

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	316	29523	20RUSCO69.0	29527	20RSPRKU69.0	1	
27023	11DELVIN	161	27045	143.2	143.5	142	100.9	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	
27044	11W	IRVI	161	27045	82.1	74	110.9	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.6	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	
27023	11DELVIN	161	27045	143.4	143.5	142	101	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	
27044	11W	IRVI	161	27045	82.2	74	111.1	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.9	318	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	318	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	
27023	11DELVIN	161	27045	143.4	143.5	142	101	319	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	
27044	11W	IRVI	161	27045	82.2	74	111.1	319	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.3	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	
27023	11DELVIN	161	27045	143.8	143.5	142	101.3	320	29530	20S	29603	20TYNER	69.0	1
27044	11W	IRVI	161	27045	82.6	74	111.6	320	29530	20S	29603	20TYNER	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	320	29530	20S	29603	20TYNER	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	320	29530	20S	29603	20TYNER	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	320	29530	20S	29603	20TYNER	69.0	1
27023	11DELVIN	161	27045	143.5	143.5	142	101	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	
27044	11W	IRVI	161	27045	82.1	74	111	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	321	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	
27023	11DELVIN	161	27045	143.5	143.5	142	101	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	
27044	11W	IRVI	161	27045	82.1	74	111	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	
27023	11DELVIN	161	27045	145.4	143.5	142	102.4	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
27044	11W	IRVI	161	27045	80.2	74	108.4	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.5	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	114.2	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
27023	11DELVIN	161	27045	144.1	144	143	108.2	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
27044	11W	IRVI	161	27045	82.2	74	100.8	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	143	111.1	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.5	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25	23	110.3	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	
27044	11W	IRVI	161	27045	82.2	74	111	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.5	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25	23	109.7	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1			
27023	11DELVIN	161	27045	143.7	143.5	142	101.2	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1		
27044	11W	IRVI	161	27045	82.2	82.2	74	111.1	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	
27051	11ADAMS	138	27148	97.4	95.8	97	100.4	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1		
27161	11AIKEN	69.0	27253	143.7	144	143	100.5	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1		
29326	20HODGEN	69.0	29634	20WOODLN	27.9	19	23	121.5	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.2	21.7	19	111.4	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	32.8	25	23	142.7	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1		
27023	11DELVIN	161	27045	147.2	143.5	142	103.7	327	29548	20SKAGGS	138	29550	20SKAGGS69.0	1		
27044	11W	IRVI	161	27045	82	82.2	74	110.7	327	29548	20SKAGGS	138	29550	20SKAGGS69.0	1	
27137	11RODBRN	138	27273	43.3	35.1	40	108.2	327	29548	20SKAGGS	138	29550	20SKAGGS69.0	1		
27161	11AIKEN	69.0	27253	144	144	143	100.7	327	29548	20SKAGGS	138	29550	20SKAGGS69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.3	327	29548	20SKAGGS	138	29550	20SKAGGS69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	327	29548	20SKAGGS	138	29550	20SKAGGS69.0	1		
27023	11DELVIN	161	27045	144	143.5	142	101.4	328	29551	20SIAT	69.0	29627	20WAYNEJ69.0	1		
27044	11W	IRVI	161	27045	82.3	82.2	74	111.2	328	29551	20SIAT	69.0	29627	20WAYNEJ69.0	1	
27161	11AIKEN	69.0	27253	144	144	143	100.7	328	29551	20SIAT	69.0	29627	20WAYNEJ69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	21.5	21.7	19	113.3	328	29551	20SIAT	69.0	29627	20WAYNEJ69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	328	29551	20SIAT	69.0	29627	20WAYNEJ69.0	1		
27023	11DELVIN	161	27045	143.2	143.5	142	100.8	329	29554	20SOMKJ69.0	29555	20SOMERS69.0	1			
27044	11W	IRVI	161	27045	82.2	82.2	74	111	329	29554	20SOMKJ69.0	29555	20SOMERS69.0	1		
27161	11AIKEN	69.0	27253	144	144	143	100.7	329	29554	20SOMKJ69.0	29555	20SOMERS69.0	1			
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	21.7	19	115.1	329	29554	20SOMKJ69.0	29555	20SOMERS69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25	23	109.5	329	29554	20SOMKJ69.0	29555	20SOMERS69.0	1			
27023	11DELVIN	161	27045	143.4	143.5	142	101	330	29555	20SOMERS69.0	29556	20SOMRKKU69.0	1			
27044	11W	IRVI	161	27045	82.1	82.2	74	111	330	29555	20SOMERS69.0	29556	20SOMRKKU69.0	1		
27161	11AIKEN	69.0	27253	144	144	143	100.7	330	29555	20SOMERS69.0	29556	20SOMRKKU69.0	1			
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	330	29555	20SOMERS69.0	29556	20SOMRKKU69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.9	330	29555	20SOMERS69.0	29556	20SOMRKKU69.0	1			
27023	11DELVIN	161	27045	143.4	143.5	142	101	331	29558	20SNOW	69.0	29559	20SNOWJ	69.0	1	
27044	11W	IRVI	161	27045	82.1	82.2	74	111	331	29558	20SNOW	69.0	29559	20SNOWJ	69.0	1
27161	11AIKEN	69.0	27253	144	144	143	100.7	331	29558	20SNOW	69.0	29559	20SNOWJ	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.7	331	29558	20SNOW	69.0	29559	20SNOWJ	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.7	331	29558	20SNOW	69.0	29559	20SNOWJ	69.0	1	
27023	11DELVIN	161	27045	143.3	143.5	142	100.9	332	29564	20SPURLK	345	29566	20SPURLK	138	2	
27044	11W	IRVI	161	27045	82.1	82.2	74	111	332	29564	20SPURLK	345	29566	20SPURLK	138	2
27161	11AIKEN	69.0	27253	144	144	143	100.7	332	29564	20SPURLK	345	29566	20SPURLK	138	2	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	332	29564	20SPURLK	345	29566	20SPURLK	138	2
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	108.9	332	29564	20SPURLK	345	29566	20SPURLK	138	2	
27023	11DELVIN	161	27045	143.2	143.5	142	100.8	333	29564	20SPURLK	345	29566	20SPURLK	138	3	
27044	11W	IRVI	161	27045	82.1	82.2	74	111	333	29564	20SPURLK	345	29566	20SPURLK	138	3
27161	11AIKEN	69.0	27253	144	144	143	100.7	333	29564	20SPURLK	345	29566	20SPURLK	138	3	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	333	29564	20SPURLK	345	29566	20SPURLK	138	3
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109	333	29564	20SPURLK	345	29566	20SPURLK	138	3	
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	334	29566	20SPURLK	138	29575	20S	PARK	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Necon	Contingency
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111.1	334	29566	20SPURLK 138	29575	20S PARK 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	334	29566	20SPURLK 138	29575	20S PARK 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	113.9	334	29566	20SPURLK 138	29575	20S PARK 138 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.5	334	29566	20SPURLK 138	29575	20S PARK 138 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	335	29566	20SPURLK 138	29641	20INLAND 138 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	335	29566	20SPURLK 138	29641	20INLAND 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	335	29566	20SPURLK 138	29641	20INLAND 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	335	29566	20SPURLK 138	29641	20INLAND 138 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	335	29566	20SPURLK 138	29641	20INLAND 138 1
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	101	336	29568	20SSPUTH69.0	29584	20SSHADE69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	336	29568	20SSPUTH69.0	29584	20SSHADE69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	336	29568	20SSPUTH69.0	29584	20SSHADE69.0 1
29210	20BARREN69.0 29335 20GOODNT	74.9	20.1	72	104	336	29568	20SSPUTH69.0	29584	20SSHADE69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	20.7	21.7	19	109	336	29568	20SSPUTH69.0	29584	20SSHADE69.0 1
29411	20LILYJ69.0 29634 20WOODLN	24.9	25	23	108.2	336	29568	20SSPUTH69.0	29584	20SSHADE69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	337	29568	20SSPUTH69.0	29590	20TMPLHL69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	337	29568	20SSPUTH69.0	29590	20TMPLHL69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	337	29568	20SSPUTH69.0	29590	20TMPLHL69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	113.5	337	29568	20SSPUTH69.0	29590	20TMPLHL69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	337	29568	20SSPUTH69.0	29590	20TMPLHL69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.6	143.5	142	101.1	338	29571	20STEPHN69.0	29606	20UPTONJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	338	29571	20STEPHN69.0	29606	20UPTONJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	338	29571	20STEPHN69.0	29606	20UPTONJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22.3	21.7	19	117.6	338	29571	20STEPHN69.0	29606	20UPTONJ69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25	23	109.7	338	29571	20STEPHN69.0	29606	20UPTONJ69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
29230	20BOONE 69.0 29299 20DEVON	77	10.2	72	106.9	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
29299	20DEVON 69.0 29600 20TRKYFJ	76.9	10.2	72	106.8	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	339	29572	20SPRKJ169.0	29576	20S PARK69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	101	340	29574	20SPRKJ269.0	29576	20S PARK69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	340	29574	20SPRKJ269.0	29576	20S PARK69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	340	29574	20SPRKJ269.0	29576	20S PARK69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	340	29574	20SPRKJ269.0	29576	20S PARK69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	340	29574	20SPRKJ269.0	29576	20S PARK69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	101	341	29575	20S PARK 138	29576	20S PARK69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	341	29575	20S PARK 138	29576	20S PARK69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	341	29575	20S PARK 138	29576	20S PARK69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114	341	29575	20S PARK 138	29576	20S PARK69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	341	29575	20S PARK 138	29576	20S PARK69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.9	143.5	142	101.3	342	29583	20SSHADE 161	29584	20SSHADE69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.2	74	111.3	342	29583	20SSHADE 161	29584	20SSHADE69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	342	29583	20SSHADE 161	29584	20SSHADE69.0 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	23.8	21.7	19	125.1	342	29583	20SSHADE	161	29584	20SSHADE69.0	1
29394	20KNOBLK69.0	29440	20MCKNYJ	26.1	5.9	23	113.3	342	29583	20SSHADE	161	29584	20SSHADE69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25	23	110.3	342	29583	20SSHADE	161	29584	20SSHADE69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	343	29583	20SSHADE	161	29586	20SSHADT 161	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	343	29583	20SSHADE	161	29586	20SSHADT 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	343	29583	20SSHADE	161	29586	20SSHADT 161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	343	29583	20SSHADE	161	29586	20SSHADT 161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	343	29583	20SSHADE	161	29586	20SSHADT 161	1
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	142	101.3	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.3	21.7	19	112.2	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.8	25	23	108.8	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1	
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	345	29587	20TAYCTP	161	29588	20TAYLOR 161	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	345	29587	20TAYCTP	161	29588	20TAYLOR 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	345	29587	20TAYCTP	161	29588	20TAYLOR 161	1
27219	11GRBURG69.0	29344	20GREENC	62.7	31.8	54	116.1	345	29587	20TAYCTP	161	29588	20TAYLOR 161	1
29359	20HODGEN69.0	29419	20MAGNOL	23	21.7	19	121.3	345	29587	20TAYCTP	161	29588	20TAYLOR 161	1
29411	20LILYJ69.0	29634	20WOODLN	25.8	25	23	112.2	345	29587	20TAYCTP	161	29588	20TAYLOR 161	1
27023	11DELVIN 161	27045	11WI TAP	148.5	143.5	142	104.6	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.7	82.2	74	111.7	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1	
27023	11DELVIN 161	27045	11WI TAP	153	143.5	142	107.7	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1	
27044	11W IRVI 161	27045	11WI TAP	83.3	82.2	74	112.6	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.2	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1	
27044	11W IRVI 161	27045	11WI TAP	81.4	82.2	74	110	348	29602	20TYNER	161	29603	20TYNER 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	348	29602	20TYNER	161	29603	20TYNER 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	348	29602	20TYNER	161	29603	20TYNER 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	348	29602	20TYNER	161	29603	20TYNER 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	142	101.3	349	29610	20WARDJ69.0	29611	20W BARD69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	349	29610	20WARDJ69.0	29611	20W BARD69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	349	29610	20WARDJ69.0	29611	20W BARD69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22.2	21.7	19	117	349	29610	20WARDJ69.0	29611	20W BARD69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	27.8	25	23	120.7	349	29610	20WARDJ69.0	29611	20W BARD69.0	1	
27023	11DELVIN 161	27045	11WI TAP	148.3	143.5	142	104.4	350	29612	20WBBERA	138	29614	20WBBERA69.0	1
27044	11W IRVI 161	27045	11WI TAP	81.8	82.2	74	110.5	350	29612	20WBBERA	138	29614	20WBBERA69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	350	29612	20WBBERA	138	29614	20WBBERA69.0	1
27209	11FAWES69.0	29283	20CROOKJ	62	21.7	54	114.8	350	29612	20WBBERA	138	29614	20WBBERA69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.6	350	29612	20WBBERA	138	29614	20WBBERA69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	350	29612	20WBBERA	138	29614	20WBBERA69.0	1
27023	11DELVIN 161	27045	11WI TAP	153	143.5	142	107.7	351	29614	20WBBERA69.0	29615	20WBBER J69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	83.3	82.2	74	112.6	351	29614 20BEREA69.0 29615 20WBER J69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.7	351	29614 20BEREA69.0 29615 20WBER J69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	21.7	19	115.2	351	29614 20BEREA69.0 29615 20WBER J69.0 1
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.7	351	29614 20BEREA69.0 29615 20WBER J69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	352	29616 20WCOLMB69.0 29618 20WCOLMJ69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	352	29616 20WCOLMB69.0 29618 20WCOLMJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	352	29616 20WCOLMB69.0 29618 20WCOLMJ69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.5	21.7	19	113.2	352	29616 20WCOLMB69.0 29618 20WCOLMJ69.0 1
29411	20LILY	J69.0	29634	20WOODLN	24.9	25	23	108.4	352	29616 20WCOLMB69.0 29618 20WCOLMJ69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.2	143.5	142	101.5	353	29626 20WAYNE 69.0 29627 20WAYNEJ69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	353	29626 20WAYNE 69.0 29627 20WAYNEJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	353	29626 20WAYNE 69.0 29627 20WAYNEJ69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.5	21.7	19	113.1	353	29626 20WAYNE 69.0 29627 20WAYNEJ69.0 1
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.8	353	29626 20WAYNE 69.0 29627 20WAYNEJ69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	354	29626 20WAYNE 69.0 29639 20ZULAJ269.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	354	29626 20WAYNE 69.0 29639 20ZULAJ269.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	354	29626 20WAYNE 69.0 29639 20ZULAJ269.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22	21.7	19	115.6	354	29626 20WAYNE 69.0 29639 20ZULAJ269.0 1
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	108.9	354	29626 20WAYNE 69.0 29639 20ZULAJ269.0 1
27023	11DELVIN	161	27045	11WI TAP	145.1	143.5	142	102.2	355	27000 11PINEVL 500 27001 11POCKET 500 1
27044	11W IRVI	161	27045	11WI TAP	82.7	82.2	74	111.8	355	27000 11PINEVL 500 27001 11POCKET 500 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	355	27000 11PINEVL 500 27001 11POCKET 500 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	355	27000 11PINEVL 500 27001 11POCKET 500 1
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109	355	27000 11PINEVL 500 27001 11POCKET 500 1
27023	11DELVIN	161	27045	11WI TAP	144.7	143.5	142	101.9	356	27000 11PINEVL 500 27011 11PINEVI 345 1
27044	11W IRVI	161	27045	11WI TAP	82.5	82.2	74	111.4	356	27000 11PINEVL 500 27011 11PINEVI 345 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	356	27000 11PINEVL 500 27011 11PINEVI 345 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	356	27000 11PINEVL 500 27011 11PINEVI 345 1
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109	356	27000 11PINEVL 500 27011 11PINEVI 345 1
27023	11DELVIN	161	27045	11WI TAP	159.3	143.5	142	112.2	357	27001 11POCKET 500 27040 11POCK N 161 1
27044	11W IRVI	161	27045	11WI TAP	84	82.2	74	113.5	357	27001 11POCKET 500 27040 11POCK N 161 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.9	357	27001 11POCKET 500 27040 11POCK N 161 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.5	357	27001 11POCKET 500 27040 11POCK N 161 1
29411	20LILY	J69.0	29634	20WOODLN	25.4	25	23	110.6	357	27001 11POCKET 500 27040 11POCK N 161 1
27023	11DELVIN	161	27045	11WI TAP	172.4	143.5	142	121.4	358	27002 11ALCALD 345 27004 11BRWN N 345 1
27044	11W IRVI	161	27045	11WI TAP	86.5	82.2	74	116.9	358	27002 11ALCALD 345 27004 11BRWN N 345 1
27161	11AIKEN	69.0	27253	11MIDDLT	143.2	144	143	100.1	358	27002 11ALCALD 345 27004 11BRWN N 345 1
27229	11HODGEN	69.0	29359	20HODGEN	40.2	35.9	40	100.6	358	27002 11ALCALD 345 27004 11BRWN N 345 1
27285	11SPRNGF	69.0	29459	20N SPR	19.2	12.6	19	101.2	358	27002 11ALCALD 345 27004 11BRWN N 345 1
29326	20FRCKBJ	69.0	29634	20WOODLN	23.1	19	23	100.6	358	27002 11ALCALD 345 27004 11BRWN N 345 1
29359	20HODGEN	69.0	29419	20MAGNOL	26.4	21.7	19	138.8	358	27002 11ALCALD 345 27004 11BRWN N 345 1
29411	20LILY	J69.0	29634	20WOODLN	28.4	25	23	123.6	358	27002 11ALCALD 345 27004 11BRWN N 345 1
27023	11DELVIN	161	27045	11WI TAP	151.1	143.5	142	106.4	359	27002 11ALCALD 345 27011 11PINEVI 345 1
27044	11W IRVI	161	27045	11WI TAP	83.2	82.2	74	112.5	359	27002 11ALCALD 345 27011 11PINEVI 345 1
27161	11AIKEN	69.0	27253	11MIDDLT	143.5	144	143	100.4	359	27002 11ALCALD 345 27011 11PINEVI 345 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.1	359	27002	11ALCALD 345 27011 11PINEVI 345 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.6	359	27002	11ALCALD 345 27011 11PINEVI 345 1
27023	11DELVIN 161	27045	11WI TAP	150.5	143.5	142	106	360	27002	11ALCALD 345 27016 11ALCALD 161 1
27044	11W IRVI 161	27045	11WI TAP	83.3	82.2	74	112.5	360	27002	11ALCALD 345 27016 11ALCALD 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	360	27002	11ALCALD 345 27016 11ALCALD 161 1
29359	20HODGEN69.0	29419	20MAGNOL	23.3	21.7	19	122.8	360	27002	11ALCALD 345 27016 11ALCALD 161 1
29411	20LILYJT69.0	29634	20WOODLN	26.3	25	23	114.5	360	27002	11ALCALD 345 27016 11ALCALD 161 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	361	27003	11BLOEVI 345 27007 11MIDDLT 345 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	361	27003	11BLOEVI 345 27007 11MIDDLT 345 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.9	144	143	101.3	361	27003	11BLOEVI 345 27007 11MIDDLT 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.2	361	27003	11BLOEVI 345 27007 11MIDDLT 345 1
29411	20LILYJT69.0	29634	20WOODLN	24.7	25	23	107.4	361	27003	11BLOEVI 345 27007 11MIDDLT 345 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	362	27003	11BLOEVI 345 27008 11MIL CK 345 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	362	27003	11BLOEVI 345 27008 11MIL CK 345 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	143	100	362	27003	11BLOEVI 345 27008 11MIL CK 345 1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	21.7	19	116.6	362	27003	11BLOEVI 345 27008 11MIL CK 345 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25	23	109.3	362	27003	11BLOEVI 345 27008 11MIL CK 345 1
27023	11DELVIN 161	27045	11WI TAP	145.1	143.5	142	102.2	363	27003	11BLOEVI 345 27019 11BLOE L 161 1
27044	11W IRVI 161	27045	11WI TAP	82.5	82.2	74	111.5	363	27003	11BLOEVI 345 27019 11BLOE L 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.6	144	143	101.8	363	27003	11BLOEVI 345 27019 11BLOE L 161 1
29359	20HODGEN69.0	29419	20MAGNOL	23.6	21.7	19	124.3	363	27003	11BLOEVI 345 27019 11BLOE L 161 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	364	27003	11BLOEVI 345 27060 11BLOEVI 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	364	27003	11BLOEVI 345 27060 11BLOEVI 138 1
27055	11ASHOT 138	27318	11GRADE	288.1	150.5	286	100.7	364	27003	11BLOEVI 345 27060 11BLOEVI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.6	144	143	101.1	364	27003	11BLOEVI 345 27060 11BLOEVI 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	364	27003	11BLOEVI 345 27060 11BLOEVI 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25	23	109.3	364	27003	11BLOEVI 345 27060 11BLOEVI 138 1
27023	11DELVIN 161	27045	11WI TAP	142.9	143.5	142	100.7	365	27004	11BRWN N 345 27006 11HARDN 345 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.2	74	111.3	365	27004	11BRWN N 345 27006 11HARDN 345 1
27051	11ADAMS 138	27148	11TYRONE	98.3	95.8	97	101.3	365	27004	11BRWN N 345 27006 11HARDN 345 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.7	144	143	101.9	365	27004	11BRWN N 345 27006 11HARDN 345 1
27229	11HODGEN69.0	29359	20HODGEN	42.7	35.9	40	106.7	365	27004	11BRWN N 345 27006 11HARDN 345 1
29359	20HODGEN69.0	29419	20MAGNOL	24.8	21.7	19	130.3	365	27004	11BRWN N 345 27006 11HARDN 345 1
29411	20LILYJT69.0	29634	20WOODLN	28.3	25	23	123.1	365	27004	11BRWN N 345 27006 11HARDN 345 1
27023	11DELVIN 161	27045	11WI TAP	147.2	143.5	142	103.7	366	27004	11BRWN N 345 27015 11W LEXN 345 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.2	74	111.4	366	27004	11BRWN N 345 27015 11W LEXN 345 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.3	144	143	100.2	366	27004	11BRWN N 345 27015 11W LEXN 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	21.7	19	112.5	366	27004	11BRWN N 345 27015 11W LEXN 345 1
29411	20LILYJT69.0	29634	20WOODLN	24.4	25	23	106	366	27004	11BRWN N 345 27015 11W LEXN 345 1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	74	110.6	367	27004	11BRWN N 345 27064 11BRWN N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	143	101	367	27004	11BRWN N 345 27064 11BRWN N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.3	367	27004	11BRWN N 345 27064 11BRWN N 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.4	25	23	110.5	367	27004	11BRWN N 345 27064 11BRWN N 138 1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	74	110.7	368	27005	11GHENT 345 27013 11TRIMBL 345 04
27161	11AIKEN 69.0	27253	11MIDDLT	147.3	144	143	103	368	27005	11GHENT 345 27013 11TRIMBL 345 04

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading %	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	368	27005	11GHENT 345 27013 11TRIMBL 345 04
29411	20LILYJ69.0	29634	20WOODLN	25.9	25	23	112.8	368	27005	11GHENT 345 27013 11TRIMBL 345 04
27044	11W IRVI	161	27045 11WI TAP	82.4	82.2	74	111.3	369	27005	11GHENT 345 27014 11W FRNK 345 1
27075	11CARROL	138	27112 11LOCKRO	158.5	82.8	135	117.4	369	27005	11GHENT 345 27014 11W FRNK 345 1
27091	11FFRT E	138	27140 11SHADRA	147.7	72.8	135	109.4	369	27005	11GHENT 345 27014 11W FRNK 345 1
27112	11LOCKPO	138	27140 11SHADRA	153.7	78.2	135	113.8	369	27005	11GHENT 345 27014 11W FRNK 345 1
27161	11AIKEN	69.0	27253 11MIDDLT	152.3	144	143	106.5	369	27005	11GHENT 345 27014 11W FRNK 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	112.9	369	27005	11GHENT 345 27014 11W FRNK 345 1
29411	20LILYJ69.0	29634	20WOODLN	26.2	25	23	113.9	369	27005	11GHENT 345 27014 11W FRNK 345 1
27044	11W IRVI	161	27045 11WI TAP	83.4	82.2	74	112.7	370	27005	11GHENT 345 27015 11W LEKN 345 1
27051	11ADAMS	138	27148 11TYRONE	122.6	95.8	97	126.4	370	27005	11GHENT 345 27015 11W LEKN 345 1
27113	11LOUDON	138	29202 20AVON	296.5	241.4	287	103.3	370	27005	11GHENT 345 27015 11W LEKN 345 1
27161	11AIKEN	69.0	27253 11MIDDLT	144.6	144	143	101.1	370	27005	11GHENT 345 27015 11W LEKN 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	21.7	19	112.5	370	27005	11GHENT 345 27015 11W LEKN 345 1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25	23	110.4	370	27005	11GHENT 345 27015 11W LEKN 345 1
27023	11DELVIN	161	27045 11WI TAP	143.4	143.5	142	101	371	27005	11GHENT 345 27092 11GHENT 138 1
27044	11W IRVI	161	27045 11WI TAP	82.1	82.2	74	111	371	27005	11GHENT 345 27092 11GHENT 138 1
27051	11ADAMS	138	27148 11TYRONE	97.6	95.8	97	100.6	371	27005	11GHENT 345 27092 11GHENT 138 1
27161	11AIKEN	69.0	27253 11MIDDLT	144.2	144	143	100.9	371	27005	11GHENT 345 27092 11GHENT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	371	27005	11GHENT 345 27092 11GHENT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	108.9	371	27005	11GHENT 345 27092 11GHENT 138 1
27023	11DELVIN	161	27045 11WI TAP	143.3	143.5	142	100.9	372	27005	11GHENT 345 27092 11GHENT 138 2
27044	11W IRVI	161	27045 11WI TAP	82.1	82.2	74	111	372	27005	11GHENT 345 27092 11GHENT 138 2
27051	11ADAMS	138	27148 11TYRONE	98.1	95.8	97	101.1	372	27005	11GHENT 345 27092 11GHENT 138 2
27161	11AIKEN	69.0	27253 11MIDDLT	144.3	144	143	100.9	372	27005	11GHENT 345 27092 11GHENT 138 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	372	27005	11GHENT 345 27092 11GHENT 138 2
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	372	27005	11GHENT 345 27092 11GHENT 138 2
27023	11DELVIN	161	27045 11WI TAP	142.6	143.5	142	100.4	373	27006	11HARDN 345 27008 11MIL CK 345 04
27044	11W IRVI	161	27045 11WI TAP	82.3	82.2	74	111.2	373	27006	11HARDN 345 27008 11MIL CK 345 04
27051	11ADAMS	138	27148 11TYRONE	99.1	95.8	97	102.2	373	27006	11HARDN 345 27008 11MIL CK 345 04
27161	11AIKEN	69.0	27253 11MIDDLT	149.8	144	143	104.8	373	27006	11HARDN 345 27008 11MIL CK 345 04
27023	11DELVIN	161	27045 11WI TAP	143	143.5	142	100.7	374	27006	11HARDN 345 27012 11SMITH 345 1
27044	11W IRVI	161	27045 11WI TAP	82.2	82.2	74	111.1	374	27006	11HARDN 345 27012 11SMITH 345 1
27161	11AIKEN	69.0	27253 11MIDDLT	144	144	143	100.7	374	27006	11HARDN 345 27012 11SMITH 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21	21.7	19	110.7	374	27006	11HARDN 345 27012 11SMITH 345 1
29411	20LILYJ69.0	29634	20WOODLN	24.3	25	23	105.6	374	27006	11HARDN 345 27012 11SMITH 345 1
27023	11DELVIN	161	27045 11WI TAP	143.5	143.5	142	101	375	27006	11HARDN 345 27100 11HARDN 138 1
27044	11W IRVI	161	27045 11WI TAP	82.2	82.2	74	111.1	375	27006	11HARDN 345 27100 11HARDN 138 1
27161	11AIKEN	69.0	27253 11MIDDLT	144.3	144	143	100.9	375	27006	11HARDN 345 27100 11HARDN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	19.7	21.7	19	103.6	375	27006	11HARDN 345 27100 11HARDN 138 1
29411	20LILYJ69.0	29634	20WOODLN	23.2	25	23	101	375	27006	11HARDN 345 27100 11HARDN 138 1
27023	11DELVIN	161	27045 11WI TAP	143.5	143.5	142	101	376	27006	11HARDN 345 27100 11HARDN 138 2
27044	11W IRVI	161	27045 11WI TAP	82.2	82.2	74	111.1	376	27006	11HARDN 345 27100 11HARDN 138 2
27161	11AIKEN	69.0	27253 11MIDDLT	144.3	144	143	100.9	376	27006	11HARDN 345 27100 11HARDN 138 2
29359	20HODGEN69.0	29419	20MAGNOL	19.7	21.7	19	103.6	376	27006	11HARDN 345 27100 11HARDN 138 2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN	23.2	25	23	101	376	27006	11HARDN	138 2
27023	11DELVIN	161	27045	143.5	143.5	142	101	377	27007	11MIDDLT	345 27008
27044	11W IRVI	161	27045	82.2	82.2	74	111	377	27007	11MIDDLT	345 27008
27161	11AIKEN	69.0	27253	144	144	143	100.7	377	27007	11MIDDLT	345 27008
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	377	27007	11MIDDLT	345 27008
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	377	27007	11MIDDLT	345 27008
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	378	27007	11MIDDLT	345 27013
27044	11W IRVI	161	27045	82.2	82.2	74	111	378	27007	11MIDDLT	345 27013
29359	20HODGEN69.0	29419	20MAGNOL	20.9	21.7	19	110.2	378	27007	11MIDDLT	345 27013
29411	20LILYJ69.0	29634	20WOODLN	23.8	25	23	103.5	378	27007	11MIDDLT	345 27013
27007	11MIDDLT	345	27119	491.3	365.6	478	102.8	379	27007	11MIDDLT	345 27119
27007	11MIDDLT	345	27119	500.6	372.7	478	104.7	379	27007	11MIDDLT	345 27119
27023	11DELVIN	161	27045	143.5	143.5	142	101	379	27007	11MIDDLT	345 27119
27044	11W IRVI	161	27045	82.2	82.2	74	111	379	27007	11MIDDLT	345 27119
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	379	27007	11MIDDLT	345 27119
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.1	379	27007	11MIDDLT	345 27119
27007	11MIDDLT	345	27119	513.8	390.9	478	107.5	380	27007	11MIDDLT	345 27119
27007	11MIDDLT	345	27119	489.8	372.7	478	102.5	380	27007	11MIDDLT	345 27119
27023	11DELVIN	161	27045	143.5	143.5	142	101	380	27007	11MIDDLT	345 27119
27044	11W IRVI	161	27045	82.2	82.2	74	111	380	27007	11MIDDLT	345 27119
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	380	27007	11MIDDLT	345 27119
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.1	380	27007	11MIDDLT	345 27119
27007	11MIDDLT	345	27119	516.7	390.9	478	108.1	381	27007	11MIDDLT	345 27119
27007	11MIDDLT	345	27119	483.4	365.6	478	101.1	381	27007	11MIDDLT	345 27119
27023	11DELVIN	161	27045	143.5	143.5	142	101	381	27007	11MIDDLT	345 27119
27044	11W IRVI	161	27045	82.2	82.2	74	111	381	27007	11MIDDLT	345 27119
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	381	27007	11MIDDLT	345 27119
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.1	381	27007	11MIDDLT	345 27119
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	382	27007	11MIDDLT	345 27119
27044	11W IRVI	161	27045	82.2	82.2	74	111	382	27007	11MIDDLT	345 27119
29359	20HODGEN69.0	29419	20MAGNOL	20.8	21.7	19	109.7	382	27007	11MIDDLT	345 27338
29411	20LILYJ69.0	29634	20WOODLN	23.7	25	23	102.9	382	27007	11MIDDLT	345 27338
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	383	27008	11MIL CK	345 27010
27044	11W IRVI	161	27045	82.2	82.2	74	111	383	27008	11MIL CK	345 27010
27161	11AIKEN	69.0	27253	147.1	144	143	102.8	383	27008	11MIL CK	345 27010
29359	20HODGEN69.0	29419	20MAGNOL	22.4	21.7	19	117.8	383	27008	11MIL CK	345 27010
29411	20LILYJ69.0	29634	20WOODLN	25.6	25	23	111.3	383	27008	11MIL CK	345 27010
27023	11DELVIN	161	27045	143.5	143.5	142	101.1	384	27008	11MIL CK	345 27121
27044	11W IRVI	161	27045	82.2	82.2	74	111	384	27008	11MIL CK	345 27121
27161	11AIKEN	69.0	27253	144.3	144	143	100.9	384	27008	11MIL CK	345 27121
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	384	27008	11MIL CK	345 27121
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.2	384	27008	11MIL CK	345 27121
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	385	27008	11MIL CK	345 27121
27044	11W IRVI	161	27045	82.2	82.2	74	111	385	27008	11MIL CK	345 27121
27161	11AIKEN	69.0	27253	144.3	144	143	100.9	385	27008	11MIL CK	345 27121

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.8	385	27008	11MIL CK 345 27121 11MIL C 138 2
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.2	385	27008	11MIL CK 345 27121 11MIL C 138 2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	386	27009	11NORTHS 345 27010 11PADDYW 345 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	386	27009	11NORTHS 345 27010 11PADDYW 345 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.6	144	143	101.9	386	27009	11NORTHS 345 27010 11PADDYW 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	115	386	27009	11NORTHS 345 27010 11PADDYW 345 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	386	27009	11NORTHS 345 27010 11PADDYW 345 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	387	27009	11NORTHS 345 27125 11NORTHS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	387	27009	11NORTHS 345 27125 11NORTHS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.6	144	143	101.8	387	27009	11NORTHS 345 27125 11NORTHS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	115	387	27009	11NORTHS 345 27125 11NORTHS 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	387	27009	11NORTHS 345 27125 11NORTHS 138 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	388	27010	11PADDYW 345 27131 11P WEST 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	388	27010	11PADDYW 345 27131 11P WEST 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	143	101.2	388	27010	11PADDYW 345 27131 11P WEST 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	21.7	19	115.6	388	27010	11PADDYW 345 27131 11P WEST 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.7	388	27010	11PADDYW 345 27131 11P WEST 138 1
27023	11DELVIN 161	27045	11WI TAP	156.3	143.5	142	110	389	27011	11PINEVI 345 27038 11PINEVI 161 1
27044	11W IRVI 161	27045	11WI TAP	84	82.2	74	113.5	389	27011	11PINEVI 345 27038 11PINEVI 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	389	27011	11PINEVI 345 27038 11PINEVI 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22	21.7	19	115.7	389	27011	11PINEVI 345 27038 11PINEVI 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25	23	110.4	389	27011	11PINEVI 345 27038 11PINEVI 161 1
27023	11DELVIN 161	27045	11WI TAP	142.9	143.5	142	100.7	390	27012	11SMITH 345 27142 11SMITH 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	390	27012	11SMITH 345 27142 11SMITH 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	390	27012	11SMITH 345 27142 11SMITH 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21	21.7	19	110.3	390	27012	11SMITH 345 27142 11SMITH 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.2	25	23	105.4	390	27012	11SMITH 345 27142 11SMITH 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	391	27013	11TRIMBL 345 27147 11TRIMBL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	391	27013	11TRIMBL 345 27147 11TRIMBL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	152.8	144	143	106.8	391	27013	11TRIMBL 345 27147 11TRIMBL 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.3	391	27013	11TRIMBL 345 27147 11TRIMBL 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.5	391	27013	11TRIMBL 345 27147 11TRIMBL 138 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	392	27013	11TRIMBL 345 27338 11BUCKNR 345 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	392	27013	11TRIMBL 345 27338 11BUCKNR 345 1
29359	20HODGEN69.0	29419	20MAGNOL	21	21.7	19	110.7	392	27013	11TRIMBL 345 27338 11BUCKNR 345 1
29411	20LILYJ69.0	29634	20WOODLN	24	25	23	104.2	392	27013	11TRIMBL 345 27338 11BUCKNR 345 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.2	74	111.3	393	27014	11W FRNK 345 27151 11W FRNK 138 1
27075	11CARROL 138	27112	11LOCKPO	158.5	82.8	135	117.4	393	27014	11W FRNK 345 27151 11W FRNK 138 1
27091	11FFERT E 138	27140	11SHADRA	147.7	72.8	135	109.4	393	27014	11W FRNK 345 27151 11W FRNK 138 1
27112	11LOCKPO 138	27140	11SHADRA	153.7	78.2	135	113.8	393	27014	11W FRNK 345 27151 11W FRNK 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	152.3	144	143	106.5	393	27014	11W FRNK 345 27151 11W FRNK 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	112.9	393	27014	11W FRNK 345 27151 11W FRNK 138 1
29411	20LILYJ69.0	29634	20WOODLN	26.2	25	23	113.9	393	27014	11W FRNK 345 27151 11W FRNK 138 1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	74	110.7	394	27015	11W FRNK 345 27153 11W FRNK 138 1
27051	11ADAMS 138	27148	11TYRONE	122	95.8	97	125.8	394	27015	11W FRNK 345 27153 11W FRNK 138 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27113	11LOUDON	138	29202	20AVON	299.9	241.4	287	104.5	394	27015	11W LEYN	345	27153	11W LEYN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	145.4	144	143	101.7	394	27015	11W LEYN	345	27153	11W LEYN	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	21.7	19	115.1	394	27015	11W LEYN	345	27153	11W LEYN	138	1
29411	20LILY	TJ69.0	29634	20WOODLN	26.1	25	23	113.3	394	27015	11W LEYN	345	27153	11W LEYN	138	1
27023	11DELVIN	161	27045	11WI TAP	145.1	143.5	142	102.2	395	27016	11ALCALD	161	27026	11ELIHU	161	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	395	27016	11ALCALD	161	27026	11ELIHU	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	395	27016	11ALCALD	161	27026	11ELIHU	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	22.5	21.7	19	118.2	395	27016	11ALCALD	161	27026	11ELIHU	161	1
29411	20LILY	TJ69.0	29634	20WOODLN	25.6	25	23	111.4	395	27016	11ALCALD	161	27026	11ELIHU	161	1
27023	11DELVIN	161	27045	11WI TAP	147	143.5	142	103.5	396	27016	11ALCALD	161	27027	11FARLEY	161	1
27044	11W IRVI	161	27045	11WI TAP	82.8	82.2	74	111.9	396	27016	11ALCALD	161	27027	11FARLEY	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	396	27016	11ALCALD	161	27027	11FARLEY	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.4	21.7	19	112.8	396	27016	11ALCALD	161	27027	11FARLEY	161	1
29411	20LILY	TJ69.0	29634	20WOODLN	24.8	25	23	108	396	27016	11ALCALD	161	27027	11FARLEY	161	1
27044	11W IRVI	161	27045	11WI TAP	80.2	82.2	74	108.4	397	27017	11ARNOLD	161	27023	11DELVIN	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	397	27017	11ARNOLD	161	27023	11DELVIN	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.3	397	27017	11ARNOLD	161	27023	11DELVIN	161	1
29411	20LILY	TJ69.0	29634	20WOODLN	24.7	25	23	107.6	397	27017	11ARNOLD	161	27023	11DELVIN	161	1
27024	11DORCHE	161	27032	11IMBODE	99	55.8	94	105.3	398	27017	11ARNOLD	161	27024	11DORCHE	161	1
27044	11W IRVI	161	27045	11WI TAP	81.9	82.2	74	110.6	398	27017	11ARNOLD	161	27024	11DORCHE	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	398	27017	11ARNOLD	161	27024	11DORCHE	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	398	27017	11ARNOLD	161	27024	11DORCHE	161	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.6	398	27017	11ARNOLD	161	27024	11DORCHE	161	1
27023	11DELVIN	161	27045	11WI TAP	146.5	143.5	142	103.2	399	27017	11ARNOLD	161	27030	11HARLAN	161	1
27044	11W IRVI	161	27045	11WI TAP	82.8	82.2	74	111.9	399	27017	11ARNOLD	161	27030	11HARLAN	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	399	27017	11ARNOLD	161	27030	11HARLAN	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	399	27017	11ARNOLD	161	27030	11HARLAN	161	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.9	399	27017	11ARNOLD	161	27030	11HARLAN	161	1
27044	11W IRVI	161	27045	11WI TAP	81.8	82.2	74	110.6	400	27017	11ARNOLD	161	27165	11ARNOLD69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	400	27017	11ARNOLD	161	27165	11ARNOLD69.0	1	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	400	27017	11ARNOLD	161	27165	11ARNOLD69.0	1	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.7	400	27017	11ARNOLD	161	27165	11ARNOLD69.0	1	1
27023	11DELVIN	161	27045	11WI TAP	144.4	143.5	142	101.7	401	27018	11ARTEMU	161	27166	11ARTEMU69.0	1	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	401	27018	11ARTEMU	161	27166	11ARTEMU69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	401	27018	11ARTEMU	161	27166	11ARTEMU69.0	1	1
27235	11KU PK	69.0	27265	11PINEVI	96.5	69.8	82	117.7	401	27018	11ARTEMU	161	27166	11ARTEMU69.0	1	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	401	27018	11ARTEMU	161	27166	11ARTEMU69.0	1	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	401	27018	11ARTEMU	161	27166	11ARTEMU69.0	1	1
27023	11DELVIN	161	27045	11WI TAP	144.4	143.5	142	101.7	402	27018	11ARTEMU	161	27328	11ARTM T	161	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	402	27018	11ARTEMU	161	27328	11ARTM T	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	402	27018	11ARTEMU	161	27328	11ARTM T	161	1
27235	11KU PK	69.0	27265	11PINEVI	96.5	69.8	82	117.7	402	27018	11ARTEMU	161	27328	11ARTM T	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	402	27018	11ARTEMU	161	27328	11ARTM T	161	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	402	27018	11ARTEMU	161	27328	11ARTM T	161	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	403	27020	11CORY T	161	27021	11CORYDO	161	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	403	27020	11CORY	T	161	27021	11CORYDO	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	403	27020	11CORY	T	161	27021	11CORYDO	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.9	403	27020	11CORY	T	161	27021	11CORYDO	161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.6	403	27020	11CORY	T	161	27021	11CORYDO	161	1
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.1	404	27020	11CORY	T	161	27028	11GR RV	161	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	404	27020	11CORY	T	161	27028	11GR RV	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	404	27020	11CORY	T	161	27028	11GR RV	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.8	404	27020	11CORY	T	161	27028	11GR RV	161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	404	27020	11CORY	T	161	27028	11GR RV	161	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	405	27020	11CORY	T	161	27035	11MORGNF	161	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	405	27020	11CORY	T	161	27035	11MORGNF	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	405	27020	11CORY	T	161	27035	11MORGNF	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.4	405	27020	11CORY	T	161	27035	11MORGNF	161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	405	27020	11CORY	T	161	27035	11MORGNF	161	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	406	27021	11CORYDO	161	27190	11CORYDO69.0	161	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	406	27021	11CORYDO	161	27190	11CORYDO69.0	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	406	27021	11CORYDO	161	27190	11CORYDO69.0	161	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.5	21.7	19	113.2	406	27021	11CORYDO	161	27190	11CORYDO69.0	161	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.6	407	27022	11CRITTE	161	27033	11LIV C	161	1	
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	408	27022	11CRITTE	161	27035	11MORGNF	161	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	408	27022	11CRITTE	161	27035	11MORGNF	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	408	27022	11CRITTE	161	27035	11MORGNF	161	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.7	408	27022	11CRITTE	161	27035	11MORGNF	161	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	408	27022	11CRITTE	161	27035	11MORGNF	161	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	409	27022	11CRITTE	161	27191	11CRITTE69.0	161	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	409	27022	11CRITTE	161	27191	11CRITTE69.0	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	409	27022	11CRITTE	161	27191	11CRITTE69.0	161	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.9	409	27022	11CRITTE	161	27191	11CRITTE69.0	161	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	409	27022	11CRITTE	161	27191	11CRITTE69.0	161	1	
27044	11W IRVI	161	27292	11W IRVI	70.2	40.2	56	125.3	410	27023	11DELVIN	161	27045	11WI TAP	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	410	27023	11DELVIN	161	27045	11WI TAP	161	1	
29359	20HODGEN	69.0	29419	20MAGNOL	22	21.7	19	115.6	410	27023	11DELVIN	161	27045	11WI TAP	161	1	
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	25	23	108	410	27023	11DELVIN	161	27045	11WI TAP	161	1	
27023	11DELVIN	161	27045	11WI TAP	145.9	143.5	142	102.7	411	27024	11DORCHE	161	27032	11IMBODE	161	1	
27044	11W IRVI	161	27045	11WI TAP	82.7	82.2	74	111.8	411	27024	11DORCHE	161	27032	11IMBODE	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	411	27024	11DORCHE	161	27032	11IMBODE	161	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	411	27024	11DORCHE	161	27032	11IMBODE	161	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	411	27024	11DORCHE	161	27032	11IMBODE	161	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	412	27024	11DORCHE	161	27196	11DORCHE69.0	161	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.2	412	27024	11DORCHE	161	27196	11DORCHE69.0	161	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	412	27024 11DORCHE	161 27196 11DORCHE69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	412	27024 11DORCHE	161 27196 11DORCHE69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	412	27024 11DORCHE	161 27196 11DORCHE69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	74	74	101.1	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111.1	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	74	74	101.1	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111.1	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	414	27025 11EARL N	161 27033 11LIV C 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.6	19	19	113.6	414	27025 11EARL N	161 27033 11LIV C 161 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.7	414	27025 11EARL N	161 27033 11LIV C 161 1
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	142	142	101.2	415	27025 11EARL N	161 27042 11RQ TAP 161 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111.1	415	27025 11EARL N	161 27042 11RQ TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	415	27025 11EARL N	161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	19	115.5	415	27025 11EARL N	161 27042 11RQ TAP 161 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	23	109	415	27025 11EARL N	161 27042 11RQ TAP 161 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	416	27025 11EARL N	161 27046 11WALKER 161 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111	416	27025 11EARL N	161 27046 11WALKER 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	416	27025 11EARL N	161 27046 11WALKER 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	416	27025 11EARL N	161 27046 11WALKER 161 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	416	27025 11EARL N	161 27046 11WALKER 161 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	417	27025 11EARL N	161 27198 11EARL N69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111	417	27025 11EARL N	161 27198 11EARL N69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	417	27025 11EARL N	161 27198 11EARL N69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114	417	27025 11EARL N	161 27198 11EARL N69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	417	27025 11EARL N	161 27198 11EARL N69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	418	27026 11EARL N	161 27200 11EARL N69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111	418	27026 11EARL N	161 27200 11EARL N69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	418	27026 11EARL N	161 27200 11EARL N69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.2	418	27026 11EARL N	161 27200 11EARL N69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	418	27026 11EARL N	161 27200 11EARL N69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	419	27026 11EARL N	161 27200 11EARL N69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111	419	27026 11EARL N	161 27200 11EARL N69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	419	27026 11EARL N	161 27200 11EARL N69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.2	419	27026 11EARL N	161 27200 11EARL N69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.9	419	27026 11EARL N	161 27200 11EARL N69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	420	27026 11EARL N	161 27200 11EARL N69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	142	142	111	420	27026 11EARL N	161 27200 11EARL N69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	420	27026 11EARL N	161 27200 11EARL N69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.2	420	27026 11EARL N	161 27200 11EARL N69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	420	27026 11EARL N	161 27200 11EARL N69.0 1
27023	11DELVIN 161	27045	11WI TAP	152.7	143.5	142	142	107.5	421	27027 11EARLEY	161 27206 11EARLEY69.0 1
27044	11W IRVI 161	27045	11WI TAP	84.9	82.2	142	142	114.7	421	27027 11EARLEY	161 27206 11EARLEY69.0 1

** From bus	** ** *	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27161	11AIKEN 69.0	27253 11MIDDLT	144.1	144	143	100.8	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27230	11HOPEWIL69.0	29399 20LAURLC	74.3	48	72	103.3	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27235	11KU PK 69.0	27265 11PINEVI	91.8	69.8	82	112	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
29359	20HODGEN69.0	29419 20MAGNOL	21.7	21.7	19	114	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
29411	20LILYJT69.0	29634 20WOODLN	25.2	25	23	109.4	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101.1	422	27027 11FARLEY	161 27328 11ARTM T 161 1
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111.1	422	27027 11FARLEY	161 27328 11ARTM T 161 1
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	422	27027 11FARLEY	161 27328 11ARTM T 161 1
29359	20HODGEN69.0	29419 20MAGNOL	21.6	21.7	19	113.9	422	27027 11FARLEY	161 27328 11ARTM T 161 1
29411	20LILYJT69.0	29634 20WOODLN	25	25	23	108.6	422	27027 11FARLEY	161 27328 11ARTM T 161 1
27023	11DELVIN 161	27045 11WI TAP	143.7	143.5	142	101.2	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111.1	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27216	11GR RVR69.0	27271 11RQ TAP	59	28.1	55	107.2	423	27028 11GR RV	161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419 20MAGNOL	21.9	21.7	19	115.3	423	27028 11GR RV	161 27042 11RQ TAP 161 1
29411	20LILYJT69.0	29634 20WOODLN	25.1	25	23	109	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101	424	27028 11GR RV	161 27095 11GR RVR 138 1
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111	424	27028 11GR RV	161 27095 11GR RVR 138 1
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	424	27028 11GR RV	161 27095 11GR RVR 138 1
29359	20HODGEN69.0	29419 20MAGNOL	21.7	21.7	19	114	424	27028 11GR RV	161 27095 11GR RVR 138 1
29411	20LILYJT69.0	29634 20WOODLN	25	25	23	108.8	424	27028 11GR RV	161 27095 11GR RVR 138 1
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101	425	27028 11GR RV	161 27095 11GR RVR 138 2
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111	425	27028 11GR RV	161 27095 11GR RVR 138 2
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	425	27028 11GR RV	161 27095 11GR RVR 138 2
29359	20HODGEN69.0	29419 20MAGNOL	21.7	21.7	19	114	425	27028 11GR RV	161 27095 11GR RVR 138 2
29411	20LILYJT69.0	29634 20WOODLN	25	25	23	108.8	425	27028 11GR RV	161 27095 11GR RVR 138 2
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101	426	27028 11GR RV	161 27095 11GR RVR 138 3
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111	426	27028 11GR RV	161 27095 11GR RVR 138 3
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	426	27028 11GR RV	161 27095 11GR RVR 138 3
29359	20HODGEN69.0	29419 20MAGNOL	21.7	21.7	19	114	426	27028 11GR RV	161 27095 11GR RVR 138 3
29411	20LILYJT69.0	29634 20WOODLN	25	25	23	108.8	426	27028 11GR RV	161 27095 11GR RVR 138 3
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101	427	27029 11GRAHVL	161 27043 11S PADU 161 1
27044	11W IRVI 161	27045 11WI TAP	82.1	82.2	74	111	427	27029 11GRAHVL	161 27043 11S PADU 161 1
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	427	27029 11GRAHVL	161 27043 11S PADU 161 1
29359	20HODGEN69.0	29419 20MAGNOL	21.6	21.7	19	113.9	427	27029 11GRAHVL	161 27043 11S PADU 161 1
29411	20LILYJT69.0	29634 20WOODLN	25	25	23	108.7	427	27029 11GRAHVL	161 27043 11S PADU 161 1
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101	428	27029 11GRAHVL	161 27047 11WICKLI 161 1
27029	11GRAHVL 161	27218 11GRAHVL	84	37.5	72	116.6	428	27029 11GRAHVL	161 27047 11WICKLI 161 1
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111	428	27029 11GRAHVL	161 27047 11WICKLI 161 1
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	428	27029 11GRAHVL	161 27047 11WICKLI 161 1
29359	20HODGEN69.0	29419 20MAGNOL	21.7	21.7	19	114.1	428	27029 11GRAHVL	161 27047 11WICKLI 161 1
29411	20LILYJT69.0	29634 20WOODLN	25	25	23	108.8	428	27029 11GRAHVL	161 27047 11WICKLI 161 1
27023	11DELVIN 161	27045 11WI TAP	143.5	143.5	142	101	429	27029 11GRAHVL	161 27218 11GRAHVM69.0 1
27044	11W IRVI 161	27045 11WI TAP	82.2	82.2	74	111	429	27029 11GRAHVL	161 27218 11GRAHVM69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT	144	144	143	100.7	429	27029 11GRAHVL	161 27218 11GRAHVM69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	429	27029	11GRAHVL 161 27218 11GRAHVM69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	429	27029	11GRAHVL 161 27218 11GRAHVM69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	143.5	142	101.8	430	27030	11HARLAN 161 27031 11HOWRD 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.3	430	27030	11HARLAN 161 27031 11HOWRD 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	430	27030	11HARLAN 161 27031 11HOWRD 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	430	27030	11HARLAN 161 27031 11HOWRD 161 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	430	27030	11HARLAN 161 27031 11HOWRD 161 1
27023	11DELVIN 161	27045	11WI TAP	144.5	143.5	142	101.8	431	27030	11HARLAN 161 27038 11PINEVI 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	431	27030	11HARLAN 161 27038 11PINEVI 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	431	27030	11HARLAN 161 27038 11PINEVI 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	431	27030	11HARLAN 161 27038 11PINEVI 161 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	431	27030	11HARLAN 161 27038 11PINEVI 161 1
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	142	101.3	432	27030	11HARLAN 161 27040 11POCK N 161 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	432	27030	11HARLAN 161 27040 11POCK N 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	432	27030	11HARLAN 161 27040 11POCK N 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	432	27030	11HARLAN 161 27040 11POCK N 161 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	432	27030	11HARLAN 161 27040 11POCK N 161 1
27023	11DELVIN 161	27045	11WI TAP	143.9	143.5	142	101.3	433	27030	11HARLAN 161 27224 11HARLAN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.3	433	27030	11HARLAN 161 27224 11HARLAN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	433	27030	11HARLAN 161 27224 11HARLAN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	433	27030	11HARLAN 161 27224 11HARLAN69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	433	27030	11HARLAN 161 27224 11HARLAN69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	143.5	142	101.9	434	27031	11HOWRD 161 27038 11PINEVI 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.3	434	27031	11HOWRD 161 27038 11PINEVI 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	434	27031	11HOWRD 161 27038 11PINEVI 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	434	27031	11HOWRD 161 27038 11PINEVI 161 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	434	27031	11HOWRD 161 27038 11PINEVI 161 1
27023	11DELVIN 161	27045	11WI TAP	149.3	143.5	142	105.1	435	27032	11IMBODE 161 27040 11POCK N 161 1
27044	11W IRVI 161	27045	11WI TAP	83.4	82.2	74	112.8	435	27032	11IMBODE 161 27040 11POCK N 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	435	27032	11IMBODE 161 27040 11POCK N 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	435	27032	11IMBODE 161 27040 11POCK N 161 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25	23	109.1	435	27032	11IMBODE 161 27040 11POCK N 161 1
27023	11DELVIN 161	27045	11WI TAP	143.9	143.5	142	101.3	436	27032	11IMBODE 161 27231 11IMBODE69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	436	27032	11IMBODE 161 27231 11IMBODE69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	436	27032	11IMBODE 161 27231 11IMBODE69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	436	27032	11IMBODE 161 27231 11IMBODE69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	436	27032	11IMBODE 161 27231 11IMBODE69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	437	27033	11LIV C 161 27043 11S PADU 161 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	437	27033	11LIV C 161 27043 11S PADU 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	437	27033	11LIV C 161 27043 11S PADU 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	437	27033	11LIV C 161 27043 11S PADU 161 1
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.7	437	27033	11LIV C 161 27043 11S PADU 161 1
27044	11W IRVI 161	27045	11WI TAP	98.3	82.2	74	132.8	438	27034	11LR TAP 161 27045 11WI TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	438	27034	11LR TAP 161 27045 11WI TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	438	27034	11LR TAP 161 27045 11WI TAP 161 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.6	438	27034 11LR TAP	161	27045	11WI TAP	161	1
27044	11W IRVI	161	27045	11WI TAP	98.1	82.2	74	132.5	439	27034 11LR TAP	161	27110	11LR TAP	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	439	27034 11LR TAP	161	27110	11LR TAP	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.7	439	27034 11LR TAP	161	27110	11LR TAP	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.6	439	27034 11LR TAP	161	27110	11LR TAP	138	1
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	440	27035 11MORGNF	161	27255	11MORGNF69.0	1	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	440	27035 11MORGNF	161	27255	11MORGNF69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	440	27035 11MORGNF	161	27255	11MORGNF69.0	1	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.9	440	27035 11MORGNF	161	27255	11MORGNF69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	440	27035 11MORGNF	161	27255	11MORGNF69.0	1	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	441	27036 11PADDYS	161	27130	11PADDYR	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	441	27036 11PADDYS	161	27130	11PADDYR	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	441	27036 11PADDYS	161	27130	11PADDYR	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.3	441	27036 11PADDYS	161	27130	11PADDYR	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	441	27036 11PADDYS	161	27130	11PADDYR	138	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	442	27036 11PADDYS	161	27130	11PADDYR	138	2
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	442	27036 11PADDYS	161	27130	11PADDYR	138	2
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	442	27036 11PADDYS	161	27130	11PADDYR	138	2
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.3	442	27036 11PADDYS	161	27130	11PADDYR	138	2
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	442	27036 11PADDYS	161	27130	11PADDYR	138	2
27023	11DELVIN	161	27045	11WI TAP	143.2	143.5	142	100.8	443	27037 11PINEVL	161	27038	11PINEVI	161	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	443	27037 11PINEVL	161	27038	11PINEVI	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	443	27037 11PINEVL	161	27038	11PINEVI	161	1
27235	11KU PK	69.0	27265	11PINEVI	85.5	69.8	82	104.2	443	27037 11PINEVL	161	27038	11PINEVI	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.6	443	27037 11PINEVL	161	27038	11PINEVI	161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	109.1	443	27037 11PINEVL	161	27038	11PINEVI	161	1
27023	11DELVIN	161	27045	11WI TAP	144.5	143.5	142	101.8	444	27037 11PINEVL	161	27328	11ARTM T	161	1
27044	11W IRVI	161	27045	11WI TAP	82.5	82.2	74	111.5	444	27037 11PINEVL	161	27328	11ARTM T	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	444	27037 11PINEVL	161	27328	11ARTM T	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	444	27037 11PINEVL	161	27328	11ARTM T	161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	444	27037 11PINEVL	161	27328	11ARTM T	161	1
27023	11DELVIN	161	27045	11WI TAP	144.9	143.5	142	102	445	27038 11PINEVI	161	27265	11PINEVI69.0	1	1
27044	11W IRVI	161	27045	11WI TAP	82.5	82.2	74	111.5	445	27038 11PINEVI	161	27265	11PINEVI69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	445	27038 11PINEVI	161	27265	11PINEVI69.0	1	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	445	27038 11PINEVI	161	27265	11PINEVI69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	445	27038 11PINEVI	161	27265	11PINEVI69.0	1	1
27023	11DELVIN	161	27045	11WI TAP	144.2	143.5	142	101.5	446	27038 11PINEVI	161	27265	11PINEVI69.0	2	2
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.2	446	27038 11PINEVI	161	27265	11PINEVI69.0	2	2
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	446	27038 11PINEVI	161	27265	11PINEVI69.0	2	2
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	446	27038 11PINEVI	161	27265	11PINEVI69.0	2	2
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	446	27038 11PINEVI	161	27265	11PINEVI69.0	2	2
27023	11DELVIN	161	27045	11WI TAP	144.7	143.5	142	101.9	447	27039 11POCKET	161	27040	11POCK N	161	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	447	27039 11POCKET	161	27040	11POCK N	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	447	27039 11POCKET	161	27040	11POCK N	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	447	27039 11POCKET	161	27040	11POCK N	161	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	474	27053 11AMERI 138 27163 11AMERI 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	474	27053 11AMERI 138 27163 11AMERI 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25	23	109.1	474	27053 11AMERI 138 27163 11AMERI 69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	475	27054 11APPLPA 138 27055 11ASHBOT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	475	27054 11APPLPA 138 27055 11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	144	143	100.9	475	27054 11APPLPA 138 27055 11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	475	27054 11APPLPA 138 27055 11ASHBOT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	475	27054 11APPLPA 138 27055 11ASHBOT 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	476	27054 11APPLPA 138 27084 11ETHEL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	476	27054 11APPLPA 138 27084 11ETHEL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	146	144	144	143	102.1	476	27054 11APPLPA 138 27084 11ETHEL 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	476	27054 11APPLPA 138 27084 11ETHEL 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	476	27054 11APPLPA 138 27084 11ETHEL 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101.1	477	27054 11APPLPA 138 27119 11MIDDLT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	477	27054 11APPLPA 138 27119 11MIDDLT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.7	144	144	143	101.9	477	27054 11APPLPA 138 27119 11MIDDLT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	477	27054 11APPLPA 138 27119 11MIDDLT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	477	27054 11APPLPA 138 27119 11MIDDLT 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	478	27055 11ASHBOT 138 27071 11CNE RN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	478	27055 11ASHBOT 138 27071 11CNE RN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.7	144	144	143	100.5	478	27055 11ASHBOT 138 27071 11CNE RN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.7	19	113.9	478	27055 11ASHBOT 138 27071 11CNE RN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.6	478	27055 11ASHBOT 138 27071 11CNE RN 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	479	27055 11ASHBOT 138 27116 11MANSJI 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	479	27055 11ASHBOT 138 27116 11MANSJI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	479	27055 11ASHBOT 138 27116 11MANSJI 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.3	479	27055 11ASHBOT 138 27116 11MANSJI 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	479	27055 11ASHBOT 138 27116 11MANSJI 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	480	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	480	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	480	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	480	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	480	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	481	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	481	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	481	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	481	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	481	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	482	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	482	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	482	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	482	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	482	27055 11ASHBOT 138 27167 11ASHBOT69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	483	27056 11ASHBY 138 27121 11MILL C 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	483	27056 11ASHBY 138 27121 11MILL C 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.8	483	27056 11ASHBY 138 27121 11MILL C 138 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.5	483	27056 11ASHBY	138 27121 11MILL C 138 1
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	25	25	23	109	483	27056 11ASHBY	138 27121 11MILL C 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101.1	484	27056 11ASHBY	138 27134 11PLSRDG 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	484	27056 11ASHBY	138 27134 11PLSRDG 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	144	143	100.7	484	27056 11ASHBY	138 27134 11PLSRDG 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.3	484	27056 11ASHBY	138 27134 11PLSRDG 138 1
29411	20LILYTJ69.0	29634	20WOODLN	25	25	25	25	23	108.9	484	27056 11ASHBY	138 27134 11PLSRDG 138 1
27023	11DELVIN 161	27045	11WI TAP	143	143.5	143.5	143.5	142	100.7	485	27057 11BKR LN	138 27064 11BRWN N 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	82.2	74	111	485	27057 11BKR LN	138 27064 11BRWN N 138 1
27051	11ADAMS 138	27148	11TYRONE	102.3	95.8	95.8	95.8	97	105.4	485	27057 11BKR LN	138 27064 11BRWN N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	144	143	100.7	485	27057 11BKR LN	138 27064 11BRWN N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114	485	27057 11BKR LN	138 27064 11BRWN N 138 1
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25	25	25	23	109.3	485	27057 11BKR LN	138 27064 11BRWN N 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	143.5	142	101	486	27057 11BKR LN	138 27101 11HIGBY 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	82.2	74	111	486	27057 11BKR LN	138 27101 11HIGBY 138 1
27051	11ADAMS 138	27148	11TYRONE	100.5	95.8	95.8	95.8	97	103.7	486	27057 11BKR LN	138 27101 11HIGBY 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	486	27057 11BKR LN	138 27101 11HIGBY 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114	486	27057 11BKR LN	138 27101 11HIGBY 138 1
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25	25	25	23	109	486	27057 11BKR LN	138 27101 11HIGBY 138 1
27023	11DELVIN 161	27045	11WI TAP	144.1	143.5	143.5	143.5	142	101.5	487	27058 11BARDST	138 27063 11BRWNCT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111.1	487	27058 11BARDST	138 27063 11BRWNCT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	144	143	100.8	487	27058 11BARDST	138 27063 11BRWNCT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.1	21.7	21.7	21.7	19	111.1	487	27058 11BARDST	138 27063 11BRWNCT 138 1
29411	20LILYTJ69.0	29634	20WOODLN	23.2	25	25	25	23	100.9	487	27058 11BARDST	138 27063 11BRWNCT 138 1
27023	11DELVIN 161	27045	11WI TAP	143	143.5	143.5	143.5	142	100.7	488	27058 11BARDST	138 27124 11NELSON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	82.2	74	111	488	27058 11BARDST	138 27124 11NELSON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	144	144	143	101	488	27058 11BARDST	138 27124 11NELSON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	21.7	21.7	19	113.3	488	27058 11BARDST	138 27124 11NELSON 138 1
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	143.5	143.5	142	101.3	489	27058 11BARDST	138 27124 11NELSON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111.1	489	27058 11BARDST	138 27124 11NELSON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.2	144	144	144	143	101.5	489	27058 11BARDST	138 27124 11NELSON 138 1
27229	11HODGEN69.0	29359	20HODGEN	45.4	35.9	35.9	35.9	40	113.5	489	27058 11BARDST	138 27124 11NELSON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	20.2	21.7	21.7	21.7	19	106.2	489	27058 11BARDST	138 27124 11NELSON 138 1
29462	20NELSON69.0	29610	20WBARDJ	86.7	49	49	49	72	120.4	489	27058 11BARDST	138 27124 11NELSON 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101	490	27059 11BEARGR	138 27104 11JEFFJC 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	490	27059 11BEARGR	138 27104 11JEFFJC 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.6	144	144	144	143	101.1	490	27059 11BEARGR	138 27104 11JEFFJC 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114	490	27059 11BEARGR	138 27104 11JEFFJC 138 1
29411	20LILYTJ69.0	29634	20WOODLN	25	25	25	25	23	108.6	490	27059 11BEARGR	138 27104 11JEFFJC 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101	491	27059 11BEARGR	138 27114 11LYNDON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	491	27059 11BEARGR	138 27114 11LYNDON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	491	27059 11BEARGR	138 27114 11LYNDON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.1	491	27059 11BEARGR	138 27114 11LYNDON 138 1
29411	20LILYTJ69.0	29634	20WOODLN	25	25	25	25	23	108.8	491	27059 11BEARGR	138 27114 11LYNDON 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101	492	27059 11BEARGR	138 27125 11NORTHS 138 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	492	27059	11BEARGR 138 27125 11NORTHS 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.6	144	143	101.1	492	27059	11BEARGR 138 27125 11NORTHS 138 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	492	27059	11BEARGR 138 27125 11NORTHS 138 1
29411	20LILYJT	69.0	29634	20WOODLN	25	25	23	108.6	492	27059	11BEARGR 138 27125 11NORTHS 138 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	493	27059	11BEARGR 138 27154 11WATRSR 138 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	493	27059	11BEARGR 138 27154 11WATRSR 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	493	27059	11BEARGR 138 27154 11WATRSR 138 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	493	27059	11BEARGR 138 27154 11WATRSR 138 1
29411	20LILYJT	69.0	29634	20WOODLN	25	25	23	108.8	493	27059	11BEARGR 138 27154 11WATRSR 138 1
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	151.3	144	143	105.8	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.9	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	24.9	25	23	108.4	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	496	27060	11BEUJELI 138 27122 11MUD LA 138 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	496	27060	11BEUJELI 138 27122 11MUD LA 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	143	100.9	496	27060	11BEUJELI 138 27122 11MUD LA 138 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.4	496	27060	11BEUJELI 138 27122 11MUD LA 138 1
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25	23	109.1	496	27060	11BEUJELI 138 27122 11MUD LA 138 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	497	27060	11BEUJELI 138 27322 11BEUJELI69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	497	27060	11BEUJELI 138 27322 11BEUJELI69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	497	27060	11BEUJELI 138 27322 11BEUJELI69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	497	27060	11BEUJELI 138 27322 11BEUJELI69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25	25	23	108.8	497	27060	11BEUJELI 138 27322 11BEUJELI69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	498	27061	11BONNIE 138 27173 11BONNI 69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	498	27061	11BONNIE 138 27173 11BONNI 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	498	27061	11BONNIE 138 27173 11BONNI 69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	21.7	19	115.1	498	27061	11BONNIE 138 27173 11BONNI 69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.2	25	23	109.7	498	27061	11BONNIE 138 27173 11BONNI 69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	499	27061	11BONNIE 138 27335 11LEBNW 138 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	499	27061	11BONNIE 138 27335 11LEBNW 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	499	27061	11BONNIE 138 27335 11LEBNW 138 1
29359	20HODGEN	69.0	29419	20MAGNOL	23.3	21.7	19	122.7	499	27061	11BONNIE 138 27335 11LEBNW 138 1
29411	20LILYJT	69.0	29634	20WOODLN	27	25	23	117.4	499	27061	11BONNIE 138 27335 11LEBNW 138 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	500	27061	11BONNIE 138 27337 11MERIDT 138 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	500	27061	11BONNIE 138 27337 11MERIDT 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	500	27061	11BONNIE 138 27337 11MERIDT 138 1
29359	20HODGEN	69.0	29419	20MAGNOL	22.8	21.7	19	119.9	500	27061	11BONNIE 138 27337 11MERIDT 138 1
29411	20LILYJT	69.0	29634	20WOODLN	25.5	25	23	115.3	500	27061	11BONNIE 138 27337 11MERIDT 138 1
29571	20STEPHN	69.0	29606	20UPTONJ	25.9	12.7	19	136.1	500	27061	11BONNIE 138 27337 11MERIDT 138 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101.1	501	27062	11BRCKNG	138	27084	11ETHEL 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	501	27062	11BRCKNG	138	27084	11ETHEL 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	143.5	144	143	100.3	501	27062	11BRCKNG	138	27084	11ETHEL 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	501	27062	11BRCKNG	138	27084	11ETHEL 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.8	501	27062	11BRCKNG	138	27084	11ETHEL 138 1
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101	502	27062	11BRCKNG	138	27102	11HRSTBR 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	502	27062	11BRCKNG	138	27102	11HRSTBR 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	150.8	144	143	105.5	502	27062	11BRCKNG	138	27102	11HRSTBR 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	502	27062	11BRCKNG	138	27102	11HRSTBR 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.7	502	27062	11BRCKNG	138	27102	11HRSTBR 138 1
27023	11DELVIN 161 27045	11WI TAP	143.4	143.5	142	101	503	27062	11BRCKNG	138	27177	11BRCKNG69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	503	27062	11BRCKNG	138	27177	11BRCKNG69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	161.6	144	143	113	503	27062	11BRCKNG	138	27177	11BRCKNG69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114	503	27062	11BRCKNG	138	27177	11BRCKNG69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.6	503	27062	11BRCKNG	138	27177	11BRCKNG69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101	504	27063	11BRWNCT	138	27064	11BRWN N 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	504	27063	11BRWNCT	138	27064	11BRWN N 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	504	27063	11BRWNCT	138	27064	11BRWN N 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	504	27063	11BRWNCT	138	27064	11BRWN N 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.8	504	27063	11BRWNCT	138	27064	11BRWN N 138 1
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101	505	27063	11BRWNCT	138	27066	11BRWNT1 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	505	27063	11BRWNCT	138	27066	11BRWNT1 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	505	27063	11BRWNCT	138	27066	11BRWNT1 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	505	27063	11BRWNCT	138	27066	11BRWNT1 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.8	505	27063	11BRWNCT	138	27066	11BRWNT1 138 1
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101	506	27063	11BRWNCT	138	27067	11BRWNT2 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	506	27063	11BRWNCT	138	27067	11BRWNT2 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	506	27063	11BRWNCT	138	27067	11BRWNT2 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	506	27063	11BRWNCT	138	27067	11BRWNT2 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.8	506	27063	11BRWNCT	138	27067	11BRWNT2 138 1
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101	507	27064	11BRWN N	138	27066	11BRWNT1 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	507	27064	11BRWN N	138	27066	11BRWNT1 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	507	27064	11BRWN N	138	27066	11BRWNT1 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	507	27064	11BRWN N	138	27066	11BRWNT1 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.8	507	27064	11BRWN N	138	27066	11BRWNT1 138 1
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101	508	27064	11BRWN N	138	27067	11BRWNT2 138 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	508	27064	11BRWN N	138	27067	11BRWNT2 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	508	27064	11BRWN N	138	27067	11BRWNT2 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	508	27064	11BRWN N	138	27067	11BRWNT2 138 1
29411	20LILYJ69.0 29634	20WOODLN	25	25	23	108.8	508	27064	11BRWN N	138	27067	11BRWNT2 138 1
27023	11DELVIN 161 27045	11WI TAP	143.2	143.5	142	100.8	509	27064	11BRWN N	138	27078	11CLAYS 138 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	74	111	509	27064	11BRWN N	138	27078	11CLAYS 138 1
27051	11ADAMS 138 27148	11TYRONE	100.2	95.8	97	103.3	509	27064	11BRWN N	138	27078	11CLAYS 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	509	27064	11BRWN N	138	27078	11CLAYS 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114	509	27064	11BRWN N	138	27078	11CLAYS 138 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.1	509	27064	11BRWN	N 138 27078 11CLAYS 138 1
27023	11DELVIN	161 27045	11WI TAP	143.1	143.5	142	100.8	510	27064	11BRWN	N 138 27101 11HIGBY 138 1
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	74	110.9	510	27064	11BRWN	N 138 27101 11HIGBY 138 1
27051	11ADAMS	138 27148	11TYRONE	102	95.8	97	105.2	510	27064	11BRWN	N 138 27101 11HIGBY 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	510	27064	11BRWN	N 138 27101 11HIGBY 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114	510	27064	11BRWN	N 138 27101 11HIGBY 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.3	510	27064	11BRWN	N 138 27101 11HIGBY 138 1
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	142	101.1	511	27064	11BRWN	N 138 27132 11PISGAH 138 1
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	74	111	511	27064	11BRWN	N 138 27132 11PISGAH 138 1
27051	11ADAMS	138 27148	11TYRONE	98.6	95.8	97	101.6	511	27064	11BRWN	N 138 27132 11PISGAH 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	511	27064	11BRWN	N 138 27132 11PISGAH 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114	511	27064	11BRWN	N 138 27132 11PISGAH 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	108.9	511	27064	11BRWN	N 138 27132 11PISGAH 138 1
27023	11DELVIN	161 27045	11WI TAP	143.4	143.5	142	101	512	27064	11BRWN	N 138 27148 11TYRONE 138 1
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	74	111	512	27064	11BRWN	N 138 27148 11TYRONE 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.8	512	27064	11BRWN	N 138 27148 11TYRONE 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114.1	512	27064	11BRWN	N 138 27148 11TYRONE 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	512	27064	11BRWN	N 138 27148 11TYRONE 138 1
27023	11DELVIN	161 27045	11WI TAP	143.4	143.5	142	101	513	27065	11BRWN	P 138 27066 11BRWNT1 138 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	74	111	513	27065	11BRWN	P 138 27066 11BRWNT1 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	513	27065	11BRWN	P 138 27066 11BRWNT1 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114.2	513	27065	11BRWN	P 138 27066 11BRWNT1 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	108.9	513	27065	11BRWN	P 138 27066 11BRWNT1 138 1
27023	11DELVIN	161 27045	11WI TAP	143.4	143.5	142	101	514	27065	11BRWN	P 138 27067 11BRWNT2 138 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	74	111	514	27065	11BRWN	P 138 27067 11BRWNT2 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	514	27065	11BRWN	P 138 27067 11BRWNT2 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114.2	514	27065	11BRWN	P 138 27067 11BRWNT2 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	514	27065	11BRWN	P 138 27067 11BRWNT2 138 1
27044	11W IRVI	161 27045	11WI TAP	81.9	82.2	74	110.6	515	27065	11BRWN	P 138 27088 11FAWKES 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	143	100.6	515	27065	11BRWN	P 138 27088 11FAWKES 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114.4	515	27065	11BRWN	P 138 27088 11FAWKES 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.1	515	27065	11BRWN	P 138 27118 11MERCER 138 1
27023	11DELVIN	161 27045	11WI TAP	148	143.5	142	104.2	516	27065	11BRWN	P 138 27118 11MERCER 138 1
27044	11W IRVI	161 27045	11WI TAP	82.9	82.2	74	112	516	27065	11BRWN	P 138 27118 11MERCER 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	143	100.6	516	27065	11BRWN	P 138 27118 11MERCER 138 1
27285	11SPRNGF69.0	29459	20N SPR	27.6	12.6	19	145.5	516	27065	11BRWN	P 138 27118 11MERCER 138 1
29326	20FRCKBJ69.0	29634	20WOODLN	26.2	19	23	113.9	516	27065	11BRWN	P 138 27118 11MERCER 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	24.3	21.7	19	127.8	516	27065	11BRWN	P 138 27118 11MERCER 138 1
29411	20LILYJ69.0	29634	20WOODLN	29.8	25	23	129.4	516	27065	11BRWN	P 138 27118 11MERCER 138 1
27023	11DELVIN	161 27045	11WI TAP	144.7	143.5	142	101.9	517	27065	11BRWN	P 138 27150 11W CLIF 138 1
27044	11W IRVI	161 27045	11WI TAP	82.4	82.2	74	111.3	517	27065	11BRWN	P 138 27150 11W CLIF 138 1
27080	11DANVIL	138 27193	11DANVIL	129.5	102.7	129	100.4	517	27065	11BRWN	P 138 27150 11W CLIF 138 1
27156	11WC-DD	138 27295	11WC-DD	194.6	97.5	143	136.1	517	27065	11BRWN	P 138 27150 11W CLIF 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.3	144	143	100.9	517	27065	11BRWN	P 138 27150 11W CLIF 138 1
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	19	114.4	517	27065	11BRWN	P 138 27150 11W CLIF 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25.8	25	23	112.1	517	27065	11BRWN P 138 27150 11W CLIF 138 1
27023	11DELVIN 161	27045	11WI TAP	144	143.5	142	101.4	518	27065	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	518	27065	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	518	27065	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	518	27065	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.2	518	27065	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	519	27068	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	519	27068	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	519	27068	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	519	27068	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	108.9	519	27068	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	520	27068	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	520	27068	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	520	27068	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	520	27068	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	520	27068	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	521	27069	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	521	27069	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	521	27069	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	521	27069	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	521	27069	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	522	27069	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	522	27069	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.8	144	143	101.2	522	27069	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	523	27070	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	523	27070	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	524	27070	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	524	27070	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	524	27070	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	524	27070	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	524	27070	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	525	27070	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	525	27070	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	525	27070	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	525	27070	11BRWN P 138 27156 11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	526	27070	11BRWN P 138 27156 11WC-DD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	526	27070	11BRWN P 138 27156 11WC-DD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	526	27070	11BRWN P 138 27156 11WC-DD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	526	27070	11BRWN P 138 27156 11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	526	27070	11BRWN P 138 27156 11WC-DD 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	143.5	108.8	526	27070 11CANAL	138 27180 11CANAL 69.0 2
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101.1	527	27071 11CNE RN	138 27072 11CN RN6 138 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	527	27071 11CNE RN	138 27072 11CN RN6 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.7	144	144	143	101.2	527	27071 11CNE RN	138 27072 11CN RN6 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	21.7	19	115.1	527	27071 11CNE RN	138 27072 11CN RN6 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	109.3	527	27071 11CNE RN	138 27072 11CN RN6 138 1
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101.1	528	27071 11CNE RN	138 27130 11PADDYR 138 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	528	27071 11CNE RN	138 27130 11PADDYR 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	144	143	100.7	528	27071 11CNE RN	138 27130 11PADDYR 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.2	528	27071 11CNE RN	138 27130 11PADDYR 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	528	27071 11CNE RN	138 27130 11PADDYR 138 1
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101	529	27071 11CNE RN	138 27181 11CANERN69.0 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	529	27071 11CNE RN	138 27181 11CANERN69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.2	144	144	143	100.8	529	27071 11CNE RN	138 27181 11CANERN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	529	27071 11CNE RN	138 27181 11CANERN69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	529	27071 11CNE RN	138 27181 11CANERN69.0 1
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101	530	27071 11CNE RN	138 27181 11CANERN69.0 2
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	530	27071 11CNE RN	138 27181 11CANERN69.0 2
27161	11AIKEN	69.0 27253	11MIDDLT	144.2	144	144	143	100.8	530	27071 11CNE RN	138 27181 11CANERN69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	530	27071 11CNE RN	138 27181 11CANERN69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	530	27071 11CNE RN	138 27181 11CANERN69.0 2
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101	531	27071 11CNE RN	138 27181 11CANERN69.0 3
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	531	27071 11CNE RN	138 27181 11CANERN69.0 3
27161	11AIKEN	69.0 27253	11MIDDLT	144.2	144	144	143	100.8	531	27071 11CNE RN	138 27181 11CANERN69.0 3
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	531	27071 11CNE RN	138 27181 11CANERN69.0 3
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	531	27071 11CNE RN	138 27181 11CANERN69.0 3
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101	532	27072 11CN RN6	138 27321 11BRIDGP 138 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	532	27072 11CN RN6	138 27321 11BRIDGP 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	532	27072 11CN RN6	138 27321 11BRIDGP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	532	27072 11CN RN6	138 27321 11BRIDGP 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	532	27072 11CN RN6	138 27321 11BRIDGP 138 1
27023	11DELVIN	161 27045	11WI TAP	143.3	143.5	143.5	142	100.9	533	27073 11CARN T	138 27074 11CARNRW 138 1
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	82.2	74	111	533	27073 11CARN T	138 27074 11CARNRW 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	533	27073 11CARN T	138 27074 11CARNRW 138 1
27233	11KENTON69.0	27280	11SHARON	49.5	30.6	30.6	45	110.1	533	27073 11CARN T	138 27074 11CARNRW 138 1
27280	11SHARON69.0	29243	20BRACKN	33.3	16.5	16.5	28	119.1	533	27073 11CARN T	138 27074 11CARNRW 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	533	27073 11CARN T	138 27074 11CARNRW 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	533	27073 11CARN T	138 27074 11CARNRW 138 1
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	143.5	142	101.1	534	27073 11CARN T	138 27105 11KENTON 138 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	82.2	74	111	534	27073 11CARN T	138 27105 11KENTON 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	534	27073 11CARN T	138 27105 11KENTON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114	534	27073 11CARN T	138 27105 11KENTON 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	534	27073 11CARN T	138 27105 11KENTON 138 1
27023	11DELVIN	161 27045	11WI TAP	143.3	143.5	143.5	142	100.9	535	27074 11CARNRW	138 27182 11CARNRN69.0 1
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	82.2	74	111	535	27074 11CARNRW	138 27182 11CARNRN69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	535	27074 11CARNTW	138	27182	11CARNTN69.0	1
27233	11KENTON69.0	27280	11SHARON	49.5	30.6	45	45	110.1	535	27074 11CARNTW	138	27182	11CARNTN69.0	1
27280	11SHARON69.0	29243	20BRACKN	33.3	16.5	28	28	119.1	535	27074 11CARNTW	138	27182	11CARNTN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	535	27074 11CARNTW	138	27182	11CARNTN69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.9	535	27074 11CARNTW	138	27182	11CARNTN69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	142	101.1	536	27075 11CARROL	138	27083	11DW CRN 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	74	111.1	536	27075 11CARROL	138	27083	11DW CRN 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	145.6	144	143	143	101.8	536	27075 11CARROL	138	27083	11DW CRN 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	19	113.9	536	27075 11CARROL	138	27083	11DW CRN 138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.5	536	27075 11CARROL	138	27083	11DW CRN 138	1
27023	11DELVIN 161	27045	11WI TAP	142.9	143.5	142	142	100.6	537	27075 11CARROL	138	27112	11LOCKPO 138	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	74	111	537	27075 11CARROL	138	27112	11LOCKPO 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	143	100.9	537	27075 11CARROL	138	27112	11LOCKPO 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	19	113.9	537	27075 11CARROL	138	27112	11LOCKPO 138	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	23	110	537	27075 11CARROL	138	27112	11LOCKPO 138	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	538	27075 11CARROL	138	27183	11CARROL69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	74	111	538	27075 11CARROL	138	27183	11CARROL69.0	1
27075	11CARROL 138	27183	11CARROL	90.8	54.5	72	72	126.1	538	27075 11CARROL	138	27183	11CARROL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	143	143	101.2	538	27075 11CARROL	138	27183	11CARROL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114	539	27075 11CARROL	138	27183	11CARROL69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.6	539	27075 11CARROL	138	27183	11CARROL69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	539	27075 11CARROL	138	27183	11CARROL69.0	2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	74	111	539	27075 11CARROL	138	27183	11CARROL69.0	2
27161	11AIKEN 69.0	27253	11MIDDLT	145.1	144	143	143	101.5	539	27075 11CARROL	138	27183	11CARROL69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114	539	27075 11CARROL	138	27183	11CARROL69.0	2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.5	539	27075 11CARROL	138	27183	11CARROL69.0	2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	142	101	540	27076 11CENTRF	138	27119	11MIDDLT 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	74	111	540	27076 11CENTRF	138	27119	11MIDDLT 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	540	27076 11CENTRF	138	27119	11MIDDLT 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	540	27076 11CENTRF	138	27119	11MIDDLT 138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	540	27076 11CENTRF	138	27119	11MIDDLT 138	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	142	101	541	27076 11CENTRF	138	27147	11TRIMBL 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	74	111	541	27076 11CENTRF	138	27147	11TRIMBL 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	152.8	144	143	143	106.9	541	27076 11CENTRF	138	27147	11TRIMBL 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	19	113.3	541	27076 11CENTRF	138	27147	11TRIMBL 138	1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	23	107.5	541	27076 11CENTRF	138	27147	11TRIMBL 138	1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	142	100.9	542	27076 11CENTRF	138	27184	11CENTR 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	74	111	542	27076 11CENTRF	138	27184	11CENTR 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	177.7	144	143	143	124.3	542	27076 11CENTRF	138	27184	11CENTR 69.0	1
27319	11COLLIN69.0	27320	11COLLIN	136.7	111.5	129	129	106	542	27076 11CENTRF	138	27184	11CENTR 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	19	113.6	542	27076 11CENTRF	138	27184	11CENTR 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	23	23	107.7	542	27076 11CENTRF	138	27184	11CENTR 69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.9	143.5	142	142	102.1	543	27077 11CLARK	138	27088	11FAWKES 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	74	111.1	543	27077 11CLARK	138	27088	11FAWKES 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	543	27077 11CLARK	138	27088	11FAWKES 138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	543	27077	11CLARK	138	27088	11FAWKES	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.7	543	27077	11CLARK	138	27088	11FAWKES	138	1	
27023	11DELVIN	161	27045	11WI	TAP	142.7	143.5	544	27077	11CLARK	138	27143	11SPENC	138	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.1	82.2	74	110.9	544	27077	11CLARK	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	544	27077	11CLARK	138	27143	11SPENC	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	544	27077	11CLARK	138	27143	11SPENC	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	544	27077	11CLARK	138	27143	11SPENC	138	1	
27023	11DELVIN	161	27045	11WI	TAP	145.1	143.5	545	27077	11CLARK	138	27186	11CLARK	69.0	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.2	74	111.2	545	27077	11CLARK	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	545	27077	11CLARK	138	27186	11CLARK	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	545	27077	11CLARK	138	27186	11CLARK	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.5	545	27077	11CLARK	138	27186	11CLARK	69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	143.3	143.5	546	27078	11CLAYS	138	27101	11HIGBY	138	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.1	82.2	74	111	546	27078	11CLAYS	138	1	
27051	11ADAMS	138	27148	11TYRONE	98.2	95.8	101.2	546	27078	11CLAYS	138	27101	11HIGBY	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	546	27078	11CLAYS	138	27101	11HIGBY	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	546	27078	11CLAYS	138	27101	11HIGBY	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25.1	25	23	109	546	27078	11CLAYS	138	27101	11HIGBY	138	1	
27023	11DELVIN	161	27045	11WI	TAP	143.6	143.5	547	27079	11CLVRPR	138	27094	11GR	STL	138	1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	111.1	547	27079	11CLVRPR	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	547	27079	11CLVRPR	138	27094	11GR	STL	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.1	547	27079	11CLVRPR	138	27094	11GR	STL	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25	23	109.1	547	27079	11CLVRPR	138	27094	11GR	STL	138	1
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	548	27079	11CLVRPR	138	27099	11HARDBG	138	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	548	27079	11HARDBG	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	548	27079	11CLVRPR	138	27099	11HARDBG	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	548	27079	11CLVRPR	138	27099	11HARDBG	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.7	548	27079	11CLVRPR	138	27099	11HARDBG	138	1	
27023	11DELVIN	161	27045	11WI	TAP	143.4	143.5	549	27079	11CLVRPR	138	27144	11TIPTOP	138	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.1	82.2	74	111	549	27079	11TIPTOP	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	100.7	549	27079	11CLVRPR	138	27144	11TIPTOP	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	549	27079	11CLVRPR	138	27144	11TIPTOP	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	549	27079	11CLVRPR	138	27144	11TIPTOP	138	1	
27023	11DELVIN	161	27045	11WI	TAP	144	143.5	550	27080	11DANVIL	138	27118	11MERC	138	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.4	82.2	74	111.4	550	27080	11MERC	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	100.9	550	27080	11DANVIL	138	27118	11MERC	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	19	111.8	550	27080	11DANVIL	138	27118	11MERC	138	1	
29411	20LILYJT69.0	29634	20WOODLN	24.6	25	23	106.9	550	27080	11DANVIL	138	27118	11MERC	138	1	
27023	11DELVIN	161	27045	11WI	TAP	144	143.5	551	27080	11DANVIL	138	27193	11DANVIL69.0	1	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.4	82.2	74	111.3	551	27080	11DANVIL69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	100.9	551	27080	11DANVIL	138	27193	11DANVIL69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	19	111.8	551	27080	11DANVIL	138	27193	11DANVIL69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN	24.6	25	23	106.9	551	27080	11DANVIL	138	27193	11DANVIL69.0	1	1	
27023	11DELVIN	161	27045	11WI	TAP	143.6	143.5	552	27081	11DAY-WA	138	27083	11DW	CRN	138	1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	111.1	552	27081	11DW	CRN	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency						
27161	11AIKEN 69.0	27253	11MIDDLT	146.1	144	143	102.2	552	27081	11DAY-WA	138	27083	11DW	CRN	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	552	27081	11DAY-WA	138	27083	11DW	CRN	138	1
29411	20LILYJT69.0	29634	20WOODLN	24.9	25	23	108.4	552	27081	11DAY-WA	138	27083	11DW	CRN	138	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	553	27081	11DAY-WA	138	27123	11NAS	138	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	553	27081	11DAY-WA	138	27123	11NAS	138	1	
27161	11AIKEN 69.0	27253	11MIDDLT	146.4	144	143	102.4	553	27081	11DAY-WA	138	27123	11NAS	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	553	27081	11DAY-WA	138	27123	11NAS	138	1	
29411	20LILYJT69.0	29634	20WOODLN	24.9	25	23	108.4	553	27081	11DAY-WA	138	27123	11NAS	138	1	
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	554	27082	11DIXIE	138	27130	11PADDYR	138	1	
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	554	27082	11DIXIE	138	27130	11PADDYR	138	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144.8	144	143	101.3	554	27082	11DIXIE	138	27130	11PADDYR	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	554	27082	11DIXIE	138	27130	11PADDYR	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.6	554	27082	11DIXIE	138	27130	11PADDYR	138	1	
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	555	27084	11ETHEL	138	27202	11ETHEL	69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	555	27084	11ETHEL	138	27202	11ETHEL	69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	555	27084	11ETHEL	138	27202	11ETHEL	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	555	27084	11ETHEL	138	27202	11ETHEL	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	555	27084	11ETHEL	138	27202	11ETHEL	69.0	1	
27023	11DELVIN 161	27045	11WI TAP	143	143.5	142	100.7	556	27085	11ETOWN	138	27100	11HARDN	138	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	556	27085	11ETOWN	138	27100	11HARDN	138	1	
27100	11HARDN 138	27222	11HARDN	180.4	110.5	172	104.9	556	27085	11ETOWN	138	27100	11HARDN	138	1	
27138	11ROGERS 138	27274	11ROGERS	104.6	78.8	102	102.5	556	27085	11ETOWN	138	27100	11HARDN	138	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144.9	144	143	101.3	556	27085	11ETOWN	138	27100	11HARDN	138	1	
27023	11DELVIN 161	27045	11WI TAP	142.7	143.5	142	100.5	557	27085	11ETOWN	138	27124	11NELSON	138	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	557	27085	11ETOWN	138	27124	11NELSON	138	1	
27161	11AIKEN 69.0	27253	11MIDDLT	145	144	143	101.4	557	27085	11ETOWN	138	27124	11NELSON	138	1	
27229	11HODGEN69.0	29359	20HODGEN	44.6	35.9	40	111.6	557	27085	11ETOWN	138	27124	11NELSON	138	1	
29310	20ETOWN 69.0	29599	20TUNHLJ	40.5	19	37	109.4	557	27085	11ETOWN	138	27124	11NELSON	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	19	111.5	557	27085	11ETOWN	138	27124	11NELSON	138	1	
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	558	27085	11ETOWN	138	27203	11ETOWN	69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	558	27085	11ETOWN	138	27203	11ETOWN	69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	558	27085	11ETOWN	138	27203	11ETOWN	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	19.9	21.7	19	104.9	558	27085	11ETOWN	138	27203	11ETOWN	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN	25.5	25	23	110.9	558	27085	11ETOWN	138	27203	11ETOWN	69.0	1	
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	559	27086	11FARM T	138	27087	11FARMER	138	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	559	27086	11FARM T	138	27087	11FARMER	138	1	
27137	11RODBRN 138	27273	11RODBRN	51.7	35.1	40	129.3	559	27086	11FARM T	138	27087	11FARMER	138	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	559	27086	11FARM T	138	27087	11FARMER	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	559	27086	11FARM T	138	27087	11FARMER	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.8	559	27086	11FARM T	138	27087	11FARMER	138	1	
27023	11DELVIN 161	27045	11WI TAP	144.3	143.5	142	101.6	560	27086	11FARM T	138	27143	11SPENC	138	1	
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	560	27086	11FARM T	138	27143	11SPENC	138	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	560	27086	11FARM T	138	27143	11SPENC	138	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	560	27086	11FARM T	138	27143	11SPENC	138	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	23	108.6	560	27086	11FARM T	138	27143	11SPENC	138	1	

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	142.2	143.5	142	561	27086	11FARM T	138	27336	11SHARKE	138 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	561	27086	11FARM T	138	27336	11SHARKE	138 1
27137	11RODBRN 138 27273 11RODBRN	40.2	35.1	40	561	27086	11FARM T	138	27336	11SHARKE	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	561	27086	11FARM T	138	27336	11SHARKE	138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	561	27086	11FARM T	138	27336	11SHARKE	138 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25	23	561	27086	11FARM T	138	27336	11SHARKE	138 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	562	27087	11FARMER	138	27207	11FARMER69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	562	27087	11FARMER	138	27207	11FARMER69.0	1
27137	11RODBRN 138 27273 11RODBRN	51.7	35.1	40	562	27087	11FARMER	138	27207	11FARMER69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	562	27087	11FARMER	138	27207	11FARMER69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	562	27087	11FARMER	138	27207	11FARMER69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	562	27087	11FARMER	138	27207	11FARMER69.0	1
27023	11DELVIN 161 27045 11WI TAP	142.6	143.5	142	563	27088	11FAWKES	138	27209	11FAWKES69.0	1
27044	11W IRVI 161 27045 11WI TAP	79.6	82.2	74	563	27088	11FAWKES	138	27209	11FAWKES69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	563	27088	11FAWKES	138	27209	11FAWKES69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	563	27088	11FAWKES	138	27209	11FAWKES69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	563	27088	11FAWKES	138	27209	11FAWKES69.0	1
27023	11DELVIN 161 27045 11WI TAP	143.6	143.5	142	565	27088	11FAWKES	138	27334	11FAWK T	138 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	565	27088	11FAWKES	138	27334	11FAWK T	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	565	27088	11FAWKES	138	27334	11FAWK T	138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	564	27088	11FAWKES	138	27209	11FAWKES69.0	2
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	564	27088	11FAWKES	138	27209	11FAWKES69.0	2
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	566	27089	11FERNVL	138	27127	11OKOLON	138 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	566	27089	11FERNVL	138	27127	11OKOLON	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	566	27089	11FERNVL	138	27127	11OKOLON	138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	566	27089	11FERNVL	138	27127	11OKOLON	138 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	566	27089	11FERNVL	138	27127	11OKOLON	138 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	567	27089	11FERNVL	138	27155	11WATTRS	138 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	567	27089	11FERNVL	138	27155	11WATTRS	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	567	27089	11FERNVL	138	27155	11WATTRS	138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	567	27089	11FERNVL	138	27155	11WATTRS	138 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	567	27089	11FERNVL	138	27155	11WATTRS	138 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	568	27089	11FERNVL	138	27211	11FERNVL69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	568	27089	11FERNVL	138	27211	11FERNVL69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	568	27089	11FERNVL	138	27211	11FERNVL69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	568	27089	11FERNVL	138	27211	11FERNVL69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	568	27089	11FERNVL	138	27211	11FERNVL69.0	1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	569	27089	11FERNVL	138	27211	11FERNVL69.0	2
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	569	27089	11FERNVL	138	27211	11FERNVL69.0	2
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	569	27089	11FERNVL	138	27211	11FERNVL69.0	2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	569	27089	11FERNVL 138 27211 11FERNVL69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	569	27089	11FERNVL 138 27211 11FERNVL69.0 2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	570	27089	11FERNVL 138 27318 11GRADE 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	570	27089	11FERNVL 138 27318 11GRADE 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	143	100	570	27089	11FERNVL 138 27318 11GRADE 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	570	27089	11FERNVL 138 27318 11GRADE 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	570	27089	11FERNVL 138 27318 11GRADE 138 1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	74	110.7	571	27090	11FLEMIN 138 27093 11GODDRD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	571	27090	11FLEMIN 138 27093 11GODDRD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	571	27090	11FLEMIN 138 27093 11GODDRD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.1	571	27090	11FLEMIN 138 27093 11GODDRD 138 1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	74	100.7	572	27090	11FLEMIN 138 27157 11WEDONI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	572	27090	11FLEMIN 138 27157 11WEDONI 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	572	27090	11FLEMIN 138 27157 11WEDONI 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.1	572	27090	11FLEMIN 138 27157 11WEDONI 138 1
27023	11DELVIN 161	27045	11WI TAP	143	143.5	142	100.7	573	27091	11FERT E 138 27140 11SHADRA 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	573	27091	11FERT E 138 27140 11SHADRA 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	573	27091	11FERT E 138 27140 11SHADRA 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	573	27091	11FERT E 138 27140 11SHADRA 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	574	27091	11FERT E 138 27148 11TYRONE 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	574	27091	11FERT E 138 27148 11TYRONE 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	143	100.6	574	27091	11FERT E 138 27148 11TYRONE 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	574	27091	11FERT E 138 27148 11TYRONE 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	574	27091	11FERT E 138 27148 11TYRONE 138 1
27044	11W IRVI 161	27045	11WI TAP	143.2	143.5	142	100.8	575	27091	11FERT E 138 27151 11W FRNK 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111.1	575	27091	11FERT E 138 27151 11W FRNK 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	100.9	575	27091	11FERT E 138 27151 11W FRNK 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	575	27091	11FERT E 138 27151 11W FRNK 138 1
27044	11W IRVI 161	27045	11WI TAP	143.5	143.5	142	101	576	27091	11FERT E 138 27214 11FERT E69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111	576	27091	11FERT E 138 27214 11FERT E69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	100.8	576	27091	11FERT E 138 27214 11FERT E69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	576	27091	11FERT E 138 27214 11FERT E69.0 1
27044	11W IRVI 161	27045	11WI TAP	143.5	143.5	142	101	577	27091	11FERT E 138 27214 11FERT E69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111	577	27091	11FERT E 138 27214 11FERT E69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	100.8	577	27091	11FERT E 138 27214 11FERT E69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
27044	11W IRVI 161	27045	11WI TAP	143.5	143.5	142	101	577	27091	11FERT E 138 27214 11FERT E69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111	577	27091	11FERT E 138 27214 11FERT E69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
27044	11W IRVI 161	27045	11WI TAP	143.5	143.5	142	101	577	27091	11FERT E 138 27214 11FERT E69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111	577	27091	11FERT E 138 27214 11FERT E69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
27044	11W IRVI 161	27045	11WI TAP	143.5	143.5	142	101	577	27091	11FERT E 138 27214 11FERT E69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111	577	27091	11FERT E 138 27214 11FERT E69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
27044	11W IRVI 161	27045	11WI TAP	143.5	143.5	142	101	577	27091	11FERT E 138 27214 11FERT E69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	82.2	82.2	74	111	577	27091	11FERT E 138 27214 11FERT E69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	577	27091	11FERT E 138 27214 11FERT E69.0 2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27023	1LDELVIN	161	27045	1LWI TAP	142.4	143.5	142	100.3	579	27092 1LGENT	138	27120	1LMIDWAY	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.1	82.2	74	111	579	27092 1LGENT	138	27120	1LMIDWAY	138	1
27051	1LADAMS	138	27148	1LTYRONE	100.4	95.8	97	103.5	579	27092 1LGENT	138	27120	1LMIDWAY	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	579	27092 1LGENT	138	27120	1LMIDWAY	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	579	27092 1LGENT	138	27120	1LMIDWAY	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25	23	109.6	579	27092 1LGENT	138	27120	1LMIDWAY	138	1
27023	1LDELVIN	161	27045	1LWI TAP	143.6	143.5	142	101.1	580	27092 1LGENT	138	27123	1LNAS	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.2	82.2	74	111.1	580	27092 1LGENT	138	27123	1LNAS	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	147.4	144	143	103	580	27092 1LGENT	138	27123	1LNAS	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.7	580	27092 1LGENT	138	27123	1LNAS	138	1
29411	20LILY	J69.0	29634	20WOODLN	24.9	25	23	108.2	580	27092 1LGENT	138	27123	1LNAS	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.1	82.2	74	110.9	581	27092 1LGENT	138	27128	1LW TAP	138	1
27051	1LADAMS	138	27148	1LTYRONE	139.1	95.8	97	143.4	581	27092 1LGENT	138	27128	1LW TAP	138	1
27075	1LCARROL	138	27183	1LCARROL	72.4	54.5	72	100.5	581	27092 1LGENT	138	27128	1LW TAP	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	146.7	144	143	102.6	581	27092 1LGENT	138	27128	1LW TAP	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.7	581	27092 1LGENT	138	27128	1LW TAP	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.3	25	23	109.8	581	27092 1LGENT	138	27128	1LW TAP	138	1
27023	1LDELVIN	161	27045	1LWI TAP	142.3	143.5	142	100.2	582	27093 1LGODDRD	138	27137	1LRODBRN	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.1	82.2	74	110.9	582	27093 1LGODDRD	138	27137	1LRODBRN	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	582	27093 1LGODDRD	138	27137	1LRODBRN	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	582	27093 1LGODDRD	138	27137	1LRODBRN	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109.3	582	27093 1LGODDRD	138	27137	1LRODBRN	138	1
27023	1LDELVIN	161	27045	1LWI TAP	143.4	143.5	142	101	583	27094 1LGR STL	138	27095	1LGR RVR	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.1	82.2	74	111	583	27094 1LGR STL	138	27095	1LGR RVR	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	583	27094 1LGR STL	138	27095	1LGR RVR	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.4	583	27094 1LGR STL	138	27095	1LGR RVR	138	1
29411	20LILY	J69.0	29634	20WOODLN	24.8	25	23	107.9	583	27094 1LGR STL	138	27095	1LGR RVR	138	1
27023	1LDELVIN	161	27045	1LWI TAP	143.6	143.5	142	101.2	584	27094 1LGR STL	138	27142	1LSMITH	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.2	82.2	74	111	584	27094 1LGR STL	138	27142	1LSMITH	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	584	27094 1LGR STL	138	27142	1LSMITH	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	21.7	19	115.1	584	27094 1LGR STL	138	27142	1LSMITH	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25	23	109.7	584	27094 1LGR STL	138	27142	1LSMITH	138	1
27023	1LDELVIN	161	27045	1LWI TAP	143.5	143.5	142	101.1	585	27094 1LGR STL	138	27215	1LGR STL69.0	1	1
27044	1LW IRVI	161	27045	1LWI TAP	82.2	82.2	74	111	585	27094 1LGR STL	138	27215	1LGR STL69.0	1	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	585	27094 1LGR STL	138	27215	1LGR STL69.0	1	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	585	27094 1LGR STL	138	27215	1LGR STL69.0	1	1
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.8	585	27094 1LGR STL	138	27215	1LGR STL69.0	1	1
27023	1LDELVIN	161	27045	1LWI TAP	143.5	143.5	142	101	586	27095 1LGR RVR	138	27126	1LHIO C	138	1
27044	1LW IRVI	161	27045	1LWI TAP	82.2	82.2	74	111	586	27095 1LGR RVR	138	27126	1LHIO C	138	1
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	586	27095 1LGR RVR	138	27126	1LHIO C	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.4	586	27095 1LGR RVR	138	27126	1LHIO C	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25	23	109.6	586	27095 1LGR RVR	138	27126	1LHIO C	138	1
27023	1LDELVIN	161	27045	1LWI TAP	143.5	143.5	142	101	587	27095 1LGR RVR	138	27126	1LHIO C	138	2
27044	1LW IRVI	161	27045	1LWI TAP	82.2	82.2	74	111	587	27095 1LGR RVR	138	27126	1LHIO C	138	2
27161	1LAIKEN	69.0	27253	1LMIDDLT	144	144	143	100.7	587	27095 1LGR RVR	138	27126	1LHIO C	138	2

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Neon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.6	21.7	19	113.5	587	27095 11GR RVR 138 27126 11OHIO C 138 2
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	25.2	25	23	109.5	587	27095 11GR RVR 138 27126 11OHIO C 138 2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101.1	588	27095 11GR RVR 138 27216 11GR RVR69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	588	27095 11GR RVR 138 27216 11GR RVR69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	588	27095 11GR RVR 138 27216 11GR RVR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.2	588	27095 11GR RVR 138 27216 11GR RVR69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	25	23	108.8	588	27095 11GR RVR 138 27216 11GR RVR69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101.1	589	27095 11GR RVR 138 27216 11GR RVR69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	589	27095 11GR RVR 138 27216 11GR RVR69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	590	27097 11HAEFLI 138 27103 11IBM N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.1	590	27097 11HAEFLI 138 27103 11IBM N 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	25	23	108.8	590	27097 11HAEFLI 138 27103 11IBM N 138 1
27023	11DELVIN 161	27045	11WI TAP	142.8	143.5	142.8	143.5	142	100.6	591	27097 11HAEFLI 138 27149 11VILEY 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.1	82.2	74	111	591	27097 11HAEFLI 138 27149 11VILEY 138 1
27051	11ADAMS 138	27148	11TYRONE	101.8	95.8	101.8	95.8	97	105	591	27097 11HAEFLI 138 27149 11VILEY 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144.1	144	143	100.8	591	27097 11HAEFLI 138 27149 11VILEY 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.2	591	27097 11HAEFLI 138 27149 11VILEY 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25.1	25	23	109.1	591	27097 11HAEFLI 138 27149 11VILEY 138 1
27023	11DELVIN 161	27045	11WI TAP	142.7	143.5	142.7	143.5	142	100.5	592	27097 11HAEFLI 138 27153 11W LEXN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.1	82.2	74	111	592	27097 11HAEFLI 138 27153 11W LEXN 138 1
27051	11ADAMS 138	27148	11TYRONE	103	95.8	103	95.8	97	106.2	592	27097 11HAEFLI 138 27153 11W LEXN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144.1	144	143	100.8	592	27097 11HAEFLI 138 27153 11W LEXN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.2	592	27097 11HAEFLI 138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25.1	25	23	109.2	592	27097 11HAEFLI 138 27153 11W LEXN 138 1
27023	11DELVIN 161	27045	11WI TAP	143	143.5	143	143.5	142	100.7	593	27097 11HAEFLI 138 27220 11HAEFLN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	593	27097 11HAEFLI 138 27220 11HAEFLN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144.1	144	143	100.7	593	27097 11HAEFLI 138 27220 11HAEFLN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.1	593	27097 11HAEFLI 138 27220 11HAEFLN69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25.1	25	23	109	593	27097 11HAEFLI 138 27220 11HAEFLN69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101	594	27098 11HANCOC 138 27115 11MAGAZI 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	594	27098 11HANCOC 138 27115 11MAGAZI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145	144	145	144	143	101.4	594	27098 11HANCOC 138 27115 11MAGAZI 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114	594	27098 11HANCOC 138 27115 11MAGAZI 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	25	23	108.7	594	27098 11HANCOC 138 27115 11MAGAZI 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	143.5	142	101	595	27098 11HANCOC 138 27221 11HANCOC69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	82.2	74	111	595	27098 11HANCOC 138 27221 11HANCOC69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.8	144	144.8	144	143	101.3	595	27098 11HANCOC 138 27221 11HANCOC69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	21.7	19	114.1	595	27098 11HANCOC 138 27221 11HANCOC69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	25	23	108.7	595	27098 11HANCOC 138 27221 11HANCOC69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.2	143.5	143.2	143.5	142	100.9	596	27099 11HARDNBG 138 27100 11HARDN 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	596	27099 11HARDBG
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	596	27099 11HARDBG
29359	20HODGEN	69.0	29419	20MAGNOL	20.9	21.7	19	110	596	27099 11HARDBG
29411	20LILY	J69.0	29634	20WOODLN	24.3	25	23	105.8	596	27099 11HARDBG
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	597	27100 11HARDN
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	597	27100 11HARDN
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	597	27100 11HARDN
27203	11ETOWN	69.0	29591	20THARP	89.4	52.5	79	113.2	597	27100 11HARDN
29359	20HODGEN	69.0	29419	20MAGNOL	20.8	21.7	19	109.3	597	27100 11HARDN
29411	20LILY	J69.0	29634	20WOODLN	24.7	25	23	107.6	597	27100 11HARDN
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	598	27100 11HARDN
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	598	27100 11HARDN
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	598	27100 11HARDN
29359	20HODGEN	69.0	29419	20MAGNOL	20.2	21.7	19	106.4	598	27100 11HARDN
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109.3	598	27100 11HARDN
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	599	27100 11HARDN
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	599	27100 11HARDN
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	599	27100 11HARDN
29359	20HODGEN	69.0	29419	20MAGNOL	20.8	21.7	19	109.5	599	27100 11HARDN
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109.1	599	27100 11HARDN
27023	11DELVIN	161	27045	11WI TAP	143.1	143.5	142	100.8	600	27101 11HIGBY
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	600	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	600	27101 11HIGBY
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	600	27101 11HIGBY
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109.1	600	27101 11HIGBY
27044	11W IRVI	161	27045	11WI TAP	143.5	143.5	142	101	601	27101 11HIGBY
27051	11ADAMS	138	27148	11TYRONE	100.9	95.8	97	104	601	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	601	27101 11HIGBY
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	601	27101 11HIGBY
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.9	601	27101 11HIGBY
27044	11W IRVI	161	27045	11WI TAP	142.9	143.5	142	100.6	602	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	602	27101 11HIGBY
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	602	27101 11HIGBY
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109	602	27101 11HIGBY
27023	11DELVIN	161	27045	11WI TAP	142.2	143.5	142	100.1	603	27101 11HIGBY
27044	11W IRVI	161	27045	11WI TAP	81.8	82.2	74	110.6	603	27101 11HIGBY
27051	11ADAMS	138	27148	11TYRONE	97.1	95.8	97	100.2	603	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	603	27101 11HIGBY
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	603	27101 11HIGBY
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109.2	603	27101 11HIGBY
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	604	27101 11HIGBY
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	604	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	604	27101 11HIGBY

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency								
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	604	27101	11HIGBY	138	27226	11HIGB	B69.0	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109.3	604	27101	11HIGBY	138	27226	11HIGB	B69.0	1			
27023	11DELVIN	161	27045	11WI	TAP	143.5	142	101	605	27102	11HRSTBR	138	27133	11PLAINV	138	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	605	27102	11HRSTBR	138	27133	11PLAINV	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.4	144	101	605	27102	11HRSTBR	138	27133	11PLAINV	138	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	605	27102	11HRSTBR	138	27133	11PLAINV	138	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	605	27102	11HRSTBR	138	27133	11PLAINV	138	1			
27023	11DELVIN	161	27045	11WI	TAP	143.5	142	101	606	27102	11HRSTBR	138	27332	11BG	PKW	138	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	606	27102	11HRSTBR	138	27332	11BG	PKW	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	147.4	144	103.1	606	27102	11HRSTBR	138	27332	11BG	PKW	138	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	606	27102	11HRSTBR	138	27332	11BG	PKW	138	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	606	27102	11HRSTBR	138	27332	11BG	PKW	138	1		
27023	11DELVIN	161	27045	11WI	TAP	143.5	142	101	607	27103	11IBM N	138	27113	11LOUDON	138	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	607	27103	11IBM N	138	27113	11LOUDON	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	607	27103	11IBM N	138	27113	11LOUDON	138	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	607	27103	11IBM N	138	27113	11LOUDON	138	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	607	27103	11IBM N	138	27113	11LOUDON	138	1			
27023	11DELVIN	161	27045	11WI	TAP	143.5	142	101	608	27104	11JEFFJC	138	27125	11NORTHS	138	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	608	27104	11JEFFJC	138	27125	11NORTHS	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.5	144	101.1	608	27104	11JEFFJC	138	27125	11NORTHS	138	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	608	27104	11JEFFJC	138	27125	11NORTHS	138	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.6	608	27104	11JEFFJC	138	27125	11NORTHS	138	1			
27023	11DELVIN	161	27045	11WI	TAP	143.5	142	100.7	609	27105	11KENTON	138	27233	11KENTON69.0	1	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	110.7	609	27105	11KENTON	138	27233	11KENTON69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	100.7	609	27105	11KENTON	138	27233	11KENTON69.0	1	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	610	27105	11KENTON	138	27233	11KENTON69.0	1	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109	610	27105	11KENTON	138	27233	11KENTON69.0	1	1			
27023	11DELVIN	161	27045	11WI	TAP	143.4	142	101	611	27105	11KENTON	138	27340	11INLAND	138	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	611	27105	11KENTON	138	27340	11INLAND	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	611	27105	11KENTON	138	27340	11INLAND	138	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	611	27105	11KENTON	138	27340	11INLAND	138	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	611	27105	11KENTON	138	27340	11INLAND	138	1			
27023	11DELVIN	161	27045	11WI	TAP	143.7	142	101.2	612	27106	11KNOB C	138	27121	11MILL C	138	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111.1	612	27106	11KNOB C	138	27121	11MILL C	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	100.9	612	27106	11KNOB C	138	27121	11MILL C	138	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.2	612	27106	11KNOB C	138	27121	11MILL C	138	1			
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.6	612	27106	11KNOB C	138	27121	11MILL C	138	1			
27023	11DELVIN	161	27045	11WI	TAP	143.7	142	101.2	613	27106	11KNOB C	138	27135	11POND C	138	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111.1	613	27106	11KNOB C	138	27135	11POND C	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	100.8	613	27106	11KNOB C	138	27135	11POND C	138	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.4	613	27106	11KNOB C	138	27135	11POND C	138	1			

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	613	27106	11KNOB C 138 27135 11POND C 138 1
27023	11DELVIN 161	27045	11WI TAP	143.1	143.5	142	100.8	614	27107	11LANSDW 138 27238 11LANSDW69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	614	27107	11LANSDW 138 27238 11LANSDW69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	614	27107	11LANSDW 138 27238 11LANSDW69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	614	27107	11LANSDW 138 27238 11LANSDW69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.1	614	27107	11LANSDW 138 27238 11LANSDW69.0 1
27023	11DELVIN 161	27045	11WI TAP	145	143.5	142	102.1	615	27108	11LEBANO 138 27117 11MARION 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	615	27108	11LEBANO 138 27117 11MARION 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	615	27108	11LEBANO 138 27117 11MARION 138 1
29359	20HODGEN69.0	29419	20MAGNOL	24.7	21.7	19	130.2	615	27108	11LEBANO 138 27117 11MERCER 138 1
27023	11DELVIN 161	27045	11WI TAP	146.3	143.5	142	103	616	27108	11LEBANO 138 27118 11MERCER 138 1
27044	11W IRVI 161	27045	11WI TAP	82.5	82.2	74	111.5	616	27108	11LEBANO 138 27118 11MERCER 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.7	144	143	100.5	616	27108	11LEBANO 138 27118 11MERCER 138 1
27285	11SPRNGF69.0	29459	20N SPR	24.2	12.6	19	127.5	616	27108	11LEBANO 138 27118 11MERCER 138 1
29326	20FRCKBJ69.0	29634	20WOODLN	24.2	19	23	105.4	616	27108	11LEBANO 138 27118 11MERCER 138 1
29359	20HODGEN69.0	29419	20MAGNOL	24.1	21.7	19	126.7	616	27108	11LEBANO 138 27118 11MERCER 138 1
29411	20LILYJ69.0	29634	20WOODLN	29.1	25	23	126.5	616	27108	11LEBANO 138 27118 11MERCER 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	617	27108	11LEBANO 138 27239 11LEBANO69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	617	27108	11LEBANO 138 27239 11LEBANO69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	617	27108	11LEBANO 138 27239 11LEBANO69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.7	617	27108	11LEBANO 138 27239 11LEBANO69.0 1
29411	20LILYJ69.0	29634	20WOODLN	26.4	25	23	115	617	27108	11LEBANO 138 27239 11LEBANO69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	618	27108	11LEBANO 138 27239 11LEBANO69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	618	27108	11LEBANO 138 27239 11LEBANO69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	618	27108	11LEBANO 138 27239 11LEBANO69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.7	618	27108	11LEBANO 138 27239 11LEBANO69.0 2
29411	20LILYJ69.0	29634	20WOODLN	26.5	25	23	115.1	618	27108	11LEBANO 138 27239 11LEBANO69.0 2
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	619	27108	11LEBANO 138 27335 11LEBNNW 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	619	27108	11LEBANO 138 27335 11LEBNNW 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	619	27108	11LEBANO 138 27335 11LEBNNW 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22.8	21.7	19	119.9	619	27108	11LEBANO 138 27335 11LEBNNW 138 1
29411	20LILYJ69.0	29634	20WOODLN	26.4	25	23	114.8	619	27108	11LEBANO 138 27335 11LEBNNW 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	620	27109	11LEITCH 138 27141 11SHREWS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	620	27109	11LEITCH 138 27141 11SHREWS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	620	27109	11LEITCH 138 27141 11SHREWS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	20.7	21.7	19	109.1	620	27109	11LEITCH 138 27141 11SHREWS 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.3	620	27109	11LEITCH 138 27141 11SHREWS 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	621	27109	11LEITCH 138 27240 11LEITCH69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	621	27109	11LEITCH 138 27240 11LEITCH69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	621	27109	11LEITCH 138 27240 11LEITCH69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	20.7	21.7	19	109.2	621	27109	11LEITCH 138 27240 11LEITCH69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.3	621	27109	11LEITCH 138 27240 11LEITCH69.0 1
27023	11DELVIN 161	27045	11WI TAP	145.7	143.5	142	102.6	622	27110	11LR TAP 138 27111 11LK REB 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	622	27110	11LR TAP 138 27111 11LK REB 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	622	27110	11LR TAP 138 27111 11LK REB 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	622	27110	11LR TAP 138 27111 11LK REB 138 1
27023	11DELVIN 161	27045	11WI TAP	145.1	143.5	142	102.2	623	27110	11LR TAP 138 27334 11FAWK T 138 1
27044	11W IRVI 161	27045	11WI TAP	81.8	82.2	74	110.6	623	27110	11LR TAP 138 27334 11FAWK T 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	623	27110	11LR TAP 138 27334 11FAWK T 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	623	27110	11LR TAP 138 27334 11FAWK T 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	623	27110	11LR TAP 138 27334 11FAWK T 138 1
27023	11DELVIN 161	27045	11WI TAP	145.7	143.5	142	102.6	624	27111	11LK REB 138 27243 11LK REB69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	624	27111	11LK REB 138 27243 11LK REB69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	624	27111	11LK REB 138 27243 11LK REB69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	624	27111	11LK REB 138 27243 11LK REB69.0 1
27023	11DELVIN 161	27045	11WI TAP	142.9	143.5	142	100.7	625	27112	11LOCKPO 138 27140 11SHADRA 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	625	27112	11LOCKPO 138 27140 11SHADRA 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.9	625	27112	11LOCKPO 138 27140 11SHADRA 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	625	27112	11LOCKPO 138 27140 11SHADRA 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	109.9	625	27112	11LOCKPO 138 27140 11SHADRA 138 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	626	27113	11LOUDON 138 27246 11LOUD A69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	626	27113	11LOUDON 138 27246 11LOUD A69.0 1
27113	11LOUDON 138	27247	11LOUD B	145.3	105.2	129	112.7	626	27113	11LOUDON 138 27246 11LOUD A69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	626	27113	11LOUDON 138 27246 11LOUD A69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	626	27113	11LOUDON 138 27246 11LOUD A69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	626	27113	11LOUDON 138 27246 11LOUD A69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	627	27113	11LOUDON 138 27247 11LOUD B69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	627	27113	11LOUDON 138 27247 11LOUD B69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	627	27113	11LOUDON 138 27247 11LOUD B69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	627	27113	11LOUDON 138 27247 11LOUD B69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	627	27113	11LOUDON 138 27247 11LOUD B69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	628	27114	11LYNDON 138 27119 11MIDDLT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	628	27114	11LYNDON 138 27119 11MIDDLT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	150.2	144	143	105	628	27114	11LYNDON 138 27119 11MIDDLT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	628	27114	11LYNDON 138 27119 11MIDDLT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	628	27114	11LYNDON 138 27119 11MIDDLT 138 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	629	27114	11LYNDON 138 27250 11LYND S69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	629	27114	11LYNDON 138 27250 11LYND S69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	153.4	144	143	107.3	629	27114	11LYNDON 138 27250 11LYND S69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	629	27114	11LYNDON 138 27250 11LYND S69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.4	629	27114	11LYNDON 138 27250 11LYND S69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	630	27115	11MAGAZI 138 27154 11WATRSD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	630	27115	11MAGAZI 138 27154 11WATRSD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.4	144	143	101.7	630	27115	11MAGAZI 138 27154 11WATRSD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	630	27115	11MAGAZI 138 27154 11WATRSD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	630	27115	11MAGAZI 138 27154 11WATRSD 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	631	27116	11MANSLI 138 27121 11MILL C 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	631	27116	11MANSLI 138 27121 11MILL C 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	631	27116	11MANSLI 138 27121 11MILL C 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.4	631	27116	11MANSLI 138 27121 11MILL C 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	631	27116	11MANSLI 138 27121 11MILL C 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	632	27119	11MIDDLT 138 27253 11MIDDLT69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	632	27119	11MIDDLT 138 27253 11MIDDLT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	632	27119	11MIDDLT 138 27253 11MIDDLT69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	632	27119	11MIDDLT 138 27253 11MIDDLT69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	633	27119	11MIDDLT 138 27253 11MIDDLT69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	633	27119	11MIDDLT 138 27253 11MIDDLT69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	633	27119	11MIDDLT 138 27253 11MIDDLT69.0 2
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	633	27119	11MIDDLT 138 27253 11MIDDLT69.0 2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	634	27119	11MIDDLT 138 27253 11MIDDLT69.0 3
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	634	27119	11MIDDLT 138 27253 11MIDDLT69.0 3
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	634	27119	11MIDDLT 138 27253 11MIDDLT69.0 3
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	634	27119	11MIDDLT 138 27253 11MIDDLT69.0 3
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	635	27119	11MIDDLT 138 27320 11COLLIN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	635	27119	11MIDDLT 138 27320 11COLLIN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	163.6	144	143	114.4	635	27119	11MIDDLT 138 27320 11COLLIN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	635	27119	11MIDDLT 138 27320 11COLLIN 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.4	635	27119	11MIDDLT 138 27320 11COLLIN 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	636	27119	11MIDDLT 138 27332 11BG PWK 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	636	27119	11MIDDLT 138 27332 11BG PWK 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	148.3	144	143	103.7	636	27119	11MIDDLT 138 27332 11BG PWK 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	636	27119	11MIDDLT 138 27332 11BG PWK 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	636	27119	11MIDDLT 138 27332 11BG PWK 138 1
27023	11DELVIN 161	27045	11WI TAP	142.5	143.5	142	100.4	637	27120	11MIDWAY 138 27153 11W LEXN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	637	27120	11MIDWAY 138 27153 11W LEXN 138 1
27051	11ADAMS 138	27148	11TYRONE	99.8	95.8	97	102.8	637	27120	11MIDWAY 138 27153 11W LEXN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	637	27120	11MIDWAY 138 27153 11W LEXN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	637	27120	11MIDWAY 138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	637	27120	11MIDWAY 138 27153 11W LEXN 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	638	27121	11MILL C 138 27321 11BRIDGP 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	638	27121	11MILL C 138 27321 11BRIDGP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	638	27121	11MILL C 138 27321 11BRIDGP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	638	27121	11MILL C 138 27321 11BRIDGP 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	638	27121	11MILL C 138 27321 11BRIDGP 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	639	27122	11MUD LA 138 27127 11OKOLON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	639	27122	11MUD LA 138 27127 11OKOLON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	639	27122	11MUD LA 138 27127 11OKOLON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	639	27122	11MUD LA 138 27127 11OKOLON 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	639	27122	11MUD LA 138 27127 11OKOLON 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	640	27122	11MUD LA 138 27256 11MUD LA69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	640	27122	11MUD LA 138 27256 11MUD LA69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	143	100.9	640	27122	11MUD LA 138 27256 11MUD LA69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	640	27122	11MUD LA 138 27256 11MUD LA69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	640	27122	11MUD LA 138 27256 11MUD LA69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	641	27126	11OHIO C 138 27141 11SHREWS 138 1

Mon: estill.mon
 Con: estill.con
 Excl: NOT USED

LF: Th North.sav
 Sys: estill.sub

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.2	74	111.2	641	27126 11OHIO C 138 27141 11SHREWS 138 1
27126	11OHIO C	138	27259	11OHIO C		69.2	38.8	60	115.3	641	27126 11OHIO C 138 27141 11SHREWS 138 1
27161	11AIKEN	69.0	27253	11MIDDLT		144.3	144	143	100.9	641	27126 11OHIO C 138 27141 11SHREWS 138 1
27203	11ETOWN	69.0	29390	20KARGLE		75.9	49.4	69	109.9	641	27126 11OHIO C 138 27141 11SHREWS 138 1
29359	20HODGEN	69.0	29419	20MAGNOL		20.9	21.7	19	110.1	641	27126 11OHIO C 138 27141 11SHREWS 138 1
29411	20LILYTJ	69.0	29634	20WOODLN		26.6	25	23	115.8	641	27126 11OHIO C 138 27141 11SHREWS 138 1
29571	20STEPHN	69.0	29606	20UFTONJ		19.1	12.7	19	100.5	641	27126 11OHIO C 138 27141 11SHREWS 138 1
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	642	27126 11OHIO C 138 27259 11OHIO C69.0 1
27044	11W IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	642	27126 11OHIO C 138 27259 11OHIO C69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	642	27126 11OHIO C 138 27259 11OHIO C69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.6	21.7	19	113.5	642	27126 11OHIO C 138 27259 11OHIO C69.0 1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.7	642	27126 11OHIO C 138 27259 11OHIO C69.0 1
27023	11DELVIN	161	27045	11WI	TAP	143.6	143.5	142	101.1	643	27128 11OC TAP 138 27129 11OWEN C 138 1
27044	11W IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	643	27128 11OC TAP 138 27129 11OWEN C 138 1
27161	11AIKEN	69.0	27253	11MIDDLT		146.2	144	143	102.2	643	27128 11OC TAP 138 27129 11OWEN C 138 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.6	21.7	19	113.8	643	27128 11OC TAP 138 27129 11OWEN C 138 1
29411	20LILYTJ	69.0	29634	20WOODLN		24.8	25	23	108	643	27128 11OC TAP 138 27129 11OWEN C 138 1
27044	11W IRVI	161	27045	11WI	TAP	82.1	82.2	74	111	644	27128 11OC TAP 138 27139 11SCOTT 138 1
27051	11ADAMS	138	27148	11TYRONE		140.1	95.8	97	144.5	644	27128 11OC TAP 138 27139 11SCOTT 138 1
27161	11AIKEN	69.0	27253	11MIDDLT		143.9	144	143	100.6	644	27128 11OC TAP 138 27139 11SCOTT 138 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.1	644	27128 11OC TAP 138 27139 11SCOTT 138 1
29411	20LILYTJ	69.0	29634	20WOODLN		25.4	25	23	110.5	644	27128 11OC TAP 138 27139 11SCOTT 138 1
27023	11DELVIN	161	27045	11WI	TAP	143.6	143.5	142	101.1	645	27130 11PADDYR 138 27131 11P WEST 138 1
27044	11W IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	645	27130 11PADDYR 138 27131 11P WEST 138 1
27161	11AIKEN	69.0	27253	11MIDDLT		143.7	144	143	100.5	645	27130 11PADDYR 138 27131 11P WEST 138 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.8	21.7	19	114.9	645	27130 11PADDYR 138 27131 11P WEST 138 1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.7	645	27130 11PADDYR 138 27131 11P WEST 138 1
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	646	27130 11PADDYR 138 27315 11PR 3 M99.0 1
27044	11W IRVI	161	27045	11WI	TAP	82.1	82.2	74	111	646	27130 11PADDYR 138 27315 11PR 3 M99.0 1
27161	11AIKEN	69.0	27253	11MIDDLT		144.6	144	143	101.1	646	27130 11PADDYR 138 27315 11PR 3 M99.0 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.6	21.7	19	113.9	646	27130 11PADDYR 138 27315 11PR 3 M99.0 1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.7	646	27130 11PADDYR 138 27315 11PR 3 M99.0 1
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	647	27130 11PADDYR 138 27316 11PR4A M99.0 1
27044	11W IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	647	27130 11PADDYR 138 27316 11PR4A M99.0 1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	647	27130 11PADDYR 138 27316 11PR4A M99.0 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.1	647	27130 11PADDYR 138 27316 11PR4A M99.0 1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.8	647	27130 11PADDYR 138 27316 11PR4A M99.0 1
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	648	27130 11PADDYR 138 27317 11PR4B M99.0 1
27044	11W IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	648	27130 11PADDYR 138 27317 11PR4B M99.0 1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	648	27130 11PADDYR 138 27317 11PR4B M99.0 1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.1	648	27130 11PADDYR 138 27317 11PR4B M99.0 1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.8	648	27130 11PADDYR 138 27317 11PR4B M99.0 1
27023	11DELVIN	161	27045	11WI	TAP	143.3	143.5	142	100.9	649	27132 11PISGAH 138 27153 11W LEXN 138 1
27044	11W IRVI	161	27045	11WI	TAP	82.1	82.2	74	111	649	27132 11PISGAH 138 27153 11W LEXN 138 1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	649	27132 11PISGAH 138 27153 11W LEXN 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	649	27132	11PISGAH 138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	649	27132	11PISGAH 138 27153 11W LEXN 138 1
27023	11DELVIN 161	27045	11WI TAP	143.1	143.5	142	100.7	650	27132	11PISGAH 138 27266 11PISGAH69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	650	27132	11PISGAH 138 27266 11PISGAH69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	143	100.9	650	27132	11PISGAH 138 27266 11PISGAH69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	650	27132	11PISGAH 138 27266 11PISGAH69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.1	650	27132	11PISGAH 138 27266 11PISGAH69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	142	101.2	651	27135	11POND C 138 27144 11TIPTOP 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	651	27135	11POND C 138 27144 11TIPTOP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	651	27135	11POND C 138 27144 11TIPTOP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.4	651	27135	11POND C 138 27144 11TIPTOP 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	651	27135	11POND C 138 27144 11TIPTOP 138 1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	652	27137	11RODBRN 138 27273 11RODBRN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	652	27137	11RODBRN 138 27273 11RODBRN69.0 1
27087	11FARMER 138	27207	11FARMER	53.5	33.1	48	111.4	652	27137	11RODBRN 138 27273 11RODBRN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	652	27137	11RODBRN 138 27273 11RODBRN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	652	27137	11RODBRN 138 27273 11RODBRN69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	652	27137	11RODBRN 138 27273 11RODBRN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	653	27137	11RODBRN 138 27336 11SHARKE 138 1
27137	11RODBRN 138	27273	11RODBRN	42.7	35.1	40	106.7	653	27137	11RODBRN 138 27336 11SHARKE 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	653	27137	11RODBRN 138 27336 11SHARKE 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	653	27137	11RODBRN 138 27336 11SHARKE 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.3	653	27137	11RODBRN 138 27336 11SHARKE 138 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	654	27138	11ROGERS 138 27274 11ROGERS69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	654	27138	11ROGERS 138 27274 11ROGERS69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	654	27138	11ROGERS 138 27274 11ROGERS69.0 1
27203	11ETOWN 69.0	29591	20THARP	89.4	52.5	79	113.2	654	27138	11ROGERS 138 27274 11ROGERS69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	20.8	21.7	19	109.2	654	27138	11ROGERS 138 27274 11ROGERS69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.6	654	27138	11ROGERS 138 27274 11ROGERS69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	655	27139	11SCOTT 138 27145 11TOYT N 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	655	27139	11SCOTT 138 27145 11TOYT N 138 1
27051	11ADAMS 138	27148	11TYRONE	98.5	95.8	97	101.6	655	27139	11SCOTT 138 27145 11TOYT N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	655	27139	11SCOTT 138 27145 11TOYT N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	655	27139	11SCOTT 138 27145 11TOYT N 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	655	27139	11SCOTT 138 27145 11TOYT N 138 1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	656	27139	11SCOTT 138 27194 11SCOTT 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	656	27139	11SCOTT 138 27194 11SCOTT 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	656	27139	11SCOTT 138 27194 11SCOTT 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	656	27139	11SCOTT 138 27194 11SCOTT 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	656	27139	11SCOTT 138 27194 11SCOTT 69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.2	657	27141	11SHREWS 138 27337 11MERIDT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	657	27141	11SHREWS 138 27337 11MERIDT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	143	100.9	657	27141	11SHREWS 138 27337 11MERIDT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	23.2	21.7	19	122.2	657	27141	11SHREWS 138 27337 11MERIDT 138 1
29411	20LILYJ69.0	29634	20WOODLN	27.1	25	23	117.7	657	27141	11SHREWS 138 27337 11MERIDT 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29571	20STEPHN69.0	29606	20UPTONJ	33	12.7	19	173.5	657	27141	11SHREWS	138	27337	11MERIDT	138	1
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	658	27142	11SMITH	138	27261	11OMU	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	658	27142	11SMITH	138	27261	11OMU	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	658	27142	11SMITH	138	27261	11OMU	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	658	27142	11SMITH	138	27261	11OMU	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	658	27142	11SMITH	138	27261	11OMU	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	659	27142	11SMITH	138	27261	11OMU	69.0	2
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	659	27142	11SMITH	138	27261	11OMU	69.0	2
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	659	27142	11SMITH	138	27261	11OMU	69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	659	27142	11SMITH	138	27261	11OMU	69.0	2
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	659	27142	11SMITH	138	27261	11OMU	69.0	2
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	660	27142	11SMITH	138	27261	11OMU	69.0	3
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	660	27142	11SMITH	138	27261	11OMU	69.0	3
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	660	27142	11SMITH	138	27261	11OMU	69.0	3
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	660	27142	11SMITH	138	27261	11OMU	69.0	3
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	660	27142	11SMITH	138	27261	11OMU	69.0	3
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	661	27142	11SMITH	138	27261	11OMU	69.0	4
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	661	27142	11SMITH	138	27261	11OMU	69.0	4
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	661	27142	11SMITH	138	27261	11OMU	69.0	4
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	661	27142	11SMITH	138	27261	11OMU	69.0	4
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	661	27142	11SMITH	138	27261	11OMU	69.0	4
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	662	27142	11SMITH	138	27261	11OMU	69.0	5
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	662	27142	11SMITH	138	27261	11OMU	69.0	5
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	662	27142	11SMITH	138	27261	11OMU	69.0	5
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	662	27142	11SMITH	138	27261	11OMU	69.0	5
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	662	27142	11SMITH	138	27261	11OMU	69.0	5
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	663	27142	11SMITH	138	27261	11OMU	69.0	6
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	663	27142	11SMITH	138	27261	11OMU	69.0	6
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	663	27142	11SMITH	138	27261	11OMU	69.0	6
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	663	27142	11SMITH	138	27261	11OMU	69.0	6
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	663	27142	11SMITH	138	27261	11OMU	69.0	6
27023	11DELVIN	161	27045	11WI TAP	144.1	142	101.5	664	27143	11SPENC	138	27284	11SPENC	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111.1	664	27143	11SPENC	138	27284	11SPENC	69.0	1
27087	11FARMER	138	27207	11FARMER	53.5	48	111.5	664	27143	11SPENC	138	27284	11SPENC	69.0	1
27137	11RODBRN	138	27273	11RODBRN	41.8	35.1	104.6	664	27143	11SPENC	138	27284	11SPENC	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	664	27143	11SPENC	138	27284	11SPENC	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	664	27143	11SPENC	138	27284	11SPENC	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.5	664	27143	11SPENC	138	27284	11SPENC	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101	665	27145	11TOYT N	138	27146	11TOYT S	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	665	27145	11TOYT N	138	27146	11TOYT S	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	665	27145	11TOYT N	138	27146	11TOYT S	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	665	27145	11TOYT N	138	27146	11TOYT S	138	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	665	27145	11TOYT N	138	27146	11TOYT S	138	1
27023	11DELVIN	161	27045	11WI TAP	142.7	142	100.5	666	27148	11TYRONE	138	27151	11W FRNK	138	04
27044	11W IRVI	161	27045	11WI TAP	82.1	74	111	666	27148	11TYRONE	138	27151	11W FRNK	138	04

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	143.5	144	143	100.3	666	27148	11TYRONE 138 27151 11W FRNK 138 04
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	666	27148	11TYRONE 138 27151 11W FRNK 138 04
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.2	666	27148	11TYRONE 138 27151 11W FRNK 138 04
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	667	27148	11TYRONE 138 27289 11TYRONE69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	667	27148	11TYRONE 138 27289 11TYRONE69.0 1
27051	11ADAMS 138	27148	11TYRONE	110.2	95.8	97	113.6	667	27148	11TYRONE 138 27289 11TYRONE69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	667	27148	11TYRONE 138 27289 11TYRONE69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.6	667	27148	11TYRONE 138 27289 11TYRONE69.0 1
29411	20LILYJ69.0	29634	20WOODLN	26	25	23	113.1	667	27148	11TYRONE 138 27289 11TYRONE69.0 1
27023	11DELVIN 161	27045	11WI TAP	142.6	143.5	142	100.5	668	27149	11VILEY 138 27153 11W LEYN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	668	27149	11VILEY 138 27153 11W LEYN 138 1
27051	11ADAMS 138	27148	11TYRONE	103.5	95.8	97	106.7	668	27149	11VILEY 138 27153 11W LEYN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	668	27149	11VILEY 138 27153 11W LEYN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	668	27149	11VILEY 138 27153 11W LEYN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.2	668	27149	11VILEY 138 27153 11W LEYN 138 1
27023	11DELVIN 161	27045	11WI TAP	144	143.5	142	101.4	669	27150	11W CLIF 138 27290 11W CLIF69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	669	27150	11W CLIF 138 27290 11W CLIF69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	669	27150	11W CLIF 138 27290 11W CLIF69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	669	27150	11W CLIF 138 27290 11W CLIF69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.6	670	27150	11W CLIF 138 27290 11W CLIF69.0 2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	670	27150	11W CLIF 138 27290 11W CLIF69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	671	27151	11W FRNK 138 27291 11W FRNK69.0 1
27051	11ADAMS 138	27148	11TYRONE	97.1	95.8	97	100.1	671	27151	11W FRNK 138 27291 11W FRNK69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	147.2	144	143	102.9	671	27151	11W FRNK 138 27291 11W FRNK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.7	671	27151	11W FRNK 138 27291 11W FRNK69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	23	107.9	671	27151	11W FRNK 138 27291 11W FRNK69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	672	27155	11WATTRS 138 27294 11WATTRS69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	672	27155	11WATTRS 138 27294 11WATTRS69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	672	27155	11WATTRS 138 27294 11WATTRS69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	672	27155	11WATTRS 138 27294 11WATTRS69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	672	27155	11WATTRS 138 27294 11WATTRS69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	673	27155	11WATTRS 138 27294 11WATTRS69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	673	27155	11WATTRS 138 27294 11WATTRS69.0 2
27155	11WATTRS 138	27294	11WATTRS	50.3	24.5	48	104.7	673	27155	11WATTRS 138 27294 11WATTRS69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	143	101.2	673	27155	11WATTRS 138 27294 11WATTRS69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	673	27155	11WATTRS 138 27294 11WATTRS69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	673	27155	11WATTRS 138 27294 11WATTRS69.0 2
27023	11DELVIN 161	27045	11WI TAP	144	143.5	142	101.4	674	27156	11WC-DD 138 27295 11WC-DD 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	674	27156	11WC-DD 138 27295 11WC-DD 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	674	27156	11WC-DD 138 27295 11WC-DD 69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	674	27156	11WC-DD	138	27295	11WC-DD	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	110.2	674	27156	11WC-DD	138	27295	11WC-DD	69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	27158	116659	T69.0	27249	11LYNDON69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27158	116659	T69.0	27249	11LYNDON69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	145.7	144	101.9	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ		
27319	11COLLIN	69.0	27320	11COLLIN	129.2	111.5	100.2	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	27158	116659	T69.0	27287	11TAYLOR69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27158	116659	T69.0	27287	11TAYLOR69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	100.8	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101.1	27158	116659	T69.0	27319	11COLLIN69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27158	116659	T69.0	27319	11COLLIN69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	677	27158	116659	T69.0	27319	11COLLIN69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	677	27158	116659	T69.0	27319	11COLLIN69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101.1	27159	116686	T69.0	27184	11CENTR	69.0	1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27159	116686	T69.0	27184	11CENTR	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	162	144	113.3	678	27159	116686	T69.0	27184	11CENTR	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	678	27159	116686	T69.0	27184	11CENTR	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	678	27159	116686	T69.0	27184	11CENTR	69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101.1	27159	116686	T69.0	27319	11COLLIN69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27159	116686	T69.0	27319	11COLLIN69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	679	27159	116686	T69.0	27319	11COLLIN69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	679	27159	116686	T69.0	27319	11COLLIN69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101	27159	116686	T69.0	27329	116658	T69.0	EQ
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27159	116686	T69.0	27329	116658	T69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	148.8	144	104	680	27159	116686	T69.0	27329	116658	T69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	680	27159	116686	T69.0	27329	116658	T69.0	EQ	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	680	27159	116686	T69.0	27329	116658	T69.0	EQ	
27023	11DELVIN	161	27045	11WI	TAP	143.4	143.5	142	101	27160	11ADAMS	69.0	27194	11SCOTT	69.0	EQ
27044	11W	IRVI	161	27045	11WI	TAP	82.1	82.2	74	27160	11ADAMS	69.0	27194	11SCOTT	69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	681	27160	11ADAMS	69.0	27194	11SCOTT	69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	681	27160	11ADAMS	69.0	27194	11SCOTT	69.0	EQ	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	681	27160	11ADAMS	69.0	27194	11SCOTT	69.0	EQ	
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101.1	27160	11ADAMS	69.0	27220	11HAEFLN69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27160	11ADAMS	69.0	27220	11HAEFLN69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	682	27160	11ADAMS	69.0	27220	11HAEFLN69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	682	27160	11ADAMS	69.0	27220	11HAEFLN69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	682	27160	11ADAMS	69.0	27220	11HAEFLN69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	143.4	143.5	142	101	27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	683	27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	683	27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	684	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	684	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	684	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.9	684	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	685	27161 11AIKEN 69.0 27329 116658 T69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	685	27161 11AIKEN 69.0 27329 116658 T69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.6	21.7	19	113.9	685	27161 11AIKEN 69.0 27329 116658 T69.0 1
29411	20LILYJ69.0	29634	20WOODLN		24.9	25	23	108.4	685	27161 11AIKEN 69.0 27329 116658 T69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	686	27162 11ALGNGU69.0 27180 11CANAL 69.0 EQ
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	686	27162 11ALGNGU69.0 27180 11CANAL 69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	686	27162 11ALGNGU69.0 27180 11CANAL 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	686	27162 11ALGNGU69.0 27180 11CANAL 69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	686	27162 11ALGNGU69.0 27180 11CANAL 69.0 EQ
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	687	27162 11ALGNGU69.0 27181 11CANERN69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	687	27162 11ALGNGU69.0 27181 11CANERN69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	687	27162 11ALGNGU69.0 27181 11CANERN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	687	27162 11ALGNGU69.0 27181 11CANERN69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	687	27162 11ALGNGU69.0 27181 11CANERN69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	688	27162 11ALGNGU69.0 27217 11GRADY 69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	688	27162 11ALGNGU69.0 27217 11GRADY 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	688	27162 11ALGNGU69.0 27217 11GRADY 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	688	27162 11ALGNGU69.0 27217 11GRADY 69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	688	27162 11ALGNGU69.0 27217 11GRADY 69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	689	27162 11ALGNGU69.0 27264 11PADDYS69.0 EQ
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	689	27162 11ALGNGU69.0 27264 11PADDYS69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	689	27162 11ALGNGU69.0 27264 11PADDYS69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	689	27162 11ALGNGU69.0 27264 11PADDYS69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	689	27162 11ALGNGU69.0 27264 11PADDYS69.0 EQ
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	690	27162 11ALGNGU69.0 27278 11SEMINO69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	690	27162 11ALGNGU69.0 27278 11SEMINO69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	690	27162 11ALGNGU69.0 27278 11SEMINO69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114	690	27162 11ALGNGU69.0 27278 11SEMINO69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.7	690	27162 11ALGNGU69.0 27278 11SEMINO69.0 1
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	691	27163 11AMERI 69.0 27220 11HAEFLN69.0 EQ
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	691	27163 11AMERI 69.0 27220 11HAEFLN69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	691	27163 11AMERI 69.0 27220 11HAEFLN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	691	27163 11AMERI 69.0 27220 11HAEFLN69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	691	27163 11AMERI 69.0 27220 11HAEFLN69.0 EQ
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	692	27163 11AMERI 69.0 27225 11HIGB A69.0 EQ
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	692	27163 11AMERI 69.0 27225 11HIGB A69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	692	27163 11AMERI 69.0 27225 11HIGB A69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	692	27163 11AMERI 69.0 27225 11HIGB A69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	692	27163 11AMERI 69.0 27225 11HIGB A69.0 EQ
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	693	27163 11AMERI 69.0 27252 11MED CN69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	693	27163 11AMERI 69.0 27252 11MED CN69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	693	27163 11AMERI 69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	693	27163 11AMERI 69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	693	27163 11AMERI 69.0
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	694	27165 11ARNOLD69.0
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	694	27165 11ARNOLD69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	694	27165 11ARNOLD69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	694	27165 11ARNOLD69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	694	27165 11ARNOLD69.0
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	143.5	142	101.3	695	27165 11ARNOLD69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	695	27165 11ARNOLD69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	695	27165 11ARNOLD69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	695	27165 11ARNOLD69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	696	27166 11ARTEMU69.0
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	696	27166 11ARTEMU69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	697	27167 11ASHBOT69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	697	27167 11ASHBOT69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	697	27167 11ASHBOT69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	697	27167 11ASHBOT69.0
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	698	27167 11ASHBOT69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	698	27167 11ASHBOT69.0
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.7	698	27167 11ASHBOT69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	698	27167 11ASHBOT69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	698	27167 11ASHBOT69.0
27023	11DELVIN 161	27045	11WI TAP	143.6	144	144	143	100.4	699	27168 11BARD 169.0
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111.1	699	27168 11BARD 169.0
27161	11AIKEN 69.0	27253	11MIDDLT	143.6	144	144	143	100.4	699	27168 11BARD 169.0
29359	20HODGEN69.0	29419	20MAGNOL	22.6	21.7	21.7	19	118.8	699	27168 11BARD 169.0
29411	20LILYJ69.0	29634	20WOODLN	80.3	49	49	72	111.6	699	27168 11BARD 169.0
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	700	27169 11BARDST69.0
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	700	27169 11BARDST69.0
27161	11AIKEN 69.0	27253	11MIDDLT	143.1	144	144	143	100.1	700	27169 11BARDST69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.1	21.7	21.7	19	110.9	700	27169 11BARDST69.0
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101.1	701	27169 11BARDST69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	701	27169 11BARDST69.0
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.6	701	27169 11BARDST69.0
29359	20HODGEN69.0	29419	20MAGNOL	20.8	21.7	21.7	19	109.4	701	27169 11BARDST69.0
29411	20LILYJ69.0	29634	20WOODLN	26.3	25	25	23	114.3	701	27169 11BARDST69.0
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	702	27170 11BEARGR69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	702	27170 11BEARGR69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	144	143	101.2	702	27170 11BEARGR69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	702	27170	11BEARGR69.0	27189	11CLIFTO69.0	E2
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	702	27170	11BEARGR69.0	27189	11CLIFTO69.0	E2
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101	703	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.2	111	703	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144.8	144	101.3	703	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	703	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	703	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	704	27170	11BEARGR69.0	27251	11MADISO69.0	1
27044	11W	IRVI	161	27045	11WI TAP	82.2	111	704	27170	11BEARGR69.0	27251	11MADISO69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	704	27170	11BEARGR69.0	27251	11MADISO69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	704	27170	11BEARGR69.0	27251	11MADISO69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101	705	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.2	111	705	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	145.4	144	101.7	705	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	705	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	705	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.4	142	101.7	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.4	111.3	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.4	142	101.7	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.3	111.3	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	143.4	142	101	708	27172	11BIMBLE69.0	27212	11FINCHV69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.1	111	708	27172	11BIMBLE69.0	27212	11FINCHV69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	143.4	144	100.3	708	27172	11BIMBLE69.0	27212	11FINCHV69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.5	708	27172	11BIMBLE69.0	27212	11FINCHV69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	26.1	25	23	113.6	708	27172	11BIMBLE69.0	27212	11FINCHV69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	143.6	142	101.2	709	27172	11BIMBLE69.0	27289	11TYRONE69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.2	111.1	709	27172	11BIMBLE69.0	27289	11TYRONE69.0	EQ
27051	11ADAMS	138	27148	11TYRONE	99.5	97	102.6	709	27172	11BIMBLE69.0	27289	11TYRONE69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144.4	144	101	709	27172	11BIMBLE69.0	27289	11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.2	709	27172	11BIMBLE69.0	27289	11TYRONE69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	26.5	25	23	115.1	709	27172	11BIMBLE69.0	27289	11TYRONE69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	710	27172	11BIMBLE69.0	27290	11W CLIF69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.1	111	710	27172	11BIMBLE69.0	27290	11W CLIF69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	100.9	710	27172	11BIMBLE69.0	27290	11W CLIF69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.7	710	27172	11BIMBLE69.0	27290	11W CLIF69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.4	25	23	110.2	710	27172	11BIMBLE69.0	27290	11W CLIF69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	143.6	142	101.1	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27044	11W	IRVI	161	27045	11WI TAP	82.2	111.1	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	22	21.7	19	116	711	27173	11BONNI 69.0 27222
29411	20LILYJ69.0	29634	20WOODLN	25.4	25	23	110.5	711	27173	11BONNI 69.0 27222
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.2	712	27174	11BOONSB69.0 27299
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	712	27174	11BOONSB69.0 27299
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	712	27174	11BOONSB69.0 27299
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	712	27174	11BOONSB69.0 27299
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.2	712	27174	11BOONSB69.0 27299
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	142	101.2	713	27176	11BOYLE 69.0 27193
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	713	27176	11BOYLE 69.0 27193
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	713	27176	11BOYLE 69.0 27193
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	713	27176	11BOYLE 69.0 27193
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.5	713	27176	11BOYLE 69.0 27193
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.2	714	27176	11BOYLE 69.0 27193
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	714	27176	11BOYLE 69.0 27237
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	714	27176	11BOYLE 69.0 27237
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	714	27176	11BOYLE 69.0 27237
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	714	27176	11BOYLE 69.0 27237
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	142	101.3	715	27176	11BOYLE 69.0 27290
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	715	27176	11BOYLE 69.0 27290
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	715	27176	11BOYLE 69.0 27290
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.6	715	27176	11BOYLE 69.0 27290
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.2	715	27176	11BOYLE 69.0 27290
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	716	27177	11BRCKNG69.0 27227
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	716	27177	11BRCKNG69.0 27227
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	108.8	716	27177	11BRCKNG69.0 27227
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	716	27177	11BRCKNG69.0 27227
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	716	27177	11BRCKNG69.0 27227
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	717	27177	11BRCKNG69.0 27263
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	717	27177	11BRCKNG69.0 27263
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	108.8	717	27177	11BRCKNG69.0 27263
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	717	27177	11BRCKNG69.0 27263
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	717	27177	11BRCKNG69.0 27263
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	718	27178	11BROMLY69.0 27183
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	718	27178	11BROMLY69.0 27183
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	718	27178	11BROMLY69.0 27183
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	718	27178	11BROMLY69.0 27183
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	718	27178	11BROMLY69.0 27183
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	718	27178	11BROMLY69.0 27183
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	718	27178	11BROMLY69.0 27183
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	719	27179	11BEATTY69.0 27292
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	719	27179	11BEATTY69.0 27292
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	719	27179	11BEATTY69.0 27292
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	720	27180	11CANAL 69.0 27217
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	720	27180	11CANAL 69.0 27217
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	720	27180	11CANAL 69.0 27217
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	720	27180	11CANAL 69.0 27217
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	720	27180	11CANAL 69.0 27217

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	721	27180 11CANAL 69.0 27251 11MADISO69.0 1
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	721	27180 11CANAL 69.0 27251 11MADISO69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	143	143	101.2	101.2	721	27180 11CANAL 69.0 27251 11MADISO69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114	114	721	27180 11CANAL 69.0 27251 11MADISO69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.7	108.7	721	27180 11CANAL 69.0 27251 11MADISO69.0 1
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	722	27181 11CANERN69.0 27208 11FARNSL69.0 1
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	722	27181 11CANERN69.0 27208 11FARNSL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	143	100.8	100.8	722	27181 11CANERN69.0 27208 11FARNSL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	114.1	722	27181 11CANERN69.0 27208 11FARNSL69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	108.8	722	27181 11CANERN69.0 27208 11FARNSL69.0 1
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	723	27181 11CANERN69.0 27281 11SHIVEL69.0 EQ
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	723	27181 11CANERN69.0 27281 11SHIVEL69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	148.5	144	143	143	103.9	103.9	723	27181 11CANERN69.0 27281 11SHIVEL69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	19	113.7	113.7	723	27181 11CANERN69.0 27281 11SHIVEL69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	23	23	107.8	107.8	723	27181 11CANERN69.0 27281 11SHIVEL69.0 EQ
27023	11DELVIN 161	27045	11WI	TAP	143.4	143.5	142	101	101	724	27183 11CARROL69.0 27325 11EMINEN69.0 EQ
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	724	27183 11CARROL69.0 27325 11EMINEN69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	148.5	144	143	143	103.9	103.9	724	27183 11CARROL69.0 27325 11EMINEN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	19	113.7	113.7	724	27183 11CARROL69.0 27325 11EMINEN69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	23	108.4	108.4	724	27183 11CARROL69.0 27325 11EMINEN69.0 EQ
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	725	27184 11CENTR 69.0 27325 11EMINEN69.0 EQ
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	725	27184 11CENTR 69.0 27325 11EMINEN69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	100.7	725	27184 11CENTR 69.0 27325 11EMINEN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	114.1	726	27186 11CLARK 69.0 27284 11SPENC 69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	108.8	726	27186 11CLARK 69.0 27284 11SPENC 69.0 EQ
27023	11DELVIN 161	27045	11WI	TAP	144.6	143.5	142	101.8	101.8	726	27186 11CLARK 69.0 27284 11SPENC 69.0 EQ
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111.1	111.1	727	27186 11CLARK 69.0 27299 11WINCHS69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	143	100.7	100.7	727	27186 11CLARK 69.0 27299 11WINCHS69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	113.9	113.9	727	27186 11CLARK 69.0 27299 11WINCHS69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.6	108.6	727	27186 11CLARK 69.0 27299 11WINCHS69.0 EQ
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	728	27187 11CLAY 69.0 27202 11ETHEL 69.0 EQ
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	728	27187 11CLAY 69.0 27202 11ETHEL 69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	143	100.8	100.8	728	27187 11CLAY 69.0 27202 11ETHEL 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114.1	114.1	728	27187 11CLAY 69.0 27202 11ETHEL 69.0 EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	108.8	728	27187 11CLAY 69.0 27202 11ETHEL 69.0 EQ
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	729	27187 11CLAY 69.0 27221 11HANCOC69.0 1
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	111	729	27187 11CLAY 69.0 27221 11HANCOC69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.1	144	143	143	101.5	101.5	729	27187 11CLAY 69.0 27221 11HANCOC69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	19	114	114	729	27187 11CLAY 69.0 27221 11HANCOC69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.7	108.7	729	27187 11CLAY 69.0 27221 11HANCOC69.0 1
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	101	730	27187 11CLAY 69.0 27251 11MADISO69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	730	27187	11CLAY	69.0	27251	11MADISO69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.4	144	143	100.3	730	27187	11CLAY	69.0	27251	11MADISO69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	730	27187	11CLAY	69.0	27251	11MADISO69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	730	27187	11CLAY	69.0	27251	11MADISO69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.6	143.5	142	101.1	731	27188	11CLAY	69.0	27282	11SHLBYV69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	731	27188	11CLAY	69.0	27282	11SHLBYV69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	146.2	144	143	102.2	731	27188	11CLAY	69.0	27282	11SHLBYV69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	113.9	731	27188	11CLAY	69.0	27282	11SHLBYV69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	24.9	25	23	108.3	731	27188	11CLAY	69.0	27282	11SHLBYV69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	143.6	143.5	142	101.1	732	27188	11CLAY	69.0	27291	11W FRNK69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	732	27188	11CLAY	69.0	27291	11W FRNK69.0 1
27051	11ADAMS 138 27148 11TYRONE	98.7	95.8	97	101.7	732	27188	11CLAY	69.0	27291	11W FRNK69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	147.5	144	143	103.1	732	27188	11CLAY	69.0	27291	11W FRNK69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	113.8	732	27188	11CLAY	69.0	27291	11W FRNK69.0 1
29411	20LILYJ69.0 29634 20WOODLN	24.8	25	23	107.8	732	27188	11CLAY	69.0	27291	11W FRNK69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	733	27189	11CLIFTO69.0	27227	11HLCRST69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	733	27189	11CLIFTO69.0	27227	11HLCRST69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	146.7	144	143	102.6	733	27189	11CLIFTO69.0	27227	11HLCRST69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	733	27189	11CLIFTO69.0	27227	11HLCRST69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	733	27189	11CLIFTO69.0	27227	11HLCRST69.0 1	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	734	27190	11CORYDO69.0	27198	11EARL N69.0 EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	734	27190	11CORYDO69.0	27198	11EARL N69.0 EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	734	27190	11CORYDO69.0	27198	11EARL N69.0 EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	734	27190	11CORYDO69.0	27198	11EARL N69.0 EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	734	27190	11CORYDO69.0	27198	11EARL N69.0 EQ	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	735	27190	11CORYDO69.0	27215	11GR STL69.0 EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	735	27190	11CORYDO69.0	27215	11GR STL69.0 EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	735	27190	11CORYDO69.0	27215	11GR STL69.0 EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.2	735	27190	11CORYDO69.0	27215	11GR STL69.0 EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.9	735	27190	11CORYDO69.0	27215	11GR STL69.0 EQ	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	736	27190	11CORYDO69.0	27255	11MORGNF69.0 EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	736	27190	11CORYDO69.0	27255	11MORGNF69.0 EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	736	27190	11CORYDO69.0	27255	11MORGNF69.0 EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	736	27190	11CORYDO69.0	27255	11MORGNF69.0 EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	736	27190	11CORYDO69.0	27255	11MORGNF69.0 EQ	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	737	27191	11CRITTE69.0	27269	11PRINCE69.0 E2	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	737	27191	11CRITTE69.0	27269	11PRINCE69.0 E2	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	737	27191	11CRITTE69.0	27269	11PRINCE69.0 E2	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	737	27191	11CRITTE69.0	27269	11PRINCE69.0 E2	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	738	27191	11CRITTE69.0	27269	11PRINCE69.0 E2	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	738	27191	11CRITTE69.0	27269	11PRINCE69.0 EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	738	27191	11CRITTE69.0	27269	11PRINCE69.0 EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	738	27191	11CRITTE69.0	27269	11PRINCE69.0 EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	738	27191	11CRITTE69.0	27269	11PRINCE69.0 EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	738	27191	11CRITTE69.0	27269	11PRINCE69.0 EQ	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	739	27192	11CYNTH	69.0	27254	11MILLRS69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	739	27192	11CYNTH	69.0	27254	11MILLRS69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	739	27192	11CYNTH	69.0	27254	11MILLRS69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	739	27192	11CYNTH	69.0	27254	11MILLRS69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	739	27192	11CYNTH	69.0	27254	11MILLRS69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.7	143.5	142	101.2	740	27193	11DANVIL69.0	27290	11W CLIF69.0	EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111.1	740	27193	11DANVIL69.0	27290	11W CLIF69.0	EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	740	27193	11DANVIL69.0	27290	11W CLIF69.0	EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.8	21.7	19	114.6	740	27193	11DANVIL69.0	27290	11W CLIF69.0	EQ	
29411	20LILYJ69.0 29634 20WOODLN	25.1	25	23	109.2	740	27193	11DANVIL69.0	27290	11W CLIF69.0	EQ	
27023	11DELVIN 161 27045 11WI TAP	143.3	143.5	142	100.9	741	27195	11DIXDAM69.0	27226	11HIGB B69.0	EQ	
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	741	27195	11DIXDAM69.0	27226	11HIGB B69.0	EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	741	27195	11DIXDAM69.0	27226	11HIGB B69.0	EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114	741	27195	11DIXDAM69.0	27226	11HIGB B69.0	EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.6	741	27195	11DIXDAM69.0	27226	11HIGB B69.0	EQ	
27023	11DELVIN 161 27045 11WI TAP	146.8	143.5	142	103.4	742	27195	11DIXDAM69.0	27237	11LANCS 69.0	EQ	
27044	11W IRVI 161 27045 11WI TAP	82.8	82.2	74	111.8	742	27195	11DIXDAM69.0	27237	11LANCS 69.0	EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.6	742	27195	11DIXDAM69.0	27237	11LANCS 69.0	EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.8	21.7	19	114.6	742	27195	11DIXDAM69.0	27237	11LANCS 69.0	EQ	
29411	20LILYJ69.0 29634 20WOODLN	25.1	25	23	109.1	742	27195	11DIXDAM69.0	27237	11LANCS 69.0	EQ	
27023	11DELVIN 161 27045 11WI TAP	145.8	143.5	142	102.7	743	27195	11DIXDAM69.0	27295	11WC-DD 69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.6	82.2	74	111.6	743	27195	11DIXDAM69.0	27295	11WC-DD 69.0	1	
27051	11ADAMS 138 27148 11TYRONE	99.4	95.8	97	102.4	743	27195	11DIXDAM69.0	27295	11WC-DD 69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	743	27195	11DIXDAM69.0	27295	11WC-DD 69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.3	743	27195	11DIXDAM69.0	27295	11WC-DD 69.0	1	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.6	743	27195	11DIXDAM69.0	27295	11WC-DD 69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.8	143.5	142	101.3	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111.1	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	745	27198	11EARL N69.0	27216	11GR RVR69.0	EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	745	27198	11EARL N69.0	27216	11GR RVR69.0	EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	745	27198	11EARL N69.0	27216	11GR RVR69.0	EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.2	745	27198	11EARL N69.0	27216	11GR RVR69.0	EQ	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	745	27198	11EARL N69.0	27216	11GR RVR69.0	EQ	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	746	27198	11EARL N69.0	27257	11NEBO 69.0	E2	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	746	27198	11EARL N69.0	27257	11NEBO 69.0	E2	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	746	27198	11EARL N69.0	27257	11NEBO 69.0	E2	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	746	27198	11EARL N69.0	27257	11NEBO 69.0	E2	
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	746	27198	11EARL N69.0	27257	11NEBO 69.0	E2	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	747	27198	11EARL N69.0	27257	11NEBO 69.0	EQ	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	747	27198	11EARL N69.0	27257	11NEBO 69.0	EQ	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	747	27198	11EARL N69.0	27257	11NEBO 69.0	EQ	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	747	27198	11EARL N69.0	27257	11NEBO 69.0	EQ	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8		747	27198 11EARL N69.0	27257 11NEBO 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		748	27198 11EARL N69.0	27293 11WALKER69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111		748	27198 11EARL N69.0	27293 11WALKER69.0	1
27161	11AIKEN 69.0	27253	11MIDDLET	144	144	143	100.7		748	27198 11EARL N69.0	27293 11WALKER69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1		748	27198 11EARL N69.0	27293 11WALKER69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8		748	27198 11EARL N69.0	27293 11WALKER69.0	1
27044	11DELVIN 161	27045	11WI TAP	143.1	143.5	142	100.8		749	27200 11ELIHU 69.0	27210 11FERG S69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111		749	27200 11ELIHU 69.0	27210 11FERG S69.0	1
27161	11AIKEN 69.0	27253	11MIDDLET	144	144	143	100.7		749	27200 11ELIHU 69.0	27210 11FERG S69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.6		749	27200 11ELIHU 69.0	27210 11FERG S69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109.1		749	27200 11ELIHU 69.0	27210 11FERG S69.0	1
27023	11DELVIN 161	27045	11WI TAP	144	143.5	142	101.4		750	27200 11ELIHU 69.0	27300 11WOFFOR69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1		750	27200 11ELIHU 69.0	27300 11WOFFOR69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLET	144	144	143	100.7		750	27200 11ELIHU 69.0	27300 11WOFFOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8		750	27200 11ELIHU 69.0	27300 11WOFFOR69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.6		750	27200 11ELIHU 69.0	27300 11WOFFOR69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		751	27202 11ETHEL 69.0	27211 11FERNVL69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111		751	27202 11ETHEL 69.0	27211 11FERNVL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLET	144.2	144	143	100.9		751	27202 11ETHEL 69.0	27211 11FERNVL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1		751	27202 11ETHEL 69.0	27211 11FERNVL69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8		751	27202 11ETHEL 69.0	27211 11FERNVL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		752	27202 11ETHEL 69.0	27294 11WATTRS69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111		752	27202 11ETHEL 69.0	27294 11WATTRS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLET	144.6	144	143	101.1		752	27202 11ETHEL 69.0	27294 11WATTRS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1		752	27202 11ETHEL 69.0	27294 11WATTRS69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8		752	27202 11ETHEL 69.0	27294 11WATTRS69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		753	27203 11ETOWN 69.0	27222 11HARDN 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111		753	27203 11ETOWN 69.0	27222 11HARDN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLET	144	144	143	100.7		753	27203 11ETOWN 69.0	27222 11HARDN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.3	21.7	19	111.9		753	27203 11ETOWN 69.0	27222 11HARDN 69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.7		753	27203 11ETOWN 69.0	27222 11HARDN 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		754	27203 11ETOWN 69.0	27222 11HARDN 69.0	2
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111		754	27203 11ETOWN 69.0	27222 11HARDN 69.0	2
27161	11AIKEN 69.0	27253	11MIDDLET	144	144	143	100.7		754	27203 11ETOWN 69.0	27222 11HARDN 69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	21.3	21.7	19	112.1		754	27203 11ETOWN 69.0	27222 11HARDN 69.0	2
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.7		754	27203 11ETOWN 69.0	27222 11HARDN 69.0	2
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		755	27203 11ETOWN 69.0	27229 11HODGEN69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1		755	27203 11ETOWN 69.0	27229 11HODGEN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLET	144.3	144	143	100.9		755	27203 11ETOWN 69.0	27229 11HODGEN69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	26.4	25	23	114.7		755	27203 11ETOWN 69.0	27229 11HODGEN69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101		756	27203 11ETOWN 69.0	27274 11ROGERS69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111		756	27203 11ETOWN 69.0	27274 11ROGERS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLET	144	144	143	100.7		756	27203 11ETOWN 69.0	27274 11ROGERS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.4		756	27203 11ETOWN 69.0	27274 11ROGERS69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.7		756	27203 11ETOWN 69.0	27274 11ROGERS69.0	EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	757	27204 11EVARSTS69.0	27224	11HARLAN69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	757	27204 11EVARSTS69.0	27224	11HARLAN69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	757	27204 11EVARSTS69.0	27224	11HARLAN69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	757	27204 11EVARSTS69.0	27224	11HARLAN69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	757	27204 11EVARSTS69.0	27224	11HARLAN69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.7	143.5	142	101.2	758	27204 11EVARSTS69.0	27268	11POCKET69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111.1	758	27204 11EVARSTS69.0	27268	11POCKET69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	758	27204 11EVARSTS69.0	27268	11POCKET69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	758	27204 11EVARSTS69.0	27268	11POCKET69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	758	27204 11EVARSTS69.0	27268	11POCKET69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	101	759	27205 11EASTVM69.0	27240	11LEITCH69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	759	27205 11EASTVM69.0	27240	11LEITCH69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	759	27205 11EASTVM69.0	27240	11LEITCH69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21	21.7	19	110.5	759	27205 11EASTVM69.0	27240	11LEITCH69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	24.9	25	23	108.1	759	27205 11EASTVM69.0	27240	11LEITCH69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	145.8	143.5	142	102.7	760	27206 11FARLEY69.0	27286	11SWEETH69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.7	82.2	74	111.8	760	27206 11FARLEY69.0	27286	11SWEETH69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	760	27206 11FARLEY69.0	27286	11SWEETH69.0	EQ
27230	11HOPEWL69.0 29399 20LAURIC	75.5	48	72	104.9	760	27206 11FARLEY69.0	27286	11SWEETH69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114	760	27206 11FARLEY69.0	27286	11SWEETH69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25.1	25	23	108.9	760	27206 11FARLEY69.0	27286	11SWEETH69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143	143.5	142	100.7	761	27206 11FARLEY69.0	27300	11WOFFOR69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	761	27206 11FARLEY69.0	27300	11WOFFOR69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	761	27206 11FARLEY69.0	27300	11WOFFOR69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	761	27206 11FARLEY69.0	27300	11WOFFOR69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	761	27206 11FARLEY69.0	27300	11WOFFOR69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.9	143.5	142	101.4	762	27207 11FARMER69.0	27273	11RODBRN69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	762	27207 11FARMER69.0	27273	11RODBRN69.0	EQ
27137	11RODBRN 138 27273 11RODBRN	47.2	35.1	40	118.1	762	27207 11FARMER69.0	27273	11RODBRN69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	762	27207 11FARMER69.0	27273	11RODBRN69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	762	27207 11FARMER69.0	27273	11RODBRN69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	762	27207 11FARMER69.0	27273	11RODBRN69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	763	27207 11FARMER69.0	27284	11SPENC 69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	763	27207 11FARMER69.0	27284	11SPENC 69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	763	27207 11FARMER69.0	27284	11SPENC 69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	763	27207 11FARMER69.0	27284	11SPENC 69.0	EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	763	27207 11FARMER69.0	27284	11SPENC 69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	764	27208 11FARNLSL69.0	27264	11PADDYS69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	764	27208 11FARNLSL69.0	27264	11PADDYS69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	764	27208 11FARNLSL69.0	27264	11PADDYS69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	764	27208 11FARNLSL69.0	27264	11PADDYS69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	764	27208 11FARNLSL69.0	27264	11PADDYS69.0	1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	765	27208 11FARNLSL69.0	27281	11SHIVEL69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	765	27208 11FARNLSL69.0	27281	11SHIVEL69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	765	27208 11FARNLSL69.0	27281	11SHIVEL69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency						
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114.1	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1			
29411	20LILYJT69.0	29634	20WOODLN	23	25	25	108.8	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1			
27023	11DELVIN	161	27045	11WI	144.6	143.5	101.8	766	27209	11FAWKES69.0	27225	11HIGB	A69.0	EQ		
27044	11W	IRVI	161	27045	11WI	82.2	111.5	766	27209	11FAWKES69.0	27225	11HIGB	A69.0	EQ		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	766	27209	11FAWKES69.0	27225	11HIGB	A69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114	766	27209	11FAWKES69.0	27225	11HIGB	A69.0	EQ		
29411	20LILYJT69.0	29634	20WOODLN	23	25	25	108.6	766	27209	11FAWKES69.0	27225	11HIGB	A69.0	EQ		
27044	11W	IRVI	161	27045	11WI	143	100.7	767	27209	11FAWKES69.0	27243	11LK	REB69.0	E2		
27044	11W	IRVI	161	27045	11WI	81.4	110	767	27209	11FAWKES69.0	27243	11LK	REB69.0	E2		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	767	27209	11FAWKES69.0	27243	11LK	REB69.0	E2		
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114.1	767	27209	11FAWKES69.0	27243	11LK	REB69.0	E2		
29411	20LILYJT69.0	29634	20WOODLN	23	25	25	108.8	767	27209	11FAWKES69.0	27243	11LK	REB69.0	E2		
27023	11DELVIN	161	27045	11WI	142.1	143.5	100.1	768	27209	11FAWKES69.0	27243	11LK	REB69.0	E2		
27044	11W	IRVI	161	27045	11WI	79.9	108	768	27209	11FAWKES69.0	27243	11LK	REB69.0	EQ		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	768	27209	11FAWKES69.0	27243	11LK	REB69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114.1	768	27209	11FAWKES69.0	27243	11LK	REB69.0	EQ		
29411	20LILYJT69.0	29634	20WOODLN	23	25	25	108.8	768	27209	11FAWKES69.0	27243	11LK	REB69.0	EQ		
27023	11DELVIN	161	27045	11WI	143.5	143.5	101	769	27212	11FINCHV69.0	27244	11SC	TAP69.0	1		
27044	11W	IRVI	161	27045	11WI	82.1	111	769	27212	11FINCHV69.0	27244	11SC	TAP69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	100.6	769	27212	11FINCHV69.0	27244	11SC	TAP69.0	1		
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	113.9	769	27212	11FINCHV69.0	27244	11SC	TAP69.0	1		
29411	20LILYJT69.0	29634	20WOODLN	23	25	25	108.4	769	27212	11FINCHV69.0	27244	11SC	TAP69.0	1		
27023	11DELVIN	161	27045	11WI	143.2	143.5	100.9	770	27212	11FINCHV69.0	27253	11MIDDLT	69.0	EQ		
27044	11W	IRVI	161	27045	11WI	82.2	111	770	27212	11FINCHV69.0	27253	11MIDDLT	69.0	EQ		
27161	11AIKEN	69.0	27253	11MIDDLT	158	144	110.5	770	27212	11FINCHV69.0	27253	11MIDDLT	69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	112.3	770	27212	11FINCHV69.0	27253	11MIDDLT	69.0	EQ		
29411	20LILYJT69.0	29634	20WOODLN	24	24	25	104.4	770	27212	11FINCHV69.0	27253	11MIDDLT	69.0	EQ		
27023	11DELVIN	161	27045	11WI	143.4	143.5	101	771	27214	11FFRT	E69.0	27289	11TYRONE	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	82.1	111	771	27214	11FFRT	E69.0	27289	11TYRONE	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	100.7	771	27214	11FFRT	E69.0	27289	11TYRONE	69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114.1	771	27214	11FFRT	E69.0	27289	11TYRONE	69.0	EQ	
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	109.3	771	27214	11FFRT	E69.0	27289	11TYRONE	69.0	EQ	
27023	11DELVIN	161	27045	11WI	143.4	143.5	101	772	27214	11FFRT	E69.0	27291	11W	FRNK	69.0	EQ
27044	11W	IRVI	161	27045	11WI	82.2	111	772	27214	11FFRT	E69.0	27291	11W	FRNK	69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	143.3	144	100.2	772	27214	11FFRT	E69.0	27291	11W	FRNK	69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114.2	772	27214	11FFRT	E69.0	27291	11W	FRNK	69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	109.3	772	27214	11FFRT	E69.0	27291	11W	FRNK	69.0	EQ
27023	11DELVIN	161	27045	11WI	143.5	143.5	101	773	27215	11GR	STL69.0	27261	11OMU	69.0	1	
27044	11W	IRVI	161	27045	11WI	82.2	111	773	27215	11GR	STL69.0	27261	11OMU	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	773	27215	11GR	STL69.0	27261	11OMU	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOLN	19	21.7	21.7	114.1	773	27215	11GR	STL69.0	27261	11OMU	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	108.7	773	27215	11GR	STL69.0	27261	11OMU	69.0	1	
27023	11DELVIN	161	27045	11WI	143.5	143.5	101	774	27216	11GR	RVR69.0	27228	11HILLSI	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	82.2	111	774	27216	11GR	RVR69.0	27228	11HILLSI	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	774	27216	11GR	RVR69.0	27228	11HILLSI	69.0	EQ	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Necon	Contingency		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.7	19	113.9	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.9	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101.1	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.7	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.2	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.8	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	778	27218 11GRAHMV69.0	27298 11WICKLI69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	778	27218 11GRAHMV69.0	27298 11WICKLI69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	778	27218 11GRAHMV69.0	27298 11WICKLI69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	778	27218 11GRAHMV69.0	27298 11WICKLI69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	778	27218 11GRAHMV69.0	27298 11WICKLI69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	779	27218 11GRAHMV69.0	27298 11WICKLI69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	779	27218 11GRAHMV69.0	27298 11WICKLI69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	779	27218 11GRAHMV69.0	27298 11WICKLI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	779	27218 11GRAHMV69.0	27298 11WICKLI69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	779	27218 11GRAHMV69.0	27298 11WICKLI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	780	27219 11GRBURG69.0	27288 11TAYLRC69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	780	27219 11GRBURG69.0	27288 11TAYLRC69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	780	27219 11GRBURG69.0	27288 11TAYLRC69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	21.7	19	111.4	780	27219 11GRBURG69.0	27288 11TAYLRC69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25	25	23	109.5	780	27219 11GRBURG69.0	27288 11TAYLRC69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	781	27220 11HAEFLN69.0	27241 11LEX PL69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	781	27220 11HAEFLN69.0	27241 11LEX PL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	781	27220 11HAEFLN69.0	27241 11LEX PL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	781	27220 11HAEFLN69.0	27241 11LEX PL69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	781	27220 11HAEFLN69.0	27241 11LEX PL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	782	27221 11HANCOC69.0	27278 11SEMINO69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	782	27221 11HANCOC69.0	27278 11SEMINO69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.8	782	27221 11HANCOC69.0	27278 11SEMINO69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	782	27221 11HANCOC69.0	27278 11SEMINO69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25	23	108.8	782	27221 11HANCOC69.0	27278 11SEMINO69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	783	27224 11HARLAN69.0	27272 11ROCKY 69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	783	27224 11HARLAN69.0	27272 11ROCKY 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	783	27224 11HARLAN69.0	27272 11ROCKY 69.0	EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	783	27224 11HARLAN69.0	27272	11ROCKY 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	783	27224 11HARLAN69.0	27272	11ROCKY 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	784	27226 11HIGB 69.0	27238	11LANSWD69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	784	27226 11HIGB 69.0	27238	11LANSWD69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	784	27226 11HIGB 69.0	27238	11LANSWD69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	784	27226 11HIGB 69.0	27238	11LANSWD69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	784	27226 11HIGB 69.0	27238	11LANSWD69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	785	27226 11HIGB 69.0	27252	11MED CN69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	785	27226 11HIGB 69.0	27252	11MED CN69.0	1
27051	11ADAMS 138	27148	11TYRONE	97	95.8	95.8	97	100	785	27226 11HIGB 69.0	27252	11MED CN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	785	27226 11HIGB 69.0	27252	11MED CN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	785	27226 11HIGB 69.0	27252	11MED CN69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	785	27226 11HIGB 69.0	27252	11MED CN69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	143.5	142	100.9	786	27226 11HIGB 69.0	27289	11TYRONE69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	786	27226 11HIGB 69.0	27289	11TYRONE69.0	EQ
27051	11ADAMS 138	27148	11TYRONE	99.4	95.8	95.8	97	102.5	786	27226 11HIGB 69.0	27289	11TYRONE69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	144	143	100.6	786	27226 11HIGB 69.0	27289	11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.3	786	27226 11HIGB 69.0	27289	11TYRONE69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	25	23	108	786	27226 11HIGB 69.0	27289	11TYRONE69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	787	27228 11HILLS169.0	27232	11INDIAN69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	787	27228 11HILLS169.0	27232	11INDIAN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	787	27228 11HILLS169.0	27232	11INDIAN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	787	27228 11HILLS169.0	27232	11INDIAN69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	787	27228 11HILLS169.0	27232	11INDIAN69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	788	27228 11HILLS169.0	27270	11RIVR Q69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	788	27228 11HILLS169.0	27270	11RIVR Q69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	788	27228 11HILLS169.0	27270	11RIVR Q69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	788	27228 11HILLS169.0	27270	11RIVR Q69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	100.8	788	27228 11HILLS169.0	27270	11RIVR Q69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.1	143.5	143.5	142	100.8	789	27230 11HOPEWL69.0	27286	11SWEETH69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	110.9	789	27230 11HOPEWL69.0	27286	11SWEETH69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	789	27230 11HOPEWL69.0	27286	11SWEETH69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	789	27230 11HOPEWL69.0	27286	11SWEETH69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	789	27230 11HOPEWL69.0	27286	11SWEETH69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	790	27231 11IMBODE69.0	27248	11LYNCH 69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	790	27231 11IMBODE69.0	27248	11LYNCH 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	790	27231 11IMBODE69.0	27248	11LYNCH 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	790	27231 11IMBODE69.0	27248	11LYNCH 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	790	27231 11IMBODE69.0	27248	11LYNCH 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	143.5	142	101.2	791	27231 11IMBODE69.0	27268	11POCKET69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	791	27231 11IMBODE69.0	27268	11POCKET69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	791	27231 11IMBODE69.0	27268	11POCKET69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	791	27231 11IMBODE69.0	27268	11POCKET69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	791	27231 11IMBODE69.0	27268	11POCKET69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	792	27232 11INDIAN69.0	27259	11OHIO C69.0	EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	792	27232 11INDIAN69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	792	27232 11INDIAN69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	792	27232 11INDIAN69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	23	109	792	27232 11INDIAN69.0
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	793	27233 11KENTON69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	793	27233 11KENTON69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	793	27233 11KENTON69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	793	27233 11KENTON69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.7	793	27233 11KENTON69.0
27023	11DELVIN	161	27045	11WI TAP	145.3	143.5	142	102.3	794	27235 11KU PK 69.0
27044	11W IRVI	161	27045	11WI TAP	82.7	82.2	74	111.8	794	27235 11KU PK 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	794	27235 11KU PK 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	794	27235 11KU PK 69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	23	109	794	27235 11KU PK 69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	795	27235 11KU PK 69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	795	27235 11KU PK 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	795	27235 11KU PK 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	795	27235 11KU PK 69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	795	27235 11KU PK 69.0
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	796	27235 11KU PK 69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	796	27235 11KU PK 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	796	27235 11KU PK 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	796	27235 11KU PK 69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	796	27235 11KU PK 69.0
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	797	27236 11KY DAM69.0
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	797	27236 11KY DAM69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	797	27236 11KY DAM69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.8	797	27236 11KY DAM69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.7	797	27236 11KY DAM69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	798	27236 11KY DAM69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	798	27236 11KY DAM69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	798	27236 11KY DAM69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	798	27236 11KY DAM69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	798	27236 11KY DAM69.0
27023	11DELVIN	161	27045	11WI TAP	146.2	143.5	142	102.9	799	27237 11LANCS 69.0
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.4	799	27237 11LANCS 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	799	27237 11LANCS 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.4	799	27237 11LANCS 69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	799	27237 11LANCS 69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	800	27238 11LANSDW69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	800	27238 11LANSDW69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	800	27238 11LANSDW69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	800	27238 11LANSDW69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	23	108.8	800	27238 11LANSDW69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	801	27238 11LANSDW69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	801	27238 11LANSDW69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	27238	11LANS	DW69.0	27247	11LOUD B69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	27238	11LANS	DW69.0	27247	11LOUD B69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	27238	11LANS	DW69.0	27247	11LOUD B69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.3	143.5	142	100.9	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.7	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
27285	11SPRNGF69.0 29459 20N SPR	22	12.6	19	115.7	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.2	21.7	19	111.7	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
29411	20LILYJ69.0 29634 20WOODLN	26.7	25	23	115.9	27239	11LEBAN	O69.0	27285	11SPRNGF69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.6	143.5	142	101.1	27239	11LEBAN	O69.0	27288	11TAYLRC69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	27239	11LEBAN	O69.0	27288	11TAYLRC69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	27239	11LEBAN	O69.0	27288	11TAYLRC69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.4	21.7	19	112.8	27239	11LEBAN	O69.0	27288	11TAYLRC69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25.1	25	23	109.2	27240	11LEITC	H69.0	27259	11OHIO C69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	144	143.5	142	101	27240	11LEITC	H69.0	27259	11OHIO C69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	27240	11LEITC	H69.0	27259	11OHIO C69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	27240	11LEITC	H69.0	27259	11OHIO C69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114	27241	11LEX	PL69.0	27246	11LOUD A69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	27241	11LEX	PL69.0	27252	11MED CN69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	27241	11LEX	PL69.0	27252	11MED CN69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	27241	11LEX	PL69.0	27252	11MED CN69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	27241	11LEX	PL69.0	27252	11MED CN69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	27241	11LEX	PL69.0	27252	11MED CN69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	27241	11LEX	PL69.0	27252	11MED CN69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	143.2	143.5	142	100.8	27241	11LEX	PL69.0	27266	11PISGAH69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	27241	11LEX	PL69.0	27266	11PISGAH69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.6	27241	11LEX	PL69.0	27266	11PISGAH69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.2	27241	11LEX	PL69.0	27266	11PISGAH69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.6	27241	11LEX	PL69.0	27266	11PISGAH69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	27241	11LEX	PL69.0	27327	11BOUREN69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	27241	11LEX	PL69.0	27327	11BOUREN69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	27241	11LEX	PL69.0	27327	11BOUREN69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114	27241	11LEX	PL69.0	27327	11BOUREN69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.8	27241	11LEX	PL69.0	27327	11BOUREN69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	142.7	143.5	142	100.5	27243	11LK	REB69.0	27292	11W IRVI69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	79.3	82.2	74	107.1	27243	11LK	REB69.0	27292	11W IRVI69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	27243	11LK	REB69.0	27292	11W IRVI69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	27243	11LK	REB69.0	27292	11W IRVI69.0 EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.8	809	27243 11LK REB69.0	27292 11W IRVI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	810	27244 11SC TAP69.0	27282 11SHLBYV69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	810	27244 11SC TAP69.0	27282 11SHLBYV69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.7	19	113.5	810	27244 11SC TAP69.0	27282 11SHLBYV69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	24.7	25	25	23	107.3	810	27244 11SC TAP69.0	27282 11SHLBYV69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	81.8	82.2	82.2	74	110.6	811	27245 11LONDON69.0	27267 11PITTSB69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	811	27245 11LONDON69.0	27267 11PITTSB69.0	1
27230	11HOPEWLE69.0	29399	20LAURLC	80.5	48	48	72	111.8	811	27245 11LONDON69.0	27267 11PITTSB69.0	1
27235	11KU PK 69.0	27265	11PINEVI	86.3	69.8	69.8	82	105.2	811	27245 11LONDON69.0	27267 11PITTSB69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	811	27245 11LONDON69.0	27267 11PITTSB69.0	1
29411	20LILYJT69.0	29634	20WOODLN	24.9	25	25	23	108.3	811	27245 11LONDON69.0	27267 11PITTSB69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.9	143.5	143.5	142	101.3	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.8	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	813	27246 11LOUDB 69.0	27247 11LOUDB 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	813	27246 11LOUDB 69.0	27247 11LOUDB 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	813	27246 11LOUDB 69.0	27247 11LOUDB 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	813	27246 11LOUDB 69.0	27247 11LOUDB 69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.8	813	27246 11LOUDB 69.0	27247 11LOUDB 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101.1	814	27246 11LOUDB 69.0	27327 11BOURBN69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	814	27246 11LOUDB 69.0	27327 11BOURBN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	814	27246 11LOUDB 69.0	27327 11BOURBN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	814	27246 11LOUDB 69.0	27327 11BOURBN69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.8	814	27246 11LOUDB 69.0	27327 11BOURBN69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	143.5	142	101.2	815	27247 11LOUDB 69.0	27299 11WINCHS69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	815	27247 11LOUDB 69.0	27299 11WINCHS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	815	27247 11LOUDB 69.0	27299 11WINCHS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	815	27247 11LOUDB 69.0	27299 11WINCHS69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.7	815	27247 11LOUDB 69.0	27299 11WINCHS69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	143.5	142	101.2	816	27248 11LYNCH 69.0	27268 11POCKET69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	816	27248 11LYNCH 69.0	27268 11POCKET69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	816	27248 11LYNCH 69.0	27268 11POCKET69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	816	27248 11LYNCH 69.0	27268 11POCKET69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.8	816	27248 11LYNCH 69.0	27268 11POCKET69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101	817	27249 11LYNCH 69.0	27250 11LYND S69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	817	27249 11LYNCH 69.0	27250 11LYND S69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	817	27249 11LYNCH 69.0	27250 11LYND S69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	817	27249 11LYNCH 69.0	27250 11LYND S69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.8	817	27249 11LYNCH 69.0	27250 11LYND S69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	143.5	142	101.1	818	27249 11LYNCH 69.0	27253 11MIDDLT69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111	818	27249 11LYNCH 69.0	27253 11MIDDLT69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	155.2	144	144	143	108.5	818	27249 11LYNCH 69.0	27253 11MIDDLT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	818	27249 11LYNCH 69.0	27253 11MIDDLT69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25	25	25	23	108.9	818	27249 11LYNCH 69.0	27253 11MIDDLT69.0	1

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	819	27249	11LYNDON69.0	27287	11TAYLOR69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	819	27249	11LYNDON69.0	27287	11TAYLOR69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.2	819	27249	11LYNDON69.0	27287	11TAYLOR69.0 1
29411	20LILYJT69.0 29634 20WOODLN	25.1	25	23	108.9	819	27249	11LYNDON69.0	27287	11TAYLOR69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	820	27250	11LYND S69.0	27253	11MIDDLT69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	820	27250	11LYND S69.0	27253	11MIDDLT69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	155.1	144	143	108.4	820	27250	11LYND S69.0	27253	11MIDDLT69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	820	27250	11LYND S69.0	27253	11MIDDLT69.0 1
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.9	820	27250	11LYND S69.0	27253	11MIDDLT69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	821	27250	11LYND S69.0	27263	11OXMOOR69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	821	27250	11LYND S69.0	27263	11OXMOOR69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	158.1	144	143	110.6	821	27250	11LYND S69.0	27263	11OXMOOR69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	821	27250	11LYND S69.0	27263	11OXMOOR69.0 1
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.8	821	27250	11LYND S69.0	27263	11OXMOOR69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.3	143.5	142	100.9	822	27254	11MILRS69.0	27277	11SARDIS69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	822	27254	11MILRS69.0	27277	11SARDIS69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	822	27254	11MILRS69.0	27277	11SARDIS69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	822	27254	11MILRS69.0	27277	11SARDIS69.0 1
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.9	822	27254	11MILRS69.0	27277	11SARDIS69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	823	27254	11MILRS69.0	27327	11BOUREN69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	823	27254	11MILRS69.0	27327	11BOUREN69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	823	27254	11MILRS69.0	27327	11BOUREN69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	823	27254	11MILRS69.0	27327	11BOUREN69.0 E2
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.8	823	27254	11MILRS69.0	27327	11BOUREN69.0 E2
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	824	27254	11MILRS69.0	27327	11BOUREN69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	824	27254	11MILRS69.0	27327	11BOUREN69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	824	27254	11MILRS69.0	27327	11BOUREN69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	824	27254	11MILRS69.0	27327	11BOUREN69.0 E2
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.8	824	27254	11MILRS69.0	27327	11BOUREN69.0 E2
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	825	27255	11MORGNF69.0	27257	11NEBO 69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	825	27255	11MORGNF69.0	27257	11NEBO 69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	825	27255	11MORGNF69.0	27257	11NEBO 69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	825	27255	11MORGNF69.0	27257	11NEBO 69.0 E2
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.8	825	27255	11MORGNF69.0	27257	11NEBO 69.0 E2
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	826	27255	11MORGNF69.0	27296	11WHTC T69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	826	27255	11MORGNF69.0	27296	11WHTC T69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	826	27255	11MORGNF69.0	27296	11WHTC T69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	826	27255	11MORGNF69.0	27296	11WHTC T69.0 E2
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.8	826	27255	11MORGNF69.0	27296	11WHTC T69.0 E2
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	827	27255	11MORGNF69.0	27297	11WHEATC69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	827	27255	11MORGNF69.0	27297	11WHEATC69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	827	27255	11MORGNF69.0	27297	11WHEATC69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	827	27255	11MORGNF69.0	27297	11WHEATC69.0 E2
29411	20LILYJT69.0 29634 20WOODLN	25	25	23	108.8	827	27255	11MORGNF69.0	27297	11WHEATC69.0 E2
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	828	27256	11MUD LA69.0	27333	116676 T69.0 E2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	828	27256 11MUD LA69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	828	27256 11MUD LA69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	828	27256 11MUD LA69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	828	27256 11MUD LA69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	829	27257 11NEBO 69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	829	27257 11NEBO 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	829	27257 11NEBO 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	829	27257 11NEBO 69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	829	27257 11NEBO 69.0
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	830	27257 11NEBO 69.0
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	830	27257 11NEBO 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144.6	144	143	101.1	830	27257 11NEBO 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.9	830	27257 11NEBO 69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.7	831	27264 11PADDYS69.0
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.1	831	27264 11PADDYS69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	831	27264 11PADDYS69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	831	27264 11PADDYS69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	831	27264 11PADDYS69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	831	27264 11PADDYS69.0
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101.1	832	27265 11PINEVI69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	832	27265 11PINEVI69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	832	27265 11PINEVI69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	832	27265 11PINEVI69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	832	27265 11PINEVI69.0
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.1	833	27265 11PINEVI69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	833	27265 11PINEVI69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	833	27265 11PINEVI69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	833	27265 11PINEVI69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	833	27265 11PINEVI69.0
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	834	27266 11PIGSAH69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	834	27266 11PIGSAH69.0
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	834	27266 11PIGSAH69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	834	27266 11PIGSAH69.0
29411	20LILY	TJ69.0	29634	20WOODLN	24.9	25	23	108.1	834	27266 11PIGSAH69.0
27023	11DELVIN	161	27045	11WI TAP	143.2	143.5	142	100.8	835	27267 11PITTSB69.0
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	835	27267 11PITTSB69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	835	27267 11PITTSB69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	835	27267 11PITTSB69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	835	27267 11PITTSB69.0
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	836	27268 11POCKET69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	836	27268 11POCKET69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	836	27268 11POCKET69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	836	27268 11POCKET69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	836	27268 11POCKET69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	837	27269 11PRINCE69.0	27293 11WALKER69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	837	27269 11PRINCE69.0	27293 11WALKER69.0	E2
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	837	27269 11PRINCE69.0	27293 11WALKER69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	837	27269 11PRINCE69.0	27293 11WALKER69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	837	27269 11PRINCE69.0	27293 11WALKER69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	838	27269 11PRINCE69.0	27293 11WALKER69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	838	27269 11PRINCE69.0	27293 11WALKER69.0	E2
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	838	27269 11PRINCE69.0	27293 11WALKER69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	838	27269 11PRINCE69.0	27293 11WALKER69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	838	27269 11PRINCE69.0	27293 11WALKER69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	839	27270 11RIVR Q69.0	27271 11RQ TAP69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	839	27270 11RIVR Q69.0	27271 11RQ TAP69.0	E2
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	839	27270 11RIVR Q69.0	27271 11RQ TAP69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	839	27270 11RIVR Q69.0	27271 11RQ TAP69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	839	27270 11RIVR Q69.0	27271 11RQ TAP69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101.1	840	27271 11RQ TAP69.0	27293 11WALKER69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	840	27271 11RQ TAP69.0	27293 11WALKER69.0	E2
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	840	27271 11RQ TAP69.0	27293 11WALKER69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	840	27271 11RQ TAP69.0	27293 11WALKER69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	840	27271 11RQ TAP69.0	27293 11WALKER69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	841	27276 11S PADU69.0	27298 11WICKLI69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	841	27276 11S PADU69.0	27298 11WICKLI69.0	E2
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	841	27276 11S PADU69.0	27298 11WICKLI69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	841	27276 11S PADU69.0	27298 11WICKLI69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	841	27276 11S PADU69.0	27298 11WICKLI69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.8	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
27023	11DELVIN 161	27045	11WI	TAP	143.6	143.6	142	101.1	843	27279 11SEWELL69.0	27283 11SSET S69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	843	27279 11SEWELL69.0	27283 11SSET S69.0	E2
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	843	27279 11SEWELL69.0	27283 11SSET S69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114	843	27279 11SEWELL69.0	27283 11SSET S69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	843	27279 11SEWELL69.0	27283 11SSET S69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.4	143.4	142	101	844	27282 11SHLBYV69.0	27325 11EMINEN69.0	1
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	844	27282 11SHLBYV69.0	27325 11EMINEN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		145.6	144	143	101.8	844	27282 11SHLBYV69.0	27325 11EMINEN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.6	21.7	19	113.8	844	27282 11SHLBYV69.0	27325 11EMINEN69.0	1
29411	20LILYJ69.0	29634	20WOODLN		24.9	25	23	108	844	27282 11SHLBYV69.0	27325 11EMINEN69.0	1
27023	11DELVIN 161	27045	11WI	TAP	143.3	143.5	142	100.9	845	27282 11SHLBYV69.0	27329 116658 T69.0	E2
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.2	74	111	845	27282 11SHLBYV69.0	27329 116658 T69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL		21.6	21.7	19	113.6	845	27282 11SHLBYV69.0	27329 116658 T69.0	E2
29411	20LILYJ69.0	29634	20WOODLN		24.8	25	23	107.6	845	27282 11SHLBYV69.0	27329 116658 T69.0	E2
27023	11DELVIN 161	27045	11WI	TAP	143.5	143.5	142	101.1	846	27290 11W CLIF69.0	27295 11WC-DD 69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	111	846	27290	11W CLIF69.0	27295	11WC-DD 69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	846	27290	11W CLIF69.0	27295	11WC-DD 69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	114.1	846	27290	11W CLIF69.0	27295	11WC-DD 69.0	1
29411	20LILYTYJ69.0 29634 20WOODLN	25	25	23	25	108.5	846	27290	11W CLIF69.0	27295	11WC-DD 69.0	1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	143.5	101	847	27296	11WHTC T69.0	27297	11WHEATC69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	111	847	27296	11WHTC T69.0	27297	11WHEATC69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	847	27296	11WHTC T69.0	27297	11WHEATC69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	114.1	847	27296	11WHTC T69.0	27297	11WHEATC69.0	EQ
29411	20LILYTYJ69.0 29634 20WOODLN	25	25	23	25	108.8	847	27296	11WHTC T69.0	27297	11WHEATC69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	143.5	101	848	27319	11COLLIN69.0	27320	11COLLIN 138	1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	82.2	111	848	27319	11COLLIN69.0	27320	11COLLIN 138	1
27161	11AIKEN 69.0 27253 11MIDDLT	163.6	144	143	144	114.4	848	27319	11COLLIN69.0	27320	11COLLIN 138	1
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	21.7	113.9	848	27319	11COLLIN69.0	27320	11COLLIN 138	1
29411	20LILYTYJ69.0 29634 20WOODLN	24.9	25	23	25	108.4	848	27319	11COLLIN69.0	27320	11COLLIN 138	1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	143.5	101.1	849	27322	11BLUJELI69.0	27333	116676 T69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	111	849	27322	11BLUJELI69.0	27333	116676 T69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	144	100.7	849	27322	11BLUJELI69.0	27333	116676 T69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	114.1	849	27322	11BLUJELI69.0	27333	116676 T69.0	EQ
29411	20LILYTYJ69.0 29634 20WOODLN	25	25	23	25	108.8	849	27322	11BLUJELI69.0	27333	116676 T69.0	EQ

Branch Violations

*** MUST 5.0 *** MON, JUN 02 2003 15:57 ***
 2001 SERIES, NERC/MMWG BASE CASE LIBRARY
 2007 SUMMER CASE, TRIAL #7
 Subsys.File H:\projects\G243\LFstudy\estill.sub
 Monit.File H:\projects\G243\LFstudy\estill.mon
 Contin.File H:\projects\G243\LFstudy\estill.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 100.0 % of nominal rating

** From bus	** To bus	** ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	Case
27051 11ADAMS	138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	**	**	Base Case
27137 11RODBRN	138 27273 11RODBRN69.0 1	35	35	33	106	**	**	Base Case
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	**	**	Base Case
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	**	**	Base Case
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.9	**	**	Base Case
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.3	144.4	143	100.9	1	29191 203M	69.0 29284 20CYNTH 69.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.9	21.8	19	115.1	1	29191 203M	69.0 29284 20CYNTH 69.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.8	1	29191 203M	69.0 29284 20CYNTH 69.0 1
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.3	144.4	143	100.9	2	29191 203M	69.0 29514 20RENAKR69.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.9	21.8	19	115.2	2	29191 203M	69.0 29514 20RENAKR69.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.8	2	29191 203M	69.0 29514 20RENAKR69.0 1
27051 11ADAMS	138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	3	29192 20ALBANY69.0	29559 20SNOWJ 69.0 1
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	3	29192 20ALBANY69.0	29559 20SNOWJ 69.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	3	29192 20ALBANY69.0	29559 20SNOWJ 69.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.9	3	29192 20ALBANY69.0	29559 20SNOWJ 69.0 1
27051 11ADAMS	138 27148 11TYRONE 138 1	97.2	97.3	97	100.2	4	29192 20ALBANY69.0	29639 20ZULAJ269.0 1
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	4	29192 20ALBANY69.0	29639 20ZULAJ269.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	22.1	21.8	19	116.3	4	29192 20ALBANY69.0	29639 20ZULAJ269.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.8	25.7	23	112	4	29192 20ALBANY69.0	29639 20ZULAJ269.0 1
27051 11ADAMS	138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.9	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
27051 11ADAMS	138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	101	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.9	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
27051 11ADAMS	138 27148 11TYRONE 138 1	97.2	97.3	97	100.2	7	29195 20ANNVJ69.0	29307 20EBERLJ69.0 1
27161 11AIKEN	69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	7	29195 20ANNVJ69.0	29307 20EBERLJ69.0 1
29359 20HODGEN	69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.9	7	29195 20ANNVJ69.0	29307 20EBERLJ69.0 1
29411 20LILYJTJ69.0	29634 20WOODLN69.0 1	25.7	25.7	23	111.8	7	29195 20ANNVJ69.0	29307 20EBERLJ69.0 1

** From bus	** **	To bus	** d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051	11ADAMS	138 27148	11TYRONE	138 1	97.2	97.3	100.2	8	29195 20ANNVLJ69.0 29603 20TYNER 69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	100.9	8	29195 20ANNVLJ69.0 29603 20TYNER 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	114.9	19	29195 20ANNVLJ69.0 29603 20TYNER 69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.8	23	29195 20ANNVLJ69.0 29603 20TYNER 69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	100.3	9	29196 20ARGTM 138 29198 20ARGTM 69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	9	29196 20ARGTM 138 29198 20ARGTM 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	114.8	19	29196 20ARGTM 138 29198 20ARGTM 69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.9	23	29196 20ARGTM 138 29198 20ARGTM 69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.4	97.3	100.4	11	29198 20ARGTM 69.0 29624 20WARNCK69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	11	29198 20ARGTM 69.0 29624 20WARNCK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	114.8	19	29198 20ARGTM 69.0 29624 20WARNCK69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	112	23	29198 20ARGTM 69.0 29624 20WARNCK69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	100.4	12	29199 20ASAHJ69.0 29544 20SHOPVL69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	12	29199 20ASAHJ69.0 29544 20SHOPVL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	114.6	19	29199 20ASAHJ69.0 29544 20SHOPVL69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.9	23	29199 20ASAHJ69.0 29544 20SHOPVL69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	117.5	97.3	121.1	14	29200 20AVON 345 29202 20AVON 138 1
27090	11FLEMING	138 27093	11GODDRD	138 1	160	135.2	101.3	14	29200 20AVON 345 29202 20AVON 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	146.4	144.4	102.4	14	29200 20AVON 345 29202 20AVON 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	113.7	19	29200 20AVON 345 29202 20AVON 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	27.7	25.7	120.6	15	29200 20AVON 345 29202 20AVON 138 1
27051	11ADAMS	138 27148	11TYRONE	138 1	117.6	97.3	121.2	15	29200 20AVON 345 29564 20SPURLK 345 1
27090	11FLEMING	138 27093	11GODDRD	138 1	160	135.2	101.3	15	29200 20AVON 345 29564 20SPURLK 345 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	146.5	144.4	102.4	15	29200 20AVON 345 29564 20SPURLK 345 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	113.7	15	29200 20AVON 345 29564 20SPURLK 345 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	27.7	25.7	120.6	15	29200 20AVON 345 29564 20SPURLK 345 1
27051	11ADAMS	138 27148	11TYRONE	138 1	144.4	144.4	101	16	29202 20AVON 138 29231 20BOONST 138 1
27090	11FLEMING	138 27093	11GODDRD	138 1	21.9	21.8	115.3	16	29202 20AVON 138 29231 20BOONST 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	26.8	25.7	116.7	16	29202 20AVON 138 29231 20BOONST 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	97.5	97.3	100.5	17	29202 20AVON 138 29237 20BOUR T 138 1
27051	11ADAMS	138 27148	11TYRONE	138 1	144.4	144.4	100.9	17	29202 20AVON 138 29237 20BOUR T 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8	21.8	114.7	17	29202 20AVON 138 29237 20BOUR T 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	111.4	17	29202 20AVON 138 29237 20BOUR T 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	100.3	18	29202 20AVON 138 29237 20BOUR T 138 1
27051	11ADAMS	138 27148	11TYRONE	138 1	144.6	144.4	101.3	18	29202 20AVON 138 29318 20FAYETT 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8	21.8	114.6	18	29202 20AVON 138 29318 20FAYETT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	111.4	18	29202 20AVON 138 29318 20FAYETT 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.4	97.3	100.4	19	29203 20BKR LN69.0 29360 20HOLLWJ69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	144.3	144.4	100.9	19	29203 20BKR LN69.0 29360 20HOLLWJ69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8	21.8	114.8	19	29203 20BKR LN69.0 29360 20HOLLWJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	114.8	19	29203 20BKR LN69.0 29360 20HOLLWJ69.0 1

** From bus	** **	To bus	** d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	25.7	111.9	23	19 29203 20BKR LN69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	144.4	101	143	20 29204 20BALLRD69.0
29326	20FRCKBJ69.0	29634 20WOODLN69.0	1	27.6	19.7	19.7	119.9	23	20 29204 20BALLRD69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.3	21.8	21.8	112.3	19	20 29204 20BALLRD69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	31.2	25.7	25.7	135.6	23	20 29204 20BALLRD69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	101	143	21 29204 20BALLRD69.0
29326	20FRCKBJ69.0	29634 20WOODLN69.0	1	24.3	19.7	19.7	105.7	23	21 29204 20BALLRD69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.5	21.8	21.8	113.1	19	21 29204 20BALLRD69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	29.6	25.7	25.7	128.9	23	21 29204 20BALLRD69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.1	97.3	97.3	100.1	97	22 29206 20BANKLK69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	100.9	143	22 29206 20BANKLK69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.9	21.8	21.8	115.1	19	22 29206 20BANKLK69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	25.7	111.9	23	22 29206 20BANKLK69.0
27051	20LILYJ69.0	29634 20WOODLN69.0	1	97.2	97.3	97.3	100.2	97	23 29207 20BARDJ69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	144.4	101	143	23 29207 20BARDJ69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.7	21.8	21.8	113.7	19	23 29207 20BARDJ69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	23.2	25.7	25.7	100.9	23	24 29207 20BARDJ69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97.3	100.3	97	25 29208 20BARREN 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	101	143	25 29208 20BARREN 161
29219	20FOX H069.0	29482 20PATRJJ69.0	1	72.5	30.8	30.8	100.7	72	25 29208 20BARREN 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.3	21.8	21.8	112	19	25 29208 20BARREN 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	25.7	111.7	23	25 29208 20BARREN 161
29452	20MUNFVL69.0	29454 20MUNFKU69.0	1	54.1	29.5	29.5	100.1	54	25 29208 20BARREN 161
29571	20STEPHN69.0	29606 20UPTONJ69.0	1	21.7	12.9	12.9	114	19	25 29208 20BARREN 161
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97.3	100.3	97	26 29208 20BARREN 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	101	143	26 29208 20BARREN 161
29219	20FOX H069.0	29482 20PATRJJ69.0	1	72.6	30.8	30.8	100.8	72	26 29208 20BARREN 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.3	21.8	21.8	111.7	19	26 29208 20BARREN 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	25.7	111.7	23	26 29208 20BARREN 161
29452	20MUNFVL69.0	29454 20MUNFKU69.0	1	54.1	29.5	29.5	100.3	54	26 29208 20BARREN 161
29571	20STEPHN69.0	29606 20UPTONJ69.0	1	21.7	12.9	12.9	114.3	19	26 29208 20BARREN 161
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97.3	100.3	97	27 29210 20BARREN 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	100.9	143	27 29210 20BARREN 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.7	21.8	21.8	114.4	19	27 29210 20BARREN 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	25.7	111.7	23	27 29210 20BARREN 161
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97.3	100.3	97	28 29210 20BARREN 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	100.9	143	28 29210 20BARREN 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	22.2	21.8	21.8	116.7	19	28 29210 20BARREN 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.8	25.7	25.7	112	23	28 29210 20BARREN 161
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97.3	100.2	97	29 29210 20BARREN 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	101	143	29 29210 20BARREN 161
29227	20BONNIE69.0	29452 20MUNFVL69.0	1	77.4	43.4	43.4	107.6	72	29 29210 20BARREN 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.1	21.8	21.8	111.3	19	29 29210 20BARREN 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.6	25.7	25.7	111.1	23	29 29210 20BARREN 161

** From bus	** **	To bus	** CContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29452	20MUNFV69.0	29454 20MUNFK69.0	1 59.7	29.5	54	110.5	29	29210 20BARREN69.0	29363 20HCAVKU69.0	1
29571	20STEPHN69.0	29606 20UPTONJ69.0	1 24.6	12.9	19	129.6	29	29210 20BARREN69.0	29363 20HCAVKU69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.3	97.3	97	100.3	30	29211 20BASS 69.0	29258 20CASEYC69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	100.9	30	29211 20BASS 69.0	29258 20CASEYC69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.7	21.8	19	114.5	30	29211 20BASS 69.0	29258 20CASEYC69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.6	25.7	23	111.4	30	29211 20BASS 69.0	29280 20CRESTN69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.3	97.3	97	100.3	31	29211 20BASS 69.0	29280 20CRESTN69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	100.9	31	29211 20BASS 69.0	29280 20CRESTN69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.8	21.8	19	114.6	31	29211 20BASS 69.0	29280 20CRESTN69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.7	25.7	23	111.6	31	29211 20BASS 69.0	29280 20CRESTN69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.2	97.3	97	100.2	32	29212 20BEAM J69.0	29250 20BLIT C69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.7	144.4	143	101.2	32	29212 20BEAM J69.0	29250 20BLIT C69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21	21.8	19	110.6	32	29212 20BEAM J69.0	29250 20BLIT C69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 23.5	25.7	23	102	32	29212 20BEAM J69.0	29250 20BLIT C69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.2	97.3	97	100.2	33	29212 20BEAM J69.0	29542 20SHEPVJ69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.7	144.4	143	101.2	33	29212 20BEAM J69.0	29542 20SHEPVJ69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.1	21.8	19	111.1	33	29212 20BEAM J69.0	29542 20SHEPVJ69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 23.7	25.7	23	102.9	33	29212 20BEAM J69.0	29542 20SHEPVJ69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.1	97.3	97	100.1	34	29214 20BTYV D69.0	29216 20BEATTY69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.3	144.4	143	100.9	34	29214 20BTYV D69.0	29216 20BEATTY69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.8	21.8	19	114.9	34	29214 20BTYV D69.0	29216 20BEATTY69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.7	25.7	23	111.7	34	29214 20BTYV D69.0	29216 20BEATTY69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.3	97.3	97	100.3	35	29215 20BTYVL 161	29216 20BEATTY69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	101	35	29215 20BTYVL 161	29216 20BEATTY69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.8	21.8	19	114.7	35	29215 20BTYVL 161	29216 20BEATTY69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.7	25.7	23	111.9	35	29215 20BTYVL 161	29216 20BEATTY69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.3	144.4	143	100.9	36	29215 20BTYVL 161	29500 20POWELL 161	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.9	21.8	19	115.4	36	29215 20BTYVL 161	29500 20POWELL 161	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.5	25.7	23	111	36	29215 20BTYVL 161	29500 20POWELL 161	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.2	97.3	97	100.2	37	29216 20BEATTY69.0	29472 20OAKD J69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	100.9	37	29216 20BEATTY69.0	29472 20OAKD J69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.8	21.8	19	114.9	37	29216 20BEATTY69.0	29472 20OAKD J69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.7	25.7	23	111.8	37	29216 20BEATTY69.0	29472 20OAKD J69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.3	97.3	97	100.3	38	29216 20BEATTY69.0	29638 20ZACHAR69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	100.9	38	29216 20BEATTY69.0	29638 20ZACHAR69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.8	21.8	19	114.8	38	29216 20BEATTY69.0	29638 20ZACHAR69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.7	25.7	23	111.9	38	29216 20BEATTY69.0	29638 20ZACHAR69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.3	97.3	97	100.3	39	29219 20FOX H069.0	29336 20GORINJ69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	100.9	39	29219 20FOX H069.0	29336 20GORINJ69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 22	21.8	19	115.7	39	29219 20FOX H069.0	29336 20GORINJ69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.7	25.7	23	111.9	39	29219 20FOX H069.0	29336 20GORINJ69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.2	97.3	97	100.2	40	29219 20FOX H069.0	29480 20PARKWY69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.3	144.4	143	100.9	40	29219 20FOX H069.0	29480 20PARKWY69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.2	21.8	19	111.7	40	29219 20FOX H069.0	29480 20PARKWY69.0	1
29411	20LILYTJ69.0	29634 20WOODLN69.0	1 25.5	25.7	23	111	40	29219 20FOX H069.0	29480 20PARKWY69.0	1
27051	11ADAMS 138	27148 11TYRONE 138	1 97.3	97.3	97	100.3	41	29219 20FOX H069.0	29482 20PATTRJ69.0	1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1 144.4	144.4	143	101	41	29219 20FOX H069.0	29482 20PATTRJ69.0	1
29359	20HODGEN69.0	29419 20MAGNOL69.0	1 21.2	21.8	19	111.6	41	29219 20FOX H069.0	29482 20PATTRJ69.0	1

** From bus	** To bus	** ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.5	41 29219 20FOX H069.0 29482 20PATRJR69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	42 29220 20BERLIN69.0 29243 20BRACKN69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	42 29220 20BERLIN69.0 29243 20BRACKN69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.9	42 29220 20BERLIN69.0 29243 20BRACKN69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	42 29220 20BERLIN69.0 29243 20BRACKN69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.8	97.3	97	100.8	43 29222 20BIGB J69.0 29230 20BOONE 69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	143	101	43 29222 20BIGB J69.0 29230 20BOONE 69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.8	43 29222 20BIGB J69.0 29230 20BOONE 69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.8	43 29222 20BIGB J69.0 29230 20BOONE 69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.4	97.3	97	100.4	44 29222 20BIGB J69.0 29455 20MUNK 69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	100.9	44 29222 20BIGB J69.0 29455 20MUNK 69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.8	44 29222 20BIGB J69.0 29455 20MUNK 69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	44 29222 20BIGB J69.0 29455 20MUNK 69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	45 29223 20BELL69.0 29224 20BELL69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	45 29223 20BELL69.0 29224 20BELL69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.9	45 29223 20BELL69.0 29224 20BELL69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.8	45 29223 20BELL69.0 29224 20BELL69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	46 29224 20BELL69.0 29380 20JNYWLJ69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	46 29224 20BELL69.0 29380 20JNYWLJ69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.8	46 29224 20BELL69.0 29380 20JNYWLJ69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.8	25.7	23	112.1	46 29224 20BELL69.0 29380 20JNYWLJ69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	47 29224 20BELL69.0 29442 20MDLCKJ69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	47 29224 20BELL69.0 29442 20MDLCKJ69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.8	47 29224 20BELL69.0 29442 20MDLCKJ69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	47 29224 20BELL69.0 29442 20MDLCKJ69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	98.1	97.3	97	101.2	47 29224 20BELL69.0 29442 20MDLCKJ69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.2	144.4	143	100.8	48 29226 20BLMFLD69.0 29262 20CHAPLJ69.0 1
29326 20FRCKBJ69.0	29634 20WOODLN69.0	1	24.2	19.7	23	105.2	48 29226 20BLMFLD69.0 29262 20CHAPLJ69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.5	21.8	19	112.9	48 29226 20BLMFLD69.0 29262 20CHAPLJ69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	31.6	25.7	23	137.2	48 29226 20BLMFLD69.0 29262 20CHAPLJ69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.8	97.3	97	100.9	49 29226 20BLMFLD69.0 29459 20N SPR 69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.2	144.4	143	100.9	49 29226 20BLMFLD69.0 29459 20N SPR 69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.7	21.8	19	114.2	49 29226 20BLMFLD69.0 29459 20N SPR 69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	27.1	25.7	23	117.9	49 29226 20BLMFLD69.0 29459 20N SPR 69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	50 29227 20BONNIE69.0 29452 20MUNFVL69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	50 29227 20BONNIE69.0 29452 20MUNFVL69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	23.3	21.8	19	122.9	50 29227 20BONNIE69.0 29452 20MUNFVL69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.7	50 29227 20BONNIE69.0 29452 20MUNFVL69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	51 29227 20BONNIE69.0 29606 20UPTONJ69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	100.9	51 29227 20BONNIE69.0 29606 20UPTONJ69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	22.3	21.8	19	117.3	51 29227 20BONNIE69.0 29606 20UPTONJ69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.9	25.7	23	112.6	51 29227 20BONNIE69.0 29606 20UPTONJ69.0 1
27051 11ADAMS 138	27148 11TYRONE 138	1	98.2	97.3	97	101.3	52 29228 20BOONE 69.0 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	143	101.1	52 29228 20BOONE 69.0 1
29302 20DURO J69.0	29572 20SPRKRJ69.0	1	105.9	48.2	72	147.1	138 29230 20BOONE 69.0 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.7	138 29230 20BOONE 69.0 1
29411 20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	138 29230 20BOONE 69.0 1
29572 20SPRKRJ69.0	29576 20S PARK69.0	1	122	63.5	72	169.4	138 29230 20BOONE 69.0 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27051	11ADAMS	138	27148	11TYRONE	138	98.5	97.3	97	101.5	53	29228 20BOONE	138 29328 20GALTN	138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144	144.4	143	100.7	53	29228 20BOONE	138 29328 20GALTN	138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.3	53	29228 20BOONE	138 29328 20GALTN	138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.2	53	29228 20BOONE	138 29328 20GALTN	138 1
27051	11ADAMS	138	27148	11TYRONE	138	97.4	97.3	97	100.5	54	29228 20BOONE	138 29512 20RENAKR	138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	54	29228 20BOONE	138 29512 20RENAKR	138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	54	29228 20BOONE	138 29512 20RENAKR	138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	112	54	29228 20BOONE	138 29512 20RENAKR	138 1
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	55	29228 20BOONE	138 29575 20S PARK	138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	55	29228 20BOONE	138 29575 20S PARK	138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	55	29228 20BOONE	138 29575 20S PARK	138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	55	29228 20BOONE	138 29575 20S PARK	138 1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	56	29230 20BOONE	69.0 29299 20DEVON	69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	56	29230 20BOONE	69.0 29299 20DEVON	69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	56	29230 20BOONE	69.0 29299 20DEVON	69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	56	29230 20BOONE	69.0 29299 20DEVON	69.0 1
29572	20SPRKTJ69.0	29576	20S PARK69.0	1	73.5	63.5	63.5	72	102.1	56	29230 20BOONE	69.0 29299 20DEVON	69.0 1
27051	11ADAMS	138	27148	11TYRONE	138	98.1	97.3	97	101.1	57	29231 20BOONST	138 29235 20BOONSB	138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	57	29231 20BOONST	138 29235 20BOONSB	138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	57	29231 20BOONST	138 29235 20BOONSB	138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.7	25.7	23	111.1	57	29231 20BOONST	138 29235 20BOONSB	138 1
27051	11ADAMS	138	27148	11TYRONE	138	98.9	97.3	97	102	58	29231 20BOONST	138 29286 20DALE	138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	58	29231 20BOONST	138 29286 20DALE	138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	58	29231 20BOONST	138 29286 20DALE	138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	113.2	58	29231 20BOONST	138 29286 20DALE	138 1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	59	29232 20BOONEV69.0	29234 20BOONVJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	59	29232 20BOONEV69.0	29234 20BOONVJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	59	29232 20BOONEV69.0	29234 20BOONVJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	59	29232 20BOONEV69.0	29234 20BOONVJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	60	29234 20BOONVJ69.0	29472 200AKD J69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	60	29234 20BOONVJ69.0	29472 200AKD J69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	60	29234 20BOONVJ69.0	29472 200AKD J69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	60	29234 20BOONVJ69.0	29472 200AKD J69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.3	61	29234 20BOONVJ69.0	29530 20S FORK69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	61	29234 20BOONVJ69.0	29530 20S FORK69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	61	29234 20BOONVJ69.0	29530 20S FORK69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	61	29234 20BOONVJ69.0	29530 20S FORK69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	62	29236 20BOSTNJ69.0	29272 20COLESJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	62	29236 20BOSTNJ69.0	29272 20COLESJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.4	62	29236 20BOSTNJ69.0	29272 20COLESJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	26.3	25.7	25.7	23	114.3	62	29236 20BOSTNJ69.0	29272 20COLESJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	63	29236 20BOSTNJ69.0	29462 20NELSON69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	63	29236 20BOSTNJ69.0	29462 20NELSON69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.4	63	29236 20BOSTNJ69.0	29462 20NELSON69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	26.3	25.7	25.7	23	114.4	63	29236 20BOSTNJ69.0	29462 20NELSON69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	99.8	97.3	97	102.9	64	29237 20BOUR T	138 29239 20BOURBN	138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	64	29237 20BOUR T	138 29239 20BOURBN	138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.5	64	29237 20BOUR T	138 29239 20BOURBN	138 1

**	From bus	**	**	To bus	**	d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7		25.7	25.7	23	111.6	64	29237 20BOUR T 138 29239 20BOURBN 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.9		97.9	97.3	97	100.9	65	29237 20BOUR T 138 29374 20JACKVJ 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4		144.4	144.4	143	101	65	29237 20BOUR T 138 29374 20JACKVJ 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8		21.8	21.8	19	114.8	65	29237 20BOUR T 138 29374 20JACKVJ 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8		25.8	25.7	23	112.4	66	29237 20BOUR T 138 29374 20JACKVJ 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.2		97.2	97.3	97	100.2	66	29238 20BOSTKU69.0 29403 20LEBANJ69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5		144.5	144.4	143	101.1	66	29238 20BOSTKU69.0 29403 20LEBANJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.4		21.4	21.8	19	112.6	66	29238 20BOSTKU69.0 29403 20LEBANJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	24.5		24.5	25.7	23	106.5	66	29238 20BOSTKU69.0 29403 20LEBANJ69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		144.4		144.4	144.4	143	101	67	29238 20BOSTKU69.0 29635 20WOOSLY69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.7		21.7	21.8	19	114	67	29238 20BOSTKU69.0 29635 20WOOSLY69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.3		25.3	25.7	23	109.9	67	29238 20BOSTKU69.0 29635 20WOOSLY69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	144.5		144.5	144.4	143	101	68	29240 20BOURNE69.0 29464 20NEWBY269.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	27.6		27.6	19.7	23	119.8	68	29240 20BOURNE69.0 29464 20NEWBY269.0 1
29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	21.3		21.3	21.8	19	112.3	68	29240 20BOURNE69.0 29464 20NEWBY269.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	31.2		31.2	25.7	23	135.7	68	29240 20BOURNE69.0 29464 20NEWBY269.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.2		97.2	97.3	97	100.2	69	29242 20BOWEN 69.0 29503 20POWELL69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		144.3		144.3	144.4	143	100.9	70	29242 20BOWEN 69.0 29503 20POWELL69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8		21.8	21.8	19	114.9	70	29242 20BOWEN 69.0 29503 20POWELL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6		25.6	25.7	23	111.2	69	29242 20BOWEN 69.0 29503 20POWELL69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	144.3		144.3	144.4	143	100.2	70	29242 20BOWEN 69.0 29536 20SANDLK69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.2		97.2	97.3	97	100.9	70	29242 20BOWEN 69.0 29536 20SANDLK69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8		21.8	21.8	19	114.9	70	29242 20BOWEN 69.0 29536 20SANDLK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6		25.6	25.7	23	111.3	70	29242 20BOWEN 69.0 29536 20SANDLK69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.8		97.8	97.3	97	100.8	71	29243 20BRACKN69.0 29323 20F OAKJ69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		144.4		144.4	144.4	143	101	71	29243 20BRACKN69.0 29323 20F OAKJ69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8		21.8	21.8	19	114.8	71	29243 20BRACKN69.0 29323 20F OAKJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.8		25.8	25.7	23	112	71	29243 20BRACKN69.0 29323 20F OAKJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.1		97.1	97.3	97	100.1	72	29243 20BRACKN69.0 29347 20GRIFFFJ69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		144.4		144.4	144.4	143	100.9	72	29243 20BRACKN69.0 29347 20GRIFFFJ69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8		21.8	21.8	19	114.8	72	29243 20BRACKN69.0 29347 20GRIFFFJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7		25.7	25.7	23	111.8	72	29243 20BRACKN69.0 29347 20GRIFFFJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3		97.3	97.3	97	100.3	73	29244 20BRISTW69.0 29302 20DURO J69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		144.4		144.4	144.4	143	100.9	73	29244 20BRISTW69.0 29302 20DURO J69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8		21.8	21.8	19	114.8	73	29244 20BRISTW69.0 29302 20DURO J69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7		25.7	25.7	23	111.9	73	29244 20BRISTW69.0 29302 20DURO J69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7		25.7	25.7	23	111.9	73	29244 20BRISTW69.0 29302 20DURO J69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3		97.3	97.3	97	100.3	74	29244 20BRISTW69.0 29600 20TRKYFJ69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4		144.4	144.4	143	100.9	74	29244 20BRISTW69.0 29600 20TRKYFJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8		21.8	21.8	19	114.8	74	29244 20BRISTW69.0 29600 20TRKYFJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7		25.7	25.7	23	111.9	74	29244 20BRISTW69.0 29600 20TRKYFJ69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3		97.3	97.3	97	100.3	75	29244 20BRISTW69.0 29600 20TRKYFJ69.0 2
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4		144.4	144.4	143	100.9	75	29244 20BRISTW69.0 29600 20TRKYFJ69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8		21.8	21.8	19	114.8	75	29244 20BRISTW69.0 29600 20TRKYFJ69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7		25.7	25.7	23	111.9	75	29244 20BRISTW69.0 29600 20TRKYFJ69.0 2
27051	11ADAMS	138 27148	11TYRONE 138 1		97.2		97.2	97.3	97	100.2	76	29246 20BRODHD69.0 29424 20MARETJ69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3		144.3	144.4	143	100.9	76	29246 20BRODHD69.0 29424 20MARETJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9		21.9	21.8	19	115.3	76	29246 20BRODHD69.0 29424 20MARETJ69.0 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	76	29246 20BRODHD69.0	29424 20MARETJ69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	97	97	97.3	97	100	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	21.8	19	115.5	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	78	29247 20BRONSJ69.0	29276 20COOPER69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	78	29247 20BRONSJ69.0	29276 20COOPER69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	78	29247 20BRONSJ69.0	29276 20COOPER69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	78	29247 20BRONSJ69.0	29276 20COOPER69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	97.2	97.2	97.3	97	100.2	80	29248 20BLIT C 161	29250 20BLIT C69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	145	144.4	144.4	143	101.4	80	29248 20BLIT C 161	29250 20BLIT C69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	20.5	21.8	21.8	19	107.7	80	29248 20BLIT C 161	29250 20BLIT C69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.4	97.4	97.3	97	100.4	81	29248 20BLIT C 161	29294 20DARWJ 161
27051	11ADAMS	138 27148	11TYRONE 138	1	144.5	144.4	144.4	143	101.1	81	29248 20BLIT C 161	29294 20DARWJ 161
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.9	21.8	21.8	19	115.3	81	29248 20BLIT C 161	29294 20DARWJ 161
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.1	25.7	25.7	23	113.6	81	29248 20BLIT C 161	29294 20DARWJ 161
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.6	97.6	97.3	97	100.7	82	29248 20BLIT C 161	29586 20SSHADT 161
27051	11ADAMS	138 27148	11TYRONE 138	1	144.9	144.4	144.4	143	101.3	82	29248 20BLIT C 161	29586 20SSHADT 161
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	24.1	21.8	21.8	19	126.7	82	29248 20BLIT C 161	29586 20SSHADT 161
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	27.5	25.7	25.7	23	119.4	82	29248 20BLIT C 161	29586 20SSHADT 161
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97.3	97	100.4	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	144.4	144.4	144.4	143	101	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	22	21.8	21.8	19	115.6	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	26.2	25.7	25.7	23	114	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97.3	97	100.3	84	29251 20BURKSJ69.0	29559 20SNOWJ 69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	144.4	144.4	144.4	143	100.9	84	29251 20BURKSJ69.0	29559 20SNOWJ 69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.7	21.8	21.8	19	114.2	84	29251 20BURKSJ69.0	29559 20SNOWJ 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.8	84	29251 20BURKSJ69.0	29559 20SNOWJ 69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97.3	97	100.3	85	29251 20BURKSJ69.0	29584 20SSHADE69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	144.4	144.4	144.4	143	100.9	85	29251 20BURKSJ69.0	29584 20SSHADE69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.7	21.8	21.8	19	114.2	85	29251 20BURKSJ69.0	29584 20SSHADE69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.8	85	29251 20BURKSJ69.0	29584 20SSHADE69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.8	97.8	97.3	97	100.9	86	29252 20CABN H69.0	29471 20NORWDJ69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	144.4	144.4	144.4	143	101	86	29252 20CABN H69.0	29471 20NORWDJ69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	60.3	21	21	54	111.6	86	29252 20CABN H69.0	29471 20NORWDJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	21.8	19	113.9	86	29252 20CABN H69.0	29471 20NORWDJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	86	29252 20CABN H69.0	29471 20NORWDJ69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	98.3	97.3	97.3	97	101.3	87	29252 20CABN H69.0	29555 20SOMERS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.4	144.4	143	101.1	87	29252 20CABN H69.0	29555 20SOMERS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	71.3	12	12	69	103.3	87	29252 20CABN H69.0	29555 20SOMERS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	85.2	21	21	54	157.8	87	29252 20CABN H69.0	29555 20SOMERS69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	21.6	21.8	21.8	19	113.6	87	29252 20CABN H69.0	29555 20SOMERS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	25.7	25.7	25.7	23	111.8	87	29252 20CABN H69.0	29555 20SOMERS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.8	87	29252 20CABN H69.0	29555 20SOMERS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.2	97.3	97.3	97	100.2	88	29254 20CAMPTN69.0	29352 20HELCHW69.0
27051	11ADAMS	138 27148	11TYRONE 138	1	97.2	97.2	97.3	97	100.2	88	29254 20CAMPTN69.0	29352 20HELCHW69.0

**	From bus	**	**	To bus	**	d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	88	29254	20CAMPNT69.0	29352	20HELCHW69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	88	29254	20CAMPNT69.0	29352	20HELCHW69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.6	23	111.5	88	29254	20CAMPNT69.0	29352	20HELCHW69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.1	97.3	97	100.1	89	29254	20CAMPNT69.0	29638	20ZACHAR69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	89	29254	20CAMPNT69.0	29638	20ZACHAR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	89	29254	20CAMPNT69.0	29638	20ZACHAR69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.6	23	111.3	89	29254	20CAMPNT69.0	29638	20ZACHAR69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	90	29255	20CARTCJ69.0	29479	20PCTLSJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	90	29255	20CARTCJ69.0	29479	20PCTLSJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	90	29255	20CARTCJ69.0	29479	20PCTLSJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	112	90	29255	20CARTCJ69.0	29479	20PCTLSJ69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	91	29255	20CARTCJ69.0	29624	20WARNCK69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	91	29255	20CARTCJ69.0	29624	20WARNCK69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	91	29255	20CARTCJ69.0	29624	20WARNCK69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.8	23	112	91	29255	20CARTCJ69.0	29624	20WARNCK69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	92	29256	20CASEYC 161	29258	20CASEYC69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	92	29256	20CASEYC 161	29258	20CASEYC69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	21.6	19	113.8	92	29256	20CASEYC 161	29258	20CASEYC69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.7	25.5	23	110.8	92	29256	20CASEYC 161	29258	20CASEYC69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	93	29256	20CASEYC 161	29408	20LIBERT 161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	93	29256	20CASEYC 161	29408	20LIBERT 161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.9	19	115.3	93	29256	20CASEYC 161	29408	20LIBERT 161	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.8	23	112.3	93	29256	20CASEYC 161	29408	20LIBERT 161	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	94	29256	20CASEYC 161	29428	20MARION 161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	94	29256	20CASEYC 161	29428	20MARION 161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.3	21.8	21.3	19	112	94	29256	20CASEYC 161	29428	20MARION 161	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25	25.7	25	23	108.7	94	29256	20CASEYC 161	29428	20MARION 161	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.5	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	24.7	19.7	24.7	23	107.5	96	29262	20CHAPLJ69.0	29547	20SINAI 69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	98.2	97.3	97	101.3	96	29262	20CHAPLJ69.0	29547	20SINAI 69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.2	144.4	143	100.8	96	29262	20CHAPLJ69.0	29547	20SINAI 69.0	1
29326	20FRCRBJ69.0	29634	20WOODLN69.0	1	24.7	19.7	24.7	23	107.5	96	29262	20CHAPLJ69.0	29547	20SINAI 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.4	21.8	21.4	19	112.8	96	29262	20CHAPLJ69.0	29547	20SINAI 69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	31.8	25.7	31.8	23	138.1	96	29262	20CHAPLJ69.0	29547	20SINAI 69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.8	23	112	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.4	25.7	25.4	23	110.3	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1

**	From bus	**	**	To bus	**	d	ContMVA	BaseFlow	Rating	Loading%	Necon	Contingency				
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.6	25.7	25.7	23	111.2	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	145	144.4	143	101.4	101	29266	20CLAY V69.0	29466	20NCASSTL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	101	29266	20CLAY V69.0	29466	20NCASSTL69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	101	29266	20CLAY V69.0	29466	20NCASSTL69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	102	29267	20CMPVPJ 161	29430	20MAR IJ 161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	102	29267	20CMPVPJ 161	29430	20MAR IJ 161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	25	21.8	21.8	19	131.4	102	29267	20CMPVPJ 161	29430	20MAR IJ 161	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.2	25.7	25.7	23	109.4	102	29267	20CMPVPJ 161	29430	20MAR IJ 161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	103	29267	20CMPVPJ 161	29587	20TAYCTP 161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	103	29267	20CMPVPJ 161	29587	20TAYCTP 161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	23.4	21.8	21.8	19	123.3	103	29267	20CMPVPJ 161	29587	20TAYCTP 161	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	97.3	25.7	25.7	23	100.6	103	29267	20CMPVPJ 161	29587	20TAYCTP 161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.3	104	29268	20COBURG69.0	29270	20COBURJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.7	21.8	21.8	19	114.1	104	29268	20COBURG69.0	29270	20COBURJ69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.6	104	29268	20COBURG69.0	29270	20COBURJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	22	21.8	21.8	19	115.7	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.8	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	22.1	21.8	21.8	19	116.3	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.5	97.3	97	100.5	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.6	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	26	25.7	25.7	23	113.2	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.6	21.8	21.8	19	113.7	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	111	29275	20COOPER 161	29276	20COOPER69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	111	29275	20COOPER 161	29276	20COOPER69.0	1
27200	11ELIHU	69.0	27210	11FERG S69.0	1	1	88.1	42.1	79	111.6	111	29275	20COOPER 161	29276	20COOPER69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.7	111	29275	20COOPER 161	29276	20COOPER69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	111	29275	20COOPER 161	29276	20COOPER69.0	1

**	From bus	**	**	To bus	**	d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	112	29275 20COOPER	161	29296	20DENNY	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	112	29275 20COOPER	161	29296	20DENNY	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.9	21.8	19	115.1	112	29275 20COOPER	161	29296	20DENNY	161	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.7	112	29275 20COOPER	161	29296	20DENNY	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	98.1	97.3	97	101.1	113	29275 20COOPER	161	29400	20LAURLD	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.5	144.4	143	101	113	29275 20COOPER	161	29400	20LAURLD	161	1
27235	11KU PK	69.0	27265	11PINEVI69.0	1	1	85.9	72.8	82	104.8	113	29275 20COOPER	161	29400	20LAURLD	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.1	21.8	19	111.2	113	29275 20COOPER	161	29400	20LAURLD	161	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.5	25.7	23	110.7	113	29275 20COOPER	161	29400	20LAURLD	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.1	97.3	97	100.1	114	29275 20COOPER	161	29408	20LIBERT	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	114	29275 20COOPER	161	29408	20LIBERT	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	22.5	21.8	19	118.4	114	29275 20COOPER	161	29408	20LIBERT	161	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	26.7	25.7	23	116.1	114	29275 20COOPER	161	29531	20S OAKH	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	115	29275 20COOPER	161	29531	20S OAKH	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	115	29275 20COOPER	161	29531	20S OAKH	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.5	115	29275 20COOPER	161	29531	20S OAKH	161	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	115	29275 20COOPER	161	29531	20S OAKH	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	116	29276 20COOPER69.0	29555	20SOMERS69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	116	29276 20COOPER69.0	29555	20SOMERS69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	116	29276 20COOPER69.0	29555	20SOMERS69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	116	29276 20COOPER69.0	29555	20SOMERS69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	117	29276 20COOPER69.0	29555	20SOMERS69.0	2	2	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	117	29276 20COOPER69.0	29555	20SOMERS69.0	2	2	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	117	29276 20COOPER69.0	29555	20SOMERS69.0	2	2	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	117	29276 20COOPER69.0	29555	20SOMERS69.0	2	2	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	118	29280 20CRESTN69.0	29490	20PHIL	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	118	29280 20CRESTN69.0	29490	20PHIL	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.6	118	29280 20CRESTN69.0	29490	20PHIL	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.6	118	29280 20CRESTN69.0	29490	20PHIL	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	119	29282 20CROCKJ69.0	29550	20SKAGGS69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	119	29282 20CROCKJ69.0	29550	20SKAGGS69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	119	29282 20CROCKJ69.0	29550	20SKAGGS69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	119	29282 20CROCKJ69.0	29550	20SKAGGS69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	120	29282 20CROCKJ69.0	29619	20W LIB	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	120	29282 20CROCKJ69.0	29619	20W LIB	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	120	29282 20CROCKJ69.0	29619	20W LIB	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.8	120	29282 20CROCKJ69.0	29619	20W LIB	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	121	29283 20CROCKJ69.0	29354	20HICK	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	121	29283 20CROCKJ69.0	29354	20HICK	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.9	121	29283 20CROCKJ69.0	29354	20HICK	69.0	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	121	29283 20CROCKJ69.0	29354	20HICK	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	98.1	97.3	97	101.2	122	29286 20DALE	138	29287	20DALE	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	122	29286 20DALE	138	29287	20DALE	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.5	122	29286 20DALE	138	29287	20DALE	69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	29.6	25.7	23	128.9	122	29286 20DALE	138	29287	20DALE	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	98.1	97.3	97	101.2	123	29286 20DALE	138	29387	20JKSMIT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	123	29286 20DALE	138	29387	20JKSMIT	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.6	123	29286 20DALE	138	29387	20JKSMIT	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	1	1	25.8	25.7	23	112.2	123	29286 20DALE	138	29387	20JKSMIT	138	1

** From bus	** **	To bus	** d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	143	124 29286 20DALE
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.9	21.8	115	19	124 29286 20DALE
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.3	25.7	110	23	124 29286 20DALE
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	100.9	143	125 29287 20DALE
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.9	21.8	115.2	19	125 29287 20DALE
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.2	25.7	109.5	23	125 29287 20DALE
27051	11ADAMS	138 27148	11TYRONE	138	97.2	97.3	100.2	97	126 29287 20DALE
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	100.9	143	126 29287 20DALE
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.8	21.8	114.9	19	126 29287 20DALE
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.2	25.7	109.8	23	126 29287 20DALE
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	143	127 29287 20DALE
29355	20HIGHDL69.0	29450	20MT	OLJ69.0	1	69.7	101	69	127 29287 20DALE
29355	20HIGHDL69.0	29604	20TGOOCH69.0	1	53.5	6.7	100.9	53	127 29287 20DALE
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	22.4	21.8	117.7	19	127 29287 20DALE
29410	20LIBERT69.0	29450	20MT	OLJ69.0	1	72.6	105.3	69	127 29287 20DALE
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.1	25.7	109.3	23	127 29287 20DALE
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.4	101	143	128 29287 20DALE
29326	20FRCRBJ69.0	29634	20WOODLN69.0	1	27.5	19.7	119.7	23	128 29287 20DALE
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.3	21.8	112.3	19	128 29287 20DALE
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	26.1	25.7	113.4	23	128 29287 20DALE
27051	11ADAMS	138 27148	11TYRONE	138	97.1	97.3	100.1	97	130 29295 20DAVIS
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	143	130 29295 20DAVIS
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.8	21.8	114.7	19	130 29295 20DAVIS
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.6	23	130 29295 20DAVIS
27051	11ADAMS	138 27148	11TYRONE	138	97.1	97.3	100.1	97	131 29295 20DAVIS
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	101	143	131 29295 20DAVIS
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.8	21.8	114.7	19	131 29295 20DAVIS
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.6	23	131 29295 20DAVIS
27051	11ADAMS	138 27148	11TYRONE	138	97.1	97.3	100.2	97	132 29296 20DENNY
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	100.2	143	132 29296 20DENNY
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.8	21.8	111.6	19	132 29296 20DENNY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.6	23	132 29296 20DENNY
27051	11ADAMS	138 27148	11TYRONE	138	97.2	97.3	100.2	97	133 29298 20DENNY
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	100.2	143	133 29298 20DENNY
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.9	21.8	115.3	19	133 29298 20DENNY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.8	23	133 29298 20DENNY
27051	11ADAMS	138 27148	11TYRONE	138	97.2	97.3	100.2	97	134 29298 20DENNY
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	100.2	143	134 29298 20DENNY
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.8	21.8	114.8	19	134 29298 20DENNY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.7	23	134 29298 20DENNY
27051	11ADAMS	138 27148	11TYRONE	138	97.2	97.3	100.2	97	135 29299 20DEVON
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.3	144.4	100.2	143	135 29299 20DEVON
29359	20HODGEN	69.0 29419	20MAGNOL69.0	1	21.8	21.8	111.7	19	135 29299 20DEVON
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	111.9	23	135 29299 20DEVON

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29572	20SPRKJ169.0	138	27148	11TYRONE 138	1	73.6	63.5	72	102.2	135	29299 20DEVON 69.0 29600 20TRKYFJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.5	97.3	97	100.5	136	29302 20DURO J69.0 29572 20SPRKJ169.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	136	29302 20DURO J69.0 29572 20SPRKJ169.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	136	29302 20DURO J69.0 29572 20SPRKJ169.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	136	29302 20DURO J69.0 29572 20SPRKJ169.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	137	29302 20DURO J69.0 29600 20TRKYFJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	137	29302 20DURO J69.0 29600 20TRKYFJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	137	29302 20DURO J69.0 29600 20TRKYFJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	137	29302 20DURO J69.0 29600 20TRKYFJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.1	97.3	97	100.1	138	29303 20E BARD69.0 29411 20LILYJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	138	29303 20E BARD69.0 29411 20LILYJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.2	21.8	21.8	19	116.8	138	29303 20E BARD69.0 29411 20LILYJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	139	29304 20EBERNST69.0 29402 20LAURIJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	139	29304 20EBERNST69.0 29402 20LAURIJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	139	29304 20EBERNST69.0 29402 20LAURIJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	139	29304 20EBERNST69.0 29402 20LAURIJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	140	29304 20EBERNST69.0 29423 20MAPLSJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	140	29304 20EBERNST69.0 29423 20MAPLSJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	140	29304 20EBERNST69.0 29423 20MAPLSJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	140	29304 20EBERNST69.0 29423 20MAPLSJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	141	29306 20EBERLE69.0 29307 20EBERLJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	141	29306 20EBERLE69.0 29307 20EBERLJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	141	29306 20EBERLE69.0 29307 20EBERLJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	141	29306 20EBERLE69.0 29307 20EBERLJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	142	29307 20EBERLJ69.0 29423 20MAPLSJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	142	29307 20EBERLJ69.0 29423 20MAPLSJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	142	29307 20EBERLJ69.0 29423 20MAPLSJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	142	29307 20EBERLJ69.0 29423 20MAPLSJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	143	29308 20ELTTLV69.0 29519 20ROWAN 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	143	29308 20ELTTLV69.0 29519 20ROWAN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	143	29308 20ELTTLV69.0 29519 20ROWAN 69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	143	29308 20ELTTLV69.0 29519 20ROWAN 69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	144	29310 20ETOWN 69.0 29552 20SMTHVJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	144	29310 20ETOWN 69.0 29552 20SMTHVJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	144	29310 20ETOWN 69.0 29552 20SMTHVJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.1	144	29310 20ETOWN 69.0 29552 20SMTHVJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	145	29310 20ETOWN 69.0 29591 20THARP 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	145	29310 20ETOWN 69.0 29591 20THARP 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	145	29310 20ETOWN 69.0 29591 20THARP 69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	24.9	25.7	25.7	23	108.3	145	29310 20ETOWN 69.0 29591 20THARP 69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	146	29310 20ETOWN 69.0 29599 20TUNHLJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	146	29310 20ETOWN 69.0 29599 20TUNHLJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.4	146	29310 20ETOWN 69.0 29599 20TUNHLJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	24.6	25.7	25.7	23	107	146	29310 20ETOWN 69.0 29599 20TUNHLJ69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	147	29311 20FALCON69.0 29418 20MAGGRD69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	147	29311 20FALCON69.0 29418 20MAGGRD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	147	29311 20FALCON69.0 29418 20MAGGRD69.0 1

**	From bus	**	**	To bus	**	c	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	147	29311 20FALCON69.0	29418 20MAGGRD69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	148	29311 20FALCON69.0	29578 20SUBLET69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	148	29311 20FALCON69.0	29578 20SUBLET69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	148	29311 20FALCON69.0	29578 20SUBLET69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	148	29311 20FALCON69.0	29578 20SUBLET69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	149	29312 20FALLRK	161 29314 20FALLRK69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	149	29312 20FALLRK	161 29314 20FALLRK69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	149	29312 20FALLRK	161 29314 20FALLRK69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.8	149	29312 20FALLRK	161 29314 20FALLRK69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	150	29312 20FALLRK	161 29602 20TYNER
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	150	29312 20FALLRK	161 29602 20TYNER
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	150	29312 20FALLRK	161 29602 20TYNER
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.8	150	29312 20FALLRK	161 29602 20TYNER
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100	151	29314 20FALLRK69.0	29475 20ONEIDJ69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.3	144.4	144.4	143	100.9	151	29314 20FALLRK69.0	29475 20ONEIDJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	151	29314 20FALLRK69.0	29475 20ONEIDJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.6	25.7	25.7	23	111.4	151	29314 20FALLRK69.0	29475 20ONEIDJ69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	152	29314 20FALLRK69.0	29603 20TYNER
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	152	29314 20FALLRK69.0	29603 20TYNER
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	152	29314 20FALLRK69.0	29603 20TYNER
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	152	29314 20FALLRK69.0	29603 20TYNER
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.4	153	29315 20FALMKU69.0	29324 20F OAKS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.3	144.4	144.4	143	100.9	153	29315 20FALMKU69.0	29324 20F OAKS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	153	29315 20FALMKU69.0	29324 20F OAKS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.6	25.7	25.7	23	111.9	153	29315 20FALMKU69.0	29324 20F OAKS69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.4	154	29316 20FAWKES	138 29387 20JKSMIT
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	154	29316 20FAWKES	138 29387 20JKSMIT
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.7	154	29316 20FAWKES	138 29387 20JKSMIT
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.6	25.7	25.7	23	111.3	154	29316 20FAWKES	138 29387 20JKSMIT
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	155	29316 20FAWKES	138 29594 20TFJ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.9	21.8	21.8	19	115	155	29316 20FAWKES	138 29594 20TFJ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.3	25.7	25.7	23	110.2	155	29316 20FAWKES	138 29594 20TFJ
27051	11ADAMS	138 27148	11TYRONE	138	1	97.2	97.3	97.3	97	100.2	156	29316 20FAWKES	138 29612 20WBAREA
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	156	29316 20FAWKES	138 29612 20WBAREA
27209	11FAWKES69.0	29283	20CROOKJ69.0	1	1	61.5	21	21	54	113.8	156	29316 20FAWKES	138 29612 20WBAREA
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.9	21.8	21.8	19	115.3	156	29316 20FAWKES	138 29612 20WBAREA
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	156	29316 20FAWKES	138 29612 20WBAREA
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	157	29318 20FAYETT	138 29319 20FAYETT69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.6	144.4	144.4	143	101.1	157	29318 20FAYETT	138 29319 20FAYETT69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.6	157	29318 20FAYETT	138 29319 20FAYETT69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.6	25.7	25.7	23	111.4	157	29318 20FAYETT	138 29319 20FAYETT69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	158	29320 20FRTKNX69.0	29322 20FRTKNJ69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.3	144.4	144.4	143	100.9	158	29320 20FRTKNX69.0	29322 20FRTKNJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	22.1	21.8	21.8	19	116.3	158	29320 20FRTKNX69.0	29322 20FRTKNJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.9	25.7	25.7	23	112.8	158	29320 20FRTKNX69.0	29322 20FRTKNJ69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	159	29322 20FRTKNX69.0	29516 20ROGV J69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	159	29322 20FRTKNX69.0	29516 20ROGV J69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.7	21.8	21.8	19	114.2	159	29322 20FRTKNX69.0	29516 20ROGV J69.0

**	From bus	**	**	To bus	**	CContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	23	111.4	159	29322	20FRKNJ69.0	29516	20ROGV	J69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97	100.3	160	29322	20FRKNJ69.0	29552	20SMTHVJ69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	100.9	160	29322	20FRKNJ69.0	29552	20SMTHVJ69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	23	114.5	160	29322	20FRKNJ69.0	29552	20SMTHVJ69.0	1	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	160	29322	20FRKNJ69.0	29552	20SMTHVJ69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97	100.2	161	29323	20F OAKJ69.0	29324	20F OAKS69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	143	100.9	161	29323	20F OAKJ69.0	29324	20F OAKS69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115	161	29323	20F OAKJ69.0	29324	20F OAKS69.0	1	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	161	29323	20F OAKJ69.0	29324	20F OAKS69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97	100.2	162	29326	20FRCKBJ69.0	29459	20N SPR	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	143	100.9	162	29326	20FRCKBJ69.0	29459	20N SPR	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	19	115.8	162	29326	20FRCKBJ69.0	29459	20N SPR	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.1	97	100.1	163	29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	143	100.9	163	29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.1	21.8	19	116.3	163	29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97	100.3	164	29327	20FRCHHB69.0	29362	20HOPE	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	100.9	164	29327	20FRCHHB69.0	29362	20HOPE	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	164	29327	20FRCHHB69.0	29362	20HOPE	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	164	29327	20FRCHHB69.0	29362	20HOPE	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97	100.3	165	29327	20FRCHHB69.0	29427	20MARIBJ69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	100.9	165	29327	20FRCHHB69.0	29427	20MARIBJ69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	165	29327	20FRCHHB69.0	29427	20MARIBJ69.0	1	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	165	29327	20FRCHHB69.0	29427	20MARIBJ69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97	100.3	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	20.8	21.8	19	109.7	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.2	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97	100.2	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	43.2	36.5	40	107.9	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	20	21.8	19	105.1	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97	100.3	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	100.3	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.9	25.7	23	112.5	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	23	112.5	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	144.4	143	100.3	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.3	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	97.6	97	100.7	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27090	11FLEMING	138	27093	11GODDRD	138	194.1	158	122.8	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27090	11FLEMING	138	27157	11WEDONI	138	200	179	111.7	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27105	11KENTON	138	27157	11WEDONI	138	205.7	179	114.9	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	169	29331	20GODDRD	138	29498	20PLUMV	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	169	29331	20GODDRD	138	29498	20PLUMV	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.7	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.5	97	100.5	170	29331	20GODDRD	138	29640	20CRANST	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	170	29331	20GODDRD	138	29640	20CRANST	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	170	29331	20GODDRD	138	29640	20CRANST	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.2	170	29331	20GODDRD	138	29640	20CRANST	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97	100.3	171	29332	20GODDRD69.0	29356	20HILDA	69.0	1	

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	171	29332 20GODDRD69.0	29356 20HILDA 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	171	29332 20GODDRD69.0	29356 20HILDA 69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	171	29332 20GODDRD69.0	29356 20HILDA 69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.4	97.3	97.3	97	100.4	172	29332 20GODDRD69.0	29358 20HILLSB69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	172	29332 20GODDRD69.0	29358 20HILLSB69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	172	29332 20GODDRD69.0	29358 20HILLSB69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.9	25.7	25.7	23	112.7	172	29332 20GODDRD69.0	29358 20HILLSB69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	173	29334 20GOLDDBG69.0	29379 20JELLCJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	173	29334 20GOLDDBG69.0	29379 20JELLCJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	173	29334 20GOLDDBG69.0	29379 20JELLCJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	97	100.3	174	29335 20GOODNT69.0	29336 20GORINJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.9	174	29335 20GOODNT69.0	29336 20GORINJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	174	29335 20GOODNT69.0	29336 20GORINJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	21.8	19	115.7	174	29335 20GOODNT69.0	29336 20GORINJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	174	29335 20GOODNT69.0	29336 20GORINJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	175	29338 20GRNTLK69.0	29347 20GRIFFJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	175	29338 20GRNTLK69.0	29347 20GRIFFJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	175	29338 20GRNTLK69.0	29347 20GRIFFJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	175	29338 20GRNTLK69.0	29347 20GRIFFJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	176	29338 20GRNTLK69.0	29574 20SPRKY269.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	176	29338 20GRNTLK69.0	29574 20SPRKY269.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	176	29338 20GRNTLK69.0	29574 20SPRKY269.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	176	29338 20GRNTLK69.0	29574 20SPRKY269.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	177	29339 20GRAYS69.0	29406 20LEON 69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	177	29339 20GRAYS69.0	29406 20LEON 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	177	29339 20GRAYS69.0	29406 20LEON 69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	177	29339 20GRAYS69.0	29406 20LEON 69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97.3	97	100.2	178	29339 20GRAYS69.0	29479 20PCTLSJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	178	29339 20GRAYS69.0	29479 20PCTLSJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	178	29339 20GRAYS69.0	29479 20PCTLSJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	178	29339 20GRAYS69.0	29479 20PCTLSJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97.3	97	100.2	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97.3	97	100.2	180	29342 20GRNBRJ69.0	29422 20MCHST69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	180	29342 20GRNBRJ69.0	29422 20MCHST69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	180	29342 20GRNBRJ69.0	29422 20MCHST69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.6	180	29342 20GRNBRJ69.0	29422 20MCHST69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97	97.3	97.3	97	100	181	29342 20GRNBRJ69.0	29475 20ONEIDJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	181	29342 20GRNBRJ69.0	29475 20ONEIDJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	181	29342 20GRNBRJ69.0	29475 20ONEIDJ69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	23	111.5	181	29342 20GRNBRJ69.0	29475 20ONEIDJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	182	29343 20GRENC 161	29344 20GRENC69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	182	29343 20GRENC 161	29344 20GRENC69.0
27229	11HODGEN69.0	29359	20HODGEN69.0	1	40.5	36.5	36.5	40	101.3	182	29343 20GRENC 161	29344 20GRENC69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	29.6	21.8	21.8	19	155.8	182	29343 20GRENC 161	29344 20GRENC69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	182	29343 20GRENC 161	29344 20GRENC69.0

**	From bus	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	100.3	183	29343 20GREENC	161	29583	20SSHADE	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.7	144.4	101.2	183	29343 20GREENC	161	29583	20SSHADE	161	1
27229	11HODGEN69.0	29359	20HODGEN69.0	1	40.5	36.5	40	101.3	183	29343 20GREENC	161	29583	20SSHADE	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	26.9	21.8	19	141.3	183	29343 20GREENC	161	29583	20SSHADE	161	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	27.5	25.7	23	119.5	183	29343 20GREENC	161	29583	20SSHADE	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	100.3	184	29343 20GREENC	161	29587	20TAYCTP	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	101	184	29343 20GREENC	161	29587	20TAYCTP	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.5	21.8	19	113.1	184	29343 20GREENC	161	29587	20TAYCTP	161	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	26	25.7	23	113.1	184	29343 20GREENC	161	29587	20TAYCTP	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	100.3	185	29344 20GREENC	69.0	29346	20GRSBRG69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	100.9	185	29344 20GREENC	69.0	29346	20GRSBRG69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	20.3	21.8	19	106.8	185	29344 20GREENC	69.0	29346	20GRSBRG69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.7	23	111	185	29344 20GREENC	69.0	29346	20GRSBRG69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	100.3	186	29344 20GREENC	69.0	29582	20SUMMRV69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	101	186	29344 20GREENC	69.0	29582	20SUMMRV69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	186	29344 20GREENC	69.0	29582	20SUMMRV69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	100.3	187	29346 20GRSBRG69.0	1	29440	20MCKNYJ69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	100.9	187	29346 20GRSBRG69.0	1	29440	20MCKNYJ69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	20.9	21.8	19	110.2	187	29346 20GRSBRG69.0	1	29440	20MCKNYJ69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	23	111.3	187	29346 20GRSBRG69.0	1	29440	20MCKNYJ69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	144.4	101	188	29348 20GRNHLJ	161	29602	20TYNER	161	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	85.3	72.8	104.1	188	29348 20GRNHLJ	161	29602	20TYNER	161	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.1	21.8	19	116.5	188	29348 20GRNHLJ	161	29602	20TYNER	161	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	23	111.4	188	29348 20GRNHLJ	161	29602	20TYNER	161	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	100.2	189	29350 20HARGTJ69.0	1	29598	20TRAPP	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	100.9	189	29350 20HARGTJ69.0	1	29598	20TRAPP	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	189	29350 20HARGTJ69.0	1	29598	20TRAPP	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.3	25.7	23	109.9	189	29350 20HARGTJ69.0	1	29598	20TRAPP	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	100.3	190	29351 20HDQTRS69.0	1	29443	20MIL-CJ69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	100.9	190	29351 20HDQTRS69.0	1	29443	20MIL-CJ69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	190	29351 20HDQTRS69.0	1	29443	20MIL-CJ69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	190	29351 20HDQTRS69.0	1	29443	20MIL-CJ69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	100.2	191	29351 20HDQTRS69.0	1	29458	20MURPHY69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	100.9	191	29351 20HDQTRS69.0	1	29458	20MURPHY69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	191	29351 20HDQTRS69.0	1	29458	20MURPHY69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	191	29351 20HDQTRS69.0	1	29458	20MURPHY69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	100.2	192	29352 20HELCHW69.0	1	29579	20SUBLTJ69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	100.9	192	29352 20HELCHW69.0	1	29579	20SUBLTJ69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	192	29352 20HELCHW69.0	1	29579	20SUBLTJ69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.7	192	29352 20HELCHW69.0	1	29579	20SUBLTJ69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	100.2	193	29354 20HICK	69.0	29504	20PPG	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	100.9	193	29354 20HICK	69.0	29504	20PPG	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	193	29354 20HICK	69.0	29504	20PPG	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	193	29354 20HICK	69.0	29504	20PPG	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.6	100.6	194	29355 20HIGHLD69.0	1	29450	20MT	OLJ69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	101	194	29355 20HIGHLD69.0	1	29450	20MT	OLJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.2	194	29355 20HIGHLD69.0	1	29450	20MT	OLJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.4	194	29355 20HIGHLD69.0	1	29450	20MT	OLJ69.0	1

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	195	29355 20HIGHLD69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	195	29355 20HIGHLD69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.9	21.8	19	115	195	29355 20HIGHLD69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	195	29355 20HIGHLD69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	196	29356 20HIGHLDA 69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	196	29356 20HIGHLDA 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	196	29356 20HIGHLDA 69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.9	196	29356 20HIGHLDA 69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	197	29358 20HILLSB69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	197	29358 20HILLSB69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.9	197	29358 20HILLSB69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.9	25.7	23	112.5	197	29358 20HILLSB69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	198	29359 20HODGEN69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	198	29359 20HODGEN69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	26.1	25.7	23	113.4	198	29359 20HODGEN69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	97.1	97.3	97	100.1	199	29359 20HODGEN69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	144.4	144.4	143	101	199	29359 20HODGEN69.0
29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	1	1	24.7	19.7	23	107.4	199	29359 20HODGEN69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	24.1	21.8	19	126.8	199	29359 20HODGEN69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	30.7	25.7	23	133.6	199	29359 20HODGEN69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	200	29360 20HOLLWJ69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	200	29360 20HOLLWJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	200	29360 20HOLLWJ69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.8	200	29360 20HOLLWJ69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	201	29362 20HOPE 69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	201	29362 20HOPE 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.8	201	29362 20HOPE 69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.8	201	29362 20HOPE 69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	202	29362 20HOPE 69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	202	29362 20HOPE 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.8	21.8	19	114.9	202	29362 20HOPE 69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.8	25.7	23	112.1	202	29362 20HOPE 69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	203	29363 20HCYAVK69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	203	29363 20HCYAVK69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	22.5	21.8	19	118.4	203	29363 20HCYAVK69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	25.7	25.7	23	111.6	203	29363 20HCYAVK69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	204	29364 20HTADMS69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	204	29364 20HTADMS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.9	21.8	19	115.4	204	29364 20HTADMS69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	24.1	25.7	23	104.7	204	29364 20HTADMS69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	205	29366 20HTADMT69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	205	29366 20HTADMT69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	22	25.7	19	115.7	205	29366 20HTADMT69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	23.7	25.7	23	103.2	205	29366 20HTADMT69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.1	97.3	97	100.1	206	29367 20HTADMT69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	206	29367 20HTADMT69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	1	21.7	21.8	19	114.5	206	29367 20HTADMT69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	1	1	26.3	25.7	23	114.3	206	29367 20HTADMT69.0

Mon: estill.mon
 Con: estill.con
 Excl: NOT USED

** From bus	** **	To bus	** c	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	207	29368 20HUNT1 69.0 29546 20SIDEV 69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.9	21.8	19	115.1	207	29368 20HUNT1 69.0 29546 20SIDEV 69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.3	25.7	23	110.2	207	29368 20HUNT1 69.0 29546 20SIDEV 69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	208	29370 20HUNT2 69.0 29388 20JKSMIT69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	208	29370 20HUNT2 69.0 29388 20JKSMIT69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.9	208	29370 20HUNT2 69.0 29388 20JKSMIT69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.2	25.7	23	109.8	208	29370 20HUNT2 69.0 29388 20JKSMIT69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	209	29371 20INDEX 69.0 29372 20INDEXJ69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.2	209	29371 20INDEX 69.0 29372 20INDEXJ69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.9	209	29371 20INDEX 69.0 29372 20INDEXJ69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.7	209	29371 20INDEX 69.0 29372 20INDEXJ69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	210	29372 20INDEXJ69.0 29435 20MAYTNJ69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	210	29372 20INDEXJ69.0 29435 20MAYTNJ69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.8	210	29372 20INDEXJ69.0 29435 20MAYTNJ69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.6	25.7	23	111.5	210	29372 20INDEXJ69.0 29435 20MAYTNJ69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	211	29372 20INDEXJ69.0 29619 20W LIB 69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	211	29372 20INDEXJ69.0 29619 20W LIB 69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.8	211	29372 20INDEXJ69.0 29619 20W LIB 69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.9	25.7	23	112.4	211	29372 20INDEXJ69.0 29619 20W LIB 69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.3	211	29372 20INDEXJ69.0 29619 20W LIB 69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	211	29372 20INDEXJ69.0 29619 20W LIB 69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	23	21.8	19	121.2	212	29374 20JACKVJ 138 29512 20RENAKR 138 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.9	25.7	23	112.6	212	29374 20JACKVJ 138 29512 20RENAKR 138 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	212	29374 20JACKVJ 138 29512 20RENAKR 138 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	212	29374 20JACKVJ 138 29512 20RENAKR 138 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.8	212	29374 20JACKVJ 138 29512 20RENAKR 138 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.9	25.7	23	112.4	212	29374 20JACKVJ 138 29512 20RENAKR 138 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.3	213	29375 20JBGALJ69.0 29394 20KNOBLK69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	213	29375 20JBGALJ69.0 29394 20KNOBLK69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	23	21.8	19	121.2	213	29375 20JBGALJ69.0 29394 20KNOBLK69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.9	25.7	23	112.6	213	29375 20JBGALJ69.0 29394 20KNOBLK69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	214	29375 20JBGALJ69.0 29584 20SSHADE69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	214	29375 20JBGALJ69.0 29584 20SSHADE69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	126.1	214	29375 20JBGALJ69.0 29584 20SSHADE69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	24	25.7	23	113	214	29375 20JBGALJ69.0 29584 20SSHADE69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	214	29375 20JBGALJ69.0 29584 20SSHADE69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	215	29376 20JEFVJL69.0 29503 20POWELL69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.8	215	29376 20JEFVJL69.0 29503 20POWELL69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.7	215	29376 20JEFVJL69.0 29503 20POWELL69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	216	29378 20JELLCR69.0 29379 20JELLCJ69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	216	29378 20JELLCR69.0 29379 20JELLCJ69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.5	216	29378 20JELLCR69.0 29379 20JELLCJ69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.7	216	29378 20JELLCR69.0 29379 20JELLCJ69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.3	217	29379 20JELLCJ69.0 29438 20MCCR 69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	217	29379 20JELLCJ69.0 29438 20MCCR 69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.7	21.8	19	114.3	217	29379 20JELLCJ69.0 29438 20MCCR 69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.6	217	29379 20JELLCJ69.0 29438 20MCCR 69.0 1
27051	11ADAMS 138	27148 11TYRONE 138	1	97.4	97.3	97	100.4	218	29380 20JNWLJ69.0 29592 20THELMA69.0 1
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	218	29380 20JNWLJ69.0 29592 20THELMA69.0 1
29359	20HODGEN69.0	29419 20WAGNOL69.0	1	21.8	21.8	19	114.8	218	29380 20JNWLJ69.0 29592 20THELMA69.0 1
29411	20LILYJT69.0	29634 20WOODLN69.0	1	25.8	25.7	23	112.1	218	29380 20JNWLJ69.0 29592 20THELMA69.0 1
27023	11DELVIN 161	27045 11WI TAP 161	1	143.3	94.8	142	100.9	219	29387 20JKSMIT 138 29501 20POWELL 138 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27034	11LR TAP 161	27045	11WI TAP 161	1	1	168.5	119.1	165	102.1	219	29387 20JKSMIT 138 29501 20POWELL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	219	29387 20JKSMIT 138 29501 20POWELL 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.9	21.8	19	115.5	219	29387 20JKSMIT 138 29501 20POWELL 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	23	112.3	219	29387 20JKSMIT 138 29501 20POWELL 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.2	97.3	97	100.2	220	29388 20JKSMIT69.0 29598 20TRAPP 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.3	144.4	143	100.9	220	29388 20JKSMIT69.0 29598 20TRAPP 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.9	220	29388 20JKSMIT69.0 29598 20TRAPP 69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.3	25.7	23	109.8	220	29388 20JKSMIT69.0 29598 20TRAPP 69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.3	97.3	97	100.3	221	29390 20KARGLE69.0 29571 20STEPHN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	221	29390 20KARGLE69.0 29571 20STEPHN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	44.9	36.5	40	112.2	221	29390 20KARGLE69.0 29571 20STEPHN69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	20.9	21.8	19	110.2	221	29390 20KARGLE69.0 29571 20STEPHN69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	26.6	25.7	23	115.6	221	29390 20KARGLE69.0 29571 20STEPHN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	97.4	97.3	97	100.4	222	29391 20KEAVY 69.0 29399 20LAURLC69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.4	144.4	143	101	222	29391 20KEAVY 69.0 29399 20LAURLC69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	114.6	222	29391 20KEAVY 69.0 29399 20LAURLC69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.3	97.3	23	111.9	222	29391 20KEAVY 69.0 29399 20LAURLC69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	25.7	25.7	23	100.3	223	29391 20KEAVY 69.0 29491 20PINEGJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.4	144.4	143	101	223	29391 20KEAVY 69.0 29491 20PINEGJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	114.7	223	29391 20KEAVY 69.0 29491 20PINEGJ69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.3	97.3	97	100.3	224	29392 20KEITH 69.0 29486 20PENN 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	25.7	25.7	23	111.9	224	29392 20KEITH 69.0 29486 20PENN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.4	144.4	143	100.3	225	29394 20KNOBLK69.0 29440 20MCKNYJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	112.6	225	29394 20KNOBLK69.0 29440 20MCKNYJ69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.3	97.3	97	101	225	29394 20KNOBLK69.0 29440 20MCKNYJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	225	29394 20KNOBLK69.0 29440 20MCKNYJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.4	21.8	19	112.6	225	29394 20KNOBLK69.0 29440 20MCKNYJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	225	29394 20KNOBLK69.0 29440 20MCKNYJ69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	144.3	144.4	143	100.9	226	29395 20LNCSTR69.0 29463 20NEWBY169.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	22.3	21.8	19	117.3	226	29395 20LNCSTR69.0 29463 20NEWBY169.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	25.3	25.7	23	110.1	226	29395 20LNCSTR69.0 29463 20NEWBY169.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	144.3	144.4	143	100.9	226	29395 20LNCSTR69.0 29463 20NEWBY169.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	144.3	144.4	143	100.9	227	29395 20LNCSTR69.0 29604 20GCOCH69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	22.1	21.8	19	116.3	227	29395 20LNCSTR69.0 29604 20GCOCH69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	25.5	25.7	23	110.9	227	29395 20LNCSTR69.0 29604 20GCOCH69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	97.3	97.3	97	100.3	228	29398 20LAURLC 161 29399 20LAURLC69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	144.4	144.4	143	101	228	29398 20LAURLC 161 29399 20LAURLC69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	21.7	21.8	19	114.1	228	29398 20LAURLC 161 29399 20LAURLC69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	25.6	25.7	23	111.2	228	29398 20LAURLC 161 29399 20LAURLC69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	98.1	97.3	97	101.1	229	29398 20LAURLC 161 29400 20LAURLD 161 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	144.5	144.4	143	101	229	29398 20LAURLC 161 29400 20LAURLD 161 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	86	72.8	82	104.8	229	29398 20LAURLC 161 29400 20LAURLD 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.1	21.8	19	111.2	229	29398 20LAURLC 161 29400 20LAURLD 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.5	25.7	23	110.8	229	29398 20LAURLC 161 29400 20LAURLD 161 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.4	97.3	97	100.5	230	29398 20LAURLC 161 29496 20PITTSB 161 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	230	29398 20LAURLC 161 29496 20PITTSB 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.7	21.8	19	114.3	230	29398 20LAURLC 161 29496 20PITTSB 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.8	230	29398 20LAURLC 161 29496 20PITTSB 161 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	1	97.3	97.3	97	100.3	231	29399 20LAURLC69.0 29528 20SCORBNE69.0 1

**	From bus	**	**	To bus	**	c	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	231	29399	20LAURLC69.0	29528	20SCORBN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	231	29399	20LAURLC69.0	29528	20SCORBN69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	231	29399	20LAURLC69.0	29528	20SCORBN69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	232	29402	20LAURIJ69.0	29620	20W LOND69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	232	29402	20LAURIJ69.0	29620	20W LOND69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	232	29402	20LAURIJ69.0	29620	20W LOND69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	232	29402	20LAURIJ69.0	29620	20W LOND69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	233	29403	20LEBANJ69.0	29542	20SHEPVJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101.1	233	29403	20LEBANJ69.0	29542	20SHEPVJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.3	21.8	19	111.9	233	29403	20LEBANJ69.0	29542	20SHEPVJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	24.1	25.7	23	104.9	233	29403	20LEBANJ69.0	29542	20SHEPVJ69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	98.4	97.3	97	101.4	234	29404	20LEESLK69.0	29486	20PENN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	234	29404	20LEESLK69.0	29486	20PENN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	234	29404	20LEESLK69.0	29486	20PENN 69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	234	29404	20LEESLK69.0	29486	20PENN 69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	100.6	97.3	97	103.7	235	29404	20LEESLK69.0	29514	20RENAKR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	235	29404	20LEESLK69.0	29514	20RENAKR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	235	29404	20LEESLK69.0	29514	20RENAKR69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	235	29404	20LEESLK69.0	29514	20RENAKR69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	236	29406	20LEON 69.0	29467	20NEWEND69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	236	29406	20LEON 69.0	29467	20NEWEND69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	236	29406	20LEON 69.0	29467	20NEWEND69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	236	29406	20LEON 69.0	29467	20NEWEND69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	237	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	237	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	237	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	237	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	238	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	238	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	238	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	238	29407	20LIBTKU69.0	29410	20LIBERT69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.4	97.3	97	100.4	239	29408	20LIBERT 161	29410	20LIBERT69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	239	29408	20LIBERT 161	29410	20LIBERT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.4	239	29408	20LIBERT 161	29410	20LIBERT69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	239	29408	20LIBERT 161	29410	20LIBERT69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.8	97.3	97	100.8	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	19	113.5	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.5	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.3	241	29410	20LIBERT69.0	29490	20PHIL 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	241	29410	20LIBERT69.0	29490	20PHIL 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	241	29410	20LIBERT69.0	29490	20PHIL 69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.5	241	29410	20LIBERT69.0	29490	20PHIL 69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97	100.1	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.1	21.8	19	116.3	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	243	29412	20LORETT69.0	29532	20S SRPF69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	243	29412	20LORETT69.0	29532	20S SRPF69.0	1

**	From bus	**	To bus	**	c	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	21.8	19	115.8	243	29412 20LORETT69.0	29532 20S SPRF69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	26	25.7	25.7	23	113	243	29412 20LORETT69.0	29532 20S SPRF69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97	100.2	244	29412 20LORETT69.0	29580 20SULPHR69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	101	244	29412 20LORETT69.0	29580 20SULPHR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	23.5	21.8	21.8	19	123.5	244	29412 20LORETT69.0	29580 20SULPHR69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	29.6	25.7	25.7	23	128.8	244	29412 20LORETT69.0	29580 20SULPHR69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97	100.2	245	29415 20LYMANJ69.0	29599 20TUNHLJ69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	101	245	29415 20LYMANJ69.0	29599 20TUNHLJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115	245	29415 20LYMANJ69.0	29599 20TUNHLJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.4	25.7	25.7	23	110.6	245	29415 20LYMANJ69.0	29599 20TUNHLJ69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.5	97.3	97	100.5	246	29416 20MCKVKU69.0	29459 20N SPR	69.0	1
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	246	29416 20MCKVKU69.0	29459 20N SPR	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.3	246	29416 20MCKVKU69.0	29459 20N SPR	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25	25.7	25.7	23	108.7	246	29416 20MCKVKU69.0	29459 20N SPR	69.0	1
27051	11ADAMS	138	27148 11TYRONE	138	1	97.4	97.3	97	100.4	247	29416 20MCKVKU69.0	29487 20PERRVL69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	247	29416 20MCKVKU69.0	29487 20PERRVL69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.2	247	29416 20MCKVKU69.0	29487 20PERRVL69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.1	25.7	25.7	23	109.2	247	29416 20MCKVKU69.0	29487 20PERRVL69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97	100.2	248	29418 20MAGGRD69.0	29550 20SKAGGS69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	248	29418 20MAGGRD69.0	29550 20SKAGGS69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	248	29418 20MAGGRD69.0	29550 20SKAGGS69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	248	29418 20MAGGRD69.0	29550 20SKAGGS69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	249	29419 20MAGNOL69.0	29582 20SUMMRV69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	143	100.3	249	29419 20MAGNOL69.0	29582 20SUMMRV69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	250	29420 20MAGOFN69.0	29442 20MDLCKJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	250	29420 20MAGOFN69.0	29442 20MDLCKJ69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	251	29420 20MAGOFN69.0	29578 20SUBLET69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	251	29420 20MAGOFN69.0	29578 20SUBLET69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	251	29420 20MAGOFN69.0	29578 20SUBLET69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	251	29420 20MAGOFN69.0	29578 20SUBLET69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97	100.2	252	29420 20MAGOFN69.0	29579 20SUBLTJ69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	252	29420 20MAGOFN69.0	29579 20SUBLTJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	252	29420 20MAGOFN69.0	29579 20SUBLTJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	252	29420 20MAGOFN69.0	29579 20SUBLTJ69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97	100.2	253	29424 20MARETJ69.0	29426 20MARETB69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	253	29424 20MARETJ69.0	29426 20MARETB69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	253	29424 20MARETJ69.0	29426 20MARETB69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.6	253	29424 20MARETJ69.0	29426 20MARETB69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	254	29424 20MARETJ69.0	29426 20MARETB69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	254	29424 20MARETJ69.0	29426 20MARETB69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	254	29424 20MARETJ69.0	29426 20MARETB69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	254	29424 20MARETJ69.0	29426 20MARETB69.0	1	
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	255	29427 20MARIJ69.0	29435 20MAYTNJ69.0	1	
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	255	29427 20MARIJ69.0	29435 20MAYTNJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	255	29427 20MARIJ69.0	29435 20MAYTNJ69.0	1	

From bus	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.9	255	29427 20MARIJ69.0
27051 11ADAMS	138 27148 11TYRONE 138	97.2	97.3	97	100.2	256	29428 20MARION 161
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	256	29428 20MARION 161
29359 20HODGEN69.0	29419 20MAGNOL69.0	25.4	21.8	19	133.7	256	29428 20MARION 161
29411 20LILYJ69.0	29634 20WOODLN69.0	25.1	25.7	23	109.2	256	29428 20MARION 161
27051 11ADAMS	138 27148 11TYRONE 138	97.2	97.3	97	100.2	257	29431 20MRTNCJ69.0
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	257	29431 20MRTNCJ69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	257	29431 20MRTNCJ69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.8	257	29431 20MRTNCJ69.0
27051 11ADAMS	138 27148 11TYRONE 138	98	97.3	97	101.1	259	29432 20MAYSJV 138
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	258	29432 20MAYSJV 138
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.9	258	29432 20MAYSJV 138
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.7	258	29432 20MAYSJV 138
27051 11ADAMS	138 27148 11TYRONE 138	98	97.3	97	101.1	259	29432 20MAYSJV 138
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	259	29432 20MAYSJV 138
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.9	259	29432 20MAYSJV 138
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.7	259	29432 20MAYSJV 138
27051 11ADAMS	138 27148 11TYRONE 138	98	97.3	97	101.1	260	29432 20MAYSJV 138
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	260	29432 20MAYSJV 138
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.9	260	29432 20MAYSJV 138
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.7	260	29432 20MAYSJV 138
27051 11ADAMS	138 27148 11TYRONE 138	98	97.3	97	101.1	261	29433 20MAYTNJ 138
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	261	29433 20MAYTNJ 138
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	261	29433 20MAYTNJ 138
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.6	261	29433 20MAYTNJ 138
27051 11ADAMS	138 27148 11TYRONE 138	97.2	97.3	97	100.2	262	29433 20MAYTNJ 138
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	262	29433 20MAYTNJ 138
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	262	29433 20MAYTNJ 138
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.6	262	29433 20MAYTNJ 138
27051 11ADAMS	138 27148 11TYRONE 138	97.2	97.3	97	100.2	263	29434 20MAYTWN 69.0
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	263	29434 20MAYTWN 69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.9	263	29434 20MAYTWN 69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.8	263	29434 20MAYTWN 69.0
27051 11ADAMS	138 27148 11TYRONE 138	97.2	97.3	97	100.2	264	29436 20MAZIE 69.0
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	264	29436 20MAZIE 69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	264	29436 20MAZIE 69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.8	264	29436 20MAZIE 69.0
27051 11ADAMS	138 27148 11TYRONE 138	97.2	97.3	97	100.2	265	29436 20MAZIE 69.0
27161 11AIAKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	265	29436 20MAZIE 69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	265	29436 20MAZIE 69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.8	265	29436 20MAZIE 69.0
27051 11ADAMS	138 27148 11TYRONE 138	97.3	97.3	97	100.3	266	29438 20MCRE 69.0

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	266	29438 20MCCKE 69.0	29515 20REVLKU69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	266	29438 20MCCKE 69.0	29515 20REVLKU69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	266	29438 20MCCKE 69.0	29515 20REVLKU69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.2	267	29439 20MCCKE 69.0	29596 20THLNKS69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	267	29439 20MCCKE 69.0	29596 20THLNKS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	267	29439 20MCCKE 69.0	29596 20THLNKS69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	267	29439 20MCCKE 69.0	29596 20THLNKS69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	267	29439 20MCCKE 69.0	29596 20THLNKS69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	268	29443 20MIL-CJ69.0	29444 20MILBRG69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	269	29443 20MIL-CJ69.0	29444 20MILBRG69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	269	29443 20MIL-CJ69.0	29444 20MILBRG69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	269	29443 20MIL-CJ69.0	29444 20MILBRG69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	269	29443 20MIL-CJ69.0	29444 20MILBRG69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	269	29443 20MIL-CJ69.0	29444 20MILBRG69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	269	29443 20MIL-CJ69.0	29444 20MILBRG69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	270	29446 20MONTVA69.0	29447 20MONTIC69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	270	29446 20MONTVA69.0	29447 20MONTIC69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.3	270	29446 20MONTVA69.0	29447 20MONTIC69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	270	29446 20MONTVA69.0	29447 20MONTIC69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	270	29446 20MONTVA69.0	29447 20MONTIC69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.3	271	29447 20MONTIC69.0	29551 20SLAT 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.3	271	29447 20MONTIC69.0	29551 20SLAT 69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	271	29447 20MONTIC69.0	29551 20SLAT 69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	271	29447 20MONTIC69.0	29551 20SLAT 69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	272	29448 20MT OLV69.0	29450 20MT OLJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.4	272	29448 20MT OLV69.0	29450 20MT OLJ69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	23	111.4	272	29448 20MT OLV69.0	29450 20MT OLJ69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.4	97.3	97.3	97	100.1	273	29451 20MTSTER69.0	29511 20REID V69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	273	29451 20MTSTER69.0	29511 20REID V69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	273	29451 20MTSTER69.0	29511 20REID V69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	23	111.2	273	29451 20MTSTER69.0	29511 20REID V69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	274	29452 20MUNFVL69.0	29454 20MUNFKU69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	274	29452 20MUNFVL69.0	29454 20MUNFKU69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.9	21.8	21.8	19	120.3	274	29452 20MUNFVL69.0	29454 20MUNFKU69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	274	29452 20MUNFVL69.0	29454 20MUNFKU69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.2	144.4	144.4	143	100.9	275	29455 20MUNK 69.0	29456 20MUNK J69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	275	29455 20MUNK 69.0	29456 20MUNK J69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	111.9	275	29455 20MUNK 69.0	29456 20MUNK J69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.8	276	29456 20MUNK J69.0	29476 20OWEN C69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.1	144.4	144.4	143	100.8	276	29456 20MUNK J69.0	29476 20OWEN C69.0
29222	20BIGB J69.0	29455	20MUNK 69.0	1	43.1	6.3	6.3	42	102.6	276	29456 20MUNK J69.0	29476 20OWEN C69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	276	29456 20MUNK J69.0	29476 20OWEN C69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	276	29456 20MUNK J69.0	29476 20OWEN C69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.9	276	29456 20MUNK J69.0	29476 20OWEN C69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	21.8	21.8	21.8	19	114.9	276	29456 20MUNK J69.0	29476 20OWEN C69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.2	144.4	144.4	143	100.8	277	29456 20MUNK J69.0	29630 20WLMSTN69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.2	277	29456 20MUNK J69.0	29630 20WLMSTN69.0
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112	277	29456 20MUNK J69.0	29630 20WLMSTN69.0
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97.3	97	100.3	278	29458 20MURPHY69.0	29499 20PUMV 69.0
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	278	29458 20MURPHY69.0	29499 20PUMV 69.0

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.8	21.8	19	114.8	278	29458 20MURPHY69.0	29499 20PLUMV 69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.7	25.7	23	111.9	278	29458 20MURPHY69.0	29499 20PLUMV 69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.2	97.3	97	100.3	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	101	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.7	21.8	19	114.1	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.3	25.7	23	109.9	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.2	97.3	97	100.2	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	100.9	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.9	21.8	19	115.5	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.8	25.7	23	112.4	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.3	97.3	97	100.3	281	29460 20NANCY 69.0	29631 20WINDSR69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	100.9	281	29460 20NANCY 69.0	29631 20WINDSR69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.9	21.8	19	115.2	281	29460 20NANCY 69.0	29631 20WINDSR69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.8	25.7	23	112.2	281	29460 20NANCY 69.0	29631 20WINDSR69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.3	97.3	97	100.3	282	29462 20NELSON69.0	29610 20WBARDDJ69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.8	144.4	143	101.3	282	29462 20NELSON69.0	29610 20WBARDDJ69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			90.4	49.1	73	123.8	282	29462 20NELSON69.0	29610 20WBARDDJ69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			67	27.6	54	124	282	29462 20NELSON69.0	29610 20WBARDDJ69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			40.8	36.5	40	101.9	282	29462 20NELSON69.0	29610 20WBARDDJ69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			21.2	21.8	19	111.4	282	29462 20NELSON69.0	29610 20WBARDDJ69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			97.3	97.3	97	100.3	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			144.4	144.4	143	101	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.7	21.8	19	114.2	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.3	25.7	23	110.2	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			145.2	144.4	143	101.5	284	29466 20NCASL69.0	29476 20WOEN C69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			21.8	21.8	19	114.7	284	29466 20NCASL69.0	29476 20WOEN C69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			25.7	25.7	23	111.5	284	29466 20NCASL69.0	29476 20WOEN C69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			144.2	144.4	143	100.8	285	29468 20NEWLIB69.0	29476 20WOEN C69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			21.9	21.8	19	115.1	285	29468 20NEWLIB69.0	29476 20WOEN C69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			25.7	25.7	23	111.9	285	29468 20NEWLIB69.0	29476 20WOEN C69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			97.4	97.3	97	100.4	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			144.4	144.4	143	101	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.7	21.8	19	114.4	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.7	25.7	23	111.8	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.2	97.3	97	100.2	287	29474 20OAKH J69.0	29554 20SOMKUJ69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	101	287	29474 20OAKH J69.0	29554 20SOMKUJ69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			22	21.8	19	115.8	287	29474 20OAKH J69.0	29554 20SOMKUJ69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.9	25.7	23	112.6	287	29474 20OAKH J69.0	29554 20SOMKUJ69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.2	97.3	97	100.2	288	29474 20OAKH J69.0	29622 20W SOM 69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	101	288	29474 20OAKH J69.0	29622 20W SOM 69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			22	21.8	19	115.7	288	29474 20OAKH J69.0	29622 20W SOM 69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.9	25.7	23	112.5	288	29474 20OAKH J69.0	29622 20W SOM 69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.3	97.3	97	100.3	289	29478 20OOWLKU69.0	29483 20PEASTK69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	101	289	29478 20OOWLKU69.0	29483 20PEASTK69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.8	21.8	19	114.9	289	29478 20OOWLKU69.0	29483 20PEASTK69.0	1
29411	20LILYIJ69.0	29634	2WOODLN69.0	1			25.8	25.7	23	112.3	289	29478 20OOWLKU69.0	29483 20PEASTK69.0	1
27051	1IADAMS 138	27148	1TYRONE 138	1			97.3	97.3	97	100.3	290	29478 20OOWLKU69.0	29507 20PRSTNJ69.0	1
27161	1IAIKEN 69.0	27253	1LMIDDLT69.0	1			144.4	144.4	143	101	290	29478 20OOWLKU69.0	29507 20PRSTNJ69.0	1
29359	2OHODGEN69.0	29419	2OMAGNOL69.0	1			21.8	21.8	19	114.9	290	29478 20OOWLKU69.0	29507 20PRSTNJ69.0	1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency					
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	23	112.1	290	29478	200WVLUK69.0	29507	20PRSTNJ69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	291	29482	20PATTRJ69.0	29568	20SSPJTH69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	291	29482	20PATTRJ69.0	29568	20SSPJTH69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.7	21.8	19	114	291	29482	20PATTRJ69.0	29568	20SSPJTH69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.8	291	29482	20PATTRJ69.0	29568	20SSPJTH69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	292	29482	20PATTRJ69.0	29590	20TMPLHL69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	292	29482	20PATTRJ69.0	29590	20TMPLHL69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.6	292	29482	20PATTRJ69.0	29590	20TMPLHL69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	292	29482	20PATTRJ69.0	29590	20TMPLHL69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	293	29483	20PEASTR69.0	29636	20WYOMNG69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	293	29483	20PEASTR69.0	29636	20WYOMNG69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.5	293	29483	20PEASTR69.0	29636	20WYOMNG69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.5	25.7	23	111	294	29490	20PHIL	29631	20WINDSR69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	295	29491	20PINEGJ69.0	29620	20WINDSR69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	295	29491	20PINEGJ69.0	29620	20WINDSR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.7	295	29491	20PINEGJ69.0	29620	20WINDSR69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	295	29491	20PINEGJ69.0	29620	20WINDSR69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	297	29493	20PITTSB	161	29602	20TYNER	161
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	298	29496	20PITTSB	161	29602	20TYNER	161
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	22	21.8	19	115.7	298	29496	20PITTSB	161	29602	20TYNER	161
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.7	298	29496	20PITTSB	161	29602	20TYNER	161
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	299	29498	20PLUMV	138	29499	20PLUMV	69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	299	29498	20PLUMV	138	29499	20PLUMV	69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	299	29498	20PLUMV	138	29499	20PLUMV	69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.8	299	29498	20PLUMV	138	29499	20PLUMV	69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	300	29499	20PLUMV	69.0	29508	20RECTVL69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	300	29499	20PLUMV	69.0	29508	20RECTVL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	300	29499	20PLUMV	69.0	29508	20RECTVL69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	23	112.1	300	29499	20PLUMV	69.0	29508	20RECTVL69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.9	301	29500	20POWELL	138	29501	20POWELL	138
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	115.4	301	29500	20POWELL	138	29501	20POWELL	138
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.9	21.8	19	115.4	301	29500	20POWELL	138	29501	20POWELL	138
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.5	25.7	23	111	301	29500	20POWELL	138	29501	20POWELL	138
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	302	29501	20POWELL	138	29503	20POWELL	69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	302	29501	20POWELL	138	29503	20POWELL	69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	302	29501	20POWELL	138	29503	20POWELL	69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	26	25.7	23	112.9	302	29501	20POWELL	138	29503	20POWELL	69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.4	303	29503	20POWELL	69.0	29570	20STANTN69.0	1

**	From bus	** ** *	To bus	** c	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	303	29503
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	303	29503
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.4	304	29504
27051	IIADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	303	29503
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	304	29504
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	304	29504
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	304	29504
27051	IIADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97	100.1	305	29510
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	305	29510
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	305	29510
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.6	305	29510
27051	IIADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97	100.1	306	29510
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	306	29510
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	306	29510
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.6	306	29510
27051	IIADAMS 138	27148	11TYRONE 138	1	97	97.3	97	100	307	29511
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	307	29511
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115	307	29511
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.5	25.7	23	110.8	307	29511
27051	IIADAMS 138	27148	11TYRONE 138	1	101.6	97.3	97	104.8	308	29512
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101.1	308	29512
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.6	308	29512
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	308	29512
27051	IIADAMS 138	27148	11TYRONE 138	1	100.2	97.3	97	103.3	309	29512
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	309	29512
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.6	309	29512
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.3	309	29512
27051	IIADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	310	29518
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	310	29518
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	310	29518
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	310	29518
27051	IIADAMS 138	27148	11TYRONE 138	1	97	97.3	97	100	311	29518
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	107.6	311	29518
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	100.9	311	29518
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	311	29518
27051	IIADAMS 138	27148	11TYRONE 138	1	43.1	35	40	111.9	311	29518
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	311	29518
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	115	311	29518
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	311	29518
27051	IIADAMS 138	27148	11TYRONE 138	1	97.4	97.3	97	100.4	312	29518
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	312	29518
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	312	29518
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.2	312	29518
27051	IIADAMS 138	27148	11TYRONE 138	1	97.5	97.3	97	100.5	313	29520
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	313	29520
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	313	29520
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.8	313	29520
27051	IIADAMS 138	27148	11TYRONE 138	1	97.4	97.3	97	100.4	314	29520
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	314	29520
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.1	314	29520
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	314	29520

LF: Th_bc.sav
 Sys: estfil.sub

Mon: estfil.mon
 Con: estfil.con
 Excl: NOT USED

** From bus	** To bus	** C	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency									
27051	11ADAMS	138	27148	11TYRONE	138	1	97.5	97.3	100.5	315	29522	20RUSSCO	161	29523	20RUSSCO69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	315	29522	20RUSSCO	161	29523	20RUSSCO69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	114.8	315	29522	20RUSSCO	161	29523	20RUSSCO69.0	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.8	112.8	315	29522	20RUSSCO	161	29523	20RUSSCO69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.4	316	29523	20RUSSCO69.0	29527	20RSPRKU69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	316	29523	20RUSSCO69.0	29527	20RSPRKU69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	19	115.7	115.7	316	29523	20RUSSCO69.0	29527	20RSPRKU69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.6	112.6	316	29523	20RUSSCO69.0	29527	20RSPRKU69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	100.2	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.3	114.3	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.6	111.6	317	29524	20RSPREJ69.0	29526	20RSPREK69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	19	115.6	115.6	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.6	112.6	318	29524	20RSPREJ69.0	29527	20RSPRKU69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115.5	115.5	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	23	112.4	112.4	319	29524	20RSPREJ69.0	29538	20SEWLTJ69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	320	29530	20S	FORK69.0	29603	20TYNER 69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	320	29530	20S	FORK69.0	29603	20TYNER 69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	114.8	320	29530	20S	FORK69.0	29603	20TYNER 69.0	1	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	111.9	320	29530	20S	FORK69.0	29603	20TYNER 69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	114.7	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.1	112.1	321	29534	20SALEMJ69.0	29538	20SEWLTJ69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	100.2	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	115	115	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	112	322	29534	20SALEMJ69.0	29631	20WINDSR69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	100.2	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	114.9	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.6	25.7	23	111.3	111.3	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.4	97.3	100.4	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101.4	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115.2	115.2	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	26.1	25.7	23	113.4	113.4	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115.2	115.2	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	26	25.7	23	112.8	112.8	325	29542	20SHEPVJ69.0	29543	20SHEPVL69.0	1	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	99	97.3	102	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.1	144.4	143	100.8	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	1
29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	28.8	19.7	23	125.2	125.2	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.3	21.8	19	112.1	112.1	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1	1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJT69.0	29634	20WOODLN69.0	1		33.6	25.7	23	146.1	326	29547 20SINAI
27051	1IADAMS	138	27148 1ITYRONE	138	1	97	97.3	97	100	327	29548 20SKAGGS
27137	1IRODBRN	138	27273 1IRODBRN	69.0	1	43.1	35	40	107.9	327	29548 20SKAGGS
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	100.9	327	29548 20SKAGGS
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.9	21.8	19	115	327	29548 20SKAGGS
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.7	25.7	23	111.9	327	29548 20SKAGGS
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.4	97.3	97	100.4	328	29551 20SIAT
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	328	29551 20SIAT
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.7	21.8	19	114	328	29551 20SIAT
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.7	25.7	23	111.8	328	29551 20SIAT
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.2	97.3	97	100.2	329	29554 20SOMKUJ69.0
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	329	29554 20SOMKUJ69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		22	21.8	19	115.8	329	29554 20SOMKUJ69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.9	25.7	23	112.6	329	29554 20SOMKUJ69.0
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.3	97.3	97	100.3	329	29554 20SOMKUJ69.0
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	100.9	330	29555 20SOMERS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.8	21.8	19	114.9	330	29555 20SOMERS69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.8	25.7	23	112	330	29555 20SOMERS69.0
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.2	97.3	97	100.3	331	29558 20SNOW
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.3	144.4	143	100.9	331	29558 20SNOW
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.7	21.8	19	114.4	331	29558 20SNOW
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.7	25.7	23	111.8	331	29558 20SNOW
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.3	97.3	97	100.3	332	29564 20SPURLK
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	332	29564 20SPURLK
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.8	21.8	19	114.8	332	29564 20SPURLK
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.8	25.7	23	112	332	29564 20SPURLK
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.3	97.3	97	100.3	333	29566 20SPURLK
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	333	29566 20SPURLK
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.8	21.8	19	114.8	333	29566 20SPURLK
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.8	25.7	23	112.1	333	29566 20SPURLK
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.4	97.3	97	100.5	334	29566 20SPURLK
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	334	29566 20SPURLK
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.8	21.8	19	114.6	334	29566 20SPURLK
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.7	25.7	23	111.6	334	29566 20SPURLK
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.2	97.3	97	100.2	335	29566 20SPURLK
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	335	29566 20SPURLK
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		21.8	21.8	19	114.8	335	29566 20SPURLK
29411	20LILYJT69.0	29634	20WOODLN69.0	1		25.7	25.7	23	111.9	335	29566 20SPURLK
27051	1IADAMS	138	27148 1ITYRONE	138	1	97.3	97.3	97	100.3	336	29568 20SSPJTH69.0
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		144.4	144.4	143	101	336	29568 20SSPJTH69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		75.2	20.2	72	104.4	336	29568 20SSPJTH69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1		20.9	21.8	19	109.7	336	29568 20SSPJTH69.0
27051	1IADAMS	138	27148 1ITYRONE	138	1	25.6	25.7	23	111.3	336	29568 20SSPJTH69.0
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		97.3	97.3	97	100.3	337	29568 20SSPJTH69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1		144.4	144.4	143	100.9	337	29568 20SSPJTH69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1		21.7	21.8	19	114.2	337	29568 20SSPJTH69.0
27051	1IADAMS	138	27148 1ITYRONE	138	1	25.7	25.7	23	111.8	337	29568 20SSPJTH69.0
27161	1IAIKEN	69.0	27253 1IMIDDLT69.0	1		97.3	97.3	97	100.3	338	29571 20STEPHN69.0

LF: Th_bc.sav
Sys: estill.sub

Mon: estill.mon
Con: estill.con
Excl: NOT USED

** From bus	** **	To bus	** c	ContMVA	BaseFlow	Rating	Loading %	Ncon	Contingency
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	100.9	338	29571 20STEPHN69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	22.5	21.8	19	118.3	338	29571 20STEPHN69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.9	25.7	23	112.8	338	29571 20STEPHN69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.6	97.3	97	100.7	339	29572 20SPRKH69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	143	101	339	29572 20SPRKH69.0
29230	20BOONE 69.0	29299 20DEVON 69.0	1	77	10.2	72	106.9	339	29572 20SPRKH69.0
29299	20DEVON 69.0	29600 20TRKYFJ69.0	1	76.9	10.2	72	106.8	339	29572 20SPRKH69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.7	339	29572 20SPRKH69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.8	339	29572 20SPRKH69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	340	29574 20SPRKH69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	340	29574 20SPRKH69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.8	340	29574 20SPRKH69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	340	29574 20SPRKH69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.8	97.3	97	100.8	341	29575 20SPRKH69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	143	101	341	29575 20SPRKH69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.7	341	29575 20SPRKH69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	341	29575 20SPRKH69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.4	342	29583 20SSHADE69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.5	144.4	143	101	342	29583 20SSHADE69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	23.9	21.8	19	126	342	29583 20SSHADE69.0
29394	20KNOBLK69.0	29440 20MCKNYJ69.0	1	26.1	5.8	23	113.4	342	29583 20SSHADE69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	26.1	25.7	23	113.4	342	29583 20SSHADE69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	343	29583 20SSHADE69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	100.9	343	29583 20SSHADE69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.9	343	29583 20SSHADE69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	343	29583 20SSHADE69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	344	29584 20SSHADE69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	344	29584 20SSHADE69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.4	21.8	19	112.8	344	29584 20SSHADE69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	344	29584 20SSHADE69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	345	29587 20TAYCTP 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	345	29587 20TAYCTP 161
27219	11GRBURG69.0	29344 20GREENC69.0	1	63.1	32.1	54	116.9	345	29587 20TAYCTP 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	23.2	21.8	19	122	345	29587 20TAYCTP 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	26.5	25.7	23	115.4	345	29587 20TAYCTP 161
27051	11ADAMS 138	27148 11TYRONE 138	1	97.2	97.3	97	100.2	346	29595 20THLNKJ69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	100.9	346	29595 20THLNKJ69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.9	346	29595 20THLNKJ69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.8	346	29595 20THLNKJ69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	22	144.4	143	100.9	347	29595 20THLNKJ69.0
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	25.7	25.7	23	115.8	347	29595 20THLNKJ69.0
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.8	347	29595 20THLNKJ69.0
27051	11ADAMS 138	27148 11TYRONE 138	1	97.3	97.3	97	100.3	348	29602 20TYNER 161
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	101	348	29602 20TYNER 161
29359	20HODGEN69.0	29419 20MAGNOL69.0	1	21.8	21.8	19	114.8	348	29602 20TYNER 161
29411	20LILYJ69.0	29634 20WOODLN69.0	1	25.7	25.7	23	111.9	348	29602 20TYNER 161
27051	11ADAMS 138	27148 11TYRONE 138	1	97.4	97.3	97	100.4	349	29610 20WBARDJ69.0
27161	11AIKEN 69.0	27253 11MIDDLT69.0	1	144.2	144.4	143	100.9	349	29610 20WBARDJ69.0

** From bus	** To bus	** dContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359 20HODGEN69.0	29419 20MAGNOL69.0	22.4	21.8	19	117.7	349	29610 20WARDJ69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	28.5	25.7	23	123.8	349	29610 20WARDJ69.0
27051 11ADAMS	138 27148 11TYRONE	97.2	97.3	97	100.2	350	29612 20BEREA
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	350	29612 20BEREA
27209 11FAWKES69.0	29283 20CROOKJ69.0	61.5	21	54	113.8	350	29612 20BEREA
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.9	21.8	19	115.3	350	29612 20BEREA
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.7	350	29612 20BEREA
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	351	29614 20BEREA69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	22	21.8	19	115.8	351	29614 20BEREA69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.8	351	29614 20BEREA69.0
27051 11ADAMS	138 27148 11TYRONE	97.3	97.3	97	100.3	352	29616 20COLMB69.0
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.4	144.4	143	101	352	29616 20COLMB69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.6	21.8	19	113.9	352	29616 20COLMB69.0
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.5	352	29616 20COLMB69.0
27051 11ADAMS	138 27148 11TYRONE	97.4	97.3	97	100.4	353	29626 20WAYNE
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.4	144.4	143	101	353	29626 20WAYNE
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.6	21.8	19	113.8	353	29626 20WAYNE
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.8	353	29626 20WAYNE
27051 11ADAMS	138 27148 11TYRONE	97.2	97.3	97	100.2	354	29626 20WAYNE
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.4	144.4	143	100.9	354	29626 20WAYNE
29359 20HODGEN69.0	29419 20MAGNOL69.0	22.1	21.8	19	116.4	354	29626 20WAYNE
29411 20LILYJ69.0	29634 20WOODLN69.0	25.8	25.7	23	112	354	29626 20WAYNE
27051 11ADAMS	138 27148 11TYRONE	97.7	97.3	97	100.7	355	27000 11PINEVL
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.5	144.4	143	101.1	355	27000 11PINEVL
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.7	355	27000 11PINEVL
29411 20LILYJ69.0	29634 20WOODLN69.0	25.8	25.7	23	112	355	27000 11PINEVL
27051 11ADAMS	138 27148 11TYRONE	97.6	97.3	97	100.7	356	27000 11PINEVL
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.5	144.4	143	101	356	27000 11PINEVL
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	356	27000 11PINEVL
29411 20LILYJ69.0	29634 20WOODLN69.0	25.8	25.7	23	112.1	356	27000 11PINEVL
27051 11ADAMS	138 27148 11TYRONE	98.2	97.3	97	101.2	357	27001 11POCKET
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.7	144.4	143	101.2	357	27001 11POCKET
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.9	21.8	19	115.2	357	27001 11POCKET
29411 20LILYJ69.0	29634 20WOODLN69.0	26.1	25.7	23	113.7	357	27001 11POCKET
27161 11AIKEN	69.0 27253 11MIDDLT69.0	143.6	144.4	143	100.4	358	27002 11ALCALD
27229 11HODGEN69.0	29359 20HODGEN69.0	40.9	36.5	40	102.3	358	27002 11ALCALD
27285 11SPRNGF69.0	29459 20N SPR	19.2	12.5	19	101.1	358	27002 11ALCALD
29326 20FRCKBJ69.0	29634 20WOODLN69.0	24.1	19.7	23	104.6	358	27002 11ALCALD
29359 20HODGEN69.0	29419 20MAGNOL69.0	26.5	21.8	19	139.7	358	27002 11ALCALD
29411 20LILYJ69.0	29634 20WOODLN69.0	29.2	25.7	23	126.8	358	27002 11ALCALD
27161 11AIKEN	69.0 27253 11MIDDLT69.0	143.9	144.4	143	100.7	359	27002 11ALCALD
29359 20HODGEN69.0	29419 20MAGNOL69.0	22	21.8	19	115.8	359	27002 11ALCALD
29411 20LILYJ69.0	29634 20WOODLN69.0	25.7	25.7	23	111.7	359	27002 11ALCALD
27051 11ADAMS	138 27148 11TYRONE	97.1	97.3	97	100.1	360	27002 11ALCALD
27161 11AIKEN	69.0 27253 11MIDDLT69.0	144.3	144.4	143	100.9	360	27002 11ALCALD
27235 11KU PK	69.0 27265 11PINEVI69.0	83.1	72.8	82	101.4	360	27002 11ALCALD
29359 20HODGEN69.0	29419 20MAGNOL69.0	23.5	21.8	19	123.9	360	27002 11ALCALD
29411 20LILYJ69.0	29634 20WOODLN69.0	27.1	25.7	23	117.8	360	27002 11ALCALD

From bus	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051 11ADAMS 138 27148 11TYRONE 138 1	97.4	97.3	97	100.4	361	27003 11BLUUELI	345 27007 11MIDDLT 345 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	145.2	144.4	143	101.6	361	27003 11BLUUELI	345 27007 11MIDDLT 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.7	21.8	19	114	361	27003 11BLUUELI	345 27007 11MIDDLT 345 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.4	25.7	23	110.5	361	27003 11BLUUELI	345 27007 11MIDDLT 345 1
27051 11ADAMS 138 27148 11TYRONE 138 1	97	97.3	97	100	362	27003 11BLUUELI	345 27008 11MIL CK 345 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	143.4	144.4	143	100.3	362	27003 11BLUUELI	345 27008 11MIL CK 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	22.3	21.8	19	117.3	362	27003 11BLUUELI	345 27008 11MIL CK 345 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.8	25.7	23	112.4	362	27003 11BLUUELI	345 27008 11MIL CK 345 1
27051 11ADAMS 138 27148 11TYRONE 138 1	97.8	97.3	97	100.9	363	27003 11BLUUELI	345 27019 11BLUE L 161 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	146	144.4	143	102.1	363	27003 11BLUUELI	345 27019 11BLUE L 161 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	23.8	21.8	19	125.1	363	27003 11BLUUELI	345 27019 11BLUE L 161 1
27051 11ADAMS 138 27148 11TYRONE 138 1	97.1	97.3	97	100.1	364	27003 11BLUUELI	345 27060 11BLUUELI 138 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	288.1	150.7	286	100.7	364	27003 11BLUUELI	345 27060 11BLUUELI 138 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	145	144.4	143	101.4	364	27003 11BLUUELI	345 27060 11BLUUELI 138 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	21.9	21.8	19	115.4	364	27003 11BLUUELI	345 27060 11BLUUELI 138 1
27051 11ADAMS 138 27148 11TYRONE 138 1	25.9	25.7	23	112.4	364	27003 11BLUUELI	345 27060 11BLUUELI 138 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	100.1	97.3	97	103.2	365	27004 11BRWN N	345 27006 11HARDN 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	146.2	144.4	143	102.3	365	27004 11BRWN N	345 27006 11HARDN 345 1
27229 11HODGEN69.0 29359 20HODGEN69.0 1	43.7	36.5	40	109.3	365	27004 11BRWN N	345 27006 11HARDN 345 1
29326 20FRCKBJ69.0 29634 20WOODLN69.0 1	23.1	19.7	23	100.6	365	27004 11BRWN N	345 27006 11HARDN 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	25.1	21.8	19	131.9	365	27004 11BRWN N	345 27006 11HARDN 345 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	29.2	25.7	23	126.9	365	27004 11BRWN N	345 27006 11HARDN 345 1
27015 11W LEXN 345 27153 11W LEXN 345 1	480.8	346.5	478	100.6	366	27004 11BRWN N	345 27015 11W LEXN 345 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	143.6	144.4	143	100.4	366	27004 11BRWN N	345 27015 11W LEXN 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.5	21.8	19	113.2	366	27004 11BRWN N	345 27015 11W LEXN 345 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.1	25.7	23	109	366	27004 11BRWN N	345 27015 11W LEXN 345 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.8	144.4	143	101.3	367	27004 11BRWN N	345 27064 11BRWN N 138 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	22.1	21.8	19	116.1	367	27004 11BRWN N	345 27064 11BRWN N 138 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	26.2	25.7	23	113.8	367	27004 11BRWN N	345 27064 11BRWN N 138 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	147.8	144.4	143	103.4	368	27005 11GHENT	345 27013 11TRIMBL 345 04
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.9	21.8	19	115.5	368	27005 11GHENT	345 27013 11TRIMBL 345 04
29411 20LILYJT69.0 29634 20WOODLN69.0 1	26.7	25.7	23	116	368	27005 11GHENT	345 27013 11TRIMBL 345 04
27075 11CARROL 138 27112 11LOCKPO 138 1	162	84.7	135	120	369	27005 11GHENT	345 27014 11W FRNK 345 1
27091 11FFRT E 138 27140 11SHADRA 138 1	151.1	74.7	135	111.9	369	27005 11GHENT	345 27014 11W FRNK 345 1
27112 11LOCKPO 138 27140 11SHADRA 138 1	157.1	80.2	135	116.4	369	27005 11GHENT	345 27014 11W FRNK 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	152.9	144.4	143	106.9	369	27005 11GHENT	345 27014 11W FRNK 345 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	21.6	21.8	19	113.6	369	27005 11GHENT	345 27014 11W FRNK 345 1
27051 11ADAMS 138 27148 11TYRONE 138 1	125.1	97.3	97	116.9	369	27005 11GHENT	345 27015 11W LEXN 345 1
27113 11LOUDDN 138 29202 20AVON 138 1	295.3	237.9	287	102.9	370	27005 11GHENT	345 27015 11W LEXN 345 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	145.1	144.4	143	101.5	370	27005 11GHENT	345 27015 11W LEXN 345 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.5	21.8	19	113.1	370	27005 11GHENT	345 27015 11W LEXN 345 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	26.1	25.7	23	113.3	370	27005 11GHENT	345 27015 11W LEXN 345 1
27051 11ADAMS 138 27148 11TYRONE 138 1	99.1	97.3	97	102.1	371	27005 11GHENT	345 27092 11GHENT 138 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.6	144.4	143	101.1	371	27005 11GHENT	345 27092 11GHENT 138 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.9	371	27005 11GHENT	345 27092 11GHENT 138 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.8	25.7	23	112	371	27005 11GHENT	345 27092 11GHENT 138 1
27051 11ADAMS 138 27148 11TYRONE 138 1	99.6	97.3	97	102.7	372	27005 11GHENT	345 27092 11GHENT 138 2

** From bus	** To bus	** C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	144.7	144.4	143	101.2	372	27005 IIGHENT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	21.8	21.8	19	115	372	27005 IIGHENT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	25.8	25.7	23	112.1	372	27005 IIGHENT 138 2
27051 IADAMS 138	27148 IITYRONE 138	1	100.8	97.3	97	103.9	373	27006 IIHARDN 138 2
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	150.3	144.4	143	105.1	373	27006 IIHARDN 138 2
27051 IADAMS 138	27148 IITYRONE 138	1	97.5	97.3	97	100.5	374	27006 IIHARDN 138 2
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	144.4	144.4	143	101	374	27006 IIHARDN 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	24.9	25.7	19	111.2	374	27006 IIHARDN 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	97.1	97.3	23	108.5	374	27006 IIHARDN 138 2
27051 IADAMS 138	27148 IITYRONE 138	1	144.7	144.4	143	100.1	375	27006 IIHARDN 138 2
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	19.8	21.8	19	101.2	375	27006 IIHARDN 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	23.9	25.7	23	104.3	375	27006 IIHARDN 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	144.7	144.4	143	103.9	375	27006 IIHARDN 138 2
27051 IADAMS 138	27148 IITYRONE 138	1	97.1	97.3	97	100.2	376	27006 IIHARDN 138 2
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	144.4	144.4	143	101	377	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	21.8	21.8	19	114.6	377	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	25.7	25.7	23	111.7	377	27007 IIMIDDLT 138 2
27051 IADAMS 138	27148 IITYRONE 138	1	97.1	97.3	97	100.1	378	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	21.1	21.8	19	110.9	378	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	24.5	25.7	23	106.6	378	27007 IIMIDDLT 138 2
27007 IIMIDDLT 345	27119 IIMIDDLT 138 2	2	491.8	366	478	102.9	379	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	501.1	373.1	478	104.8	379	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	21.8	21.8	19	114.7	379	27007 IIMIDDLT 138 2
27007 IIMIDDLT 345	27119 IIMIDDLT 138 1	1	25.6	25.7	23	111.1	379	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	514.3	391.3	478	102.6	380	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	490.3	373.1	478	107.6	380	27007 IIMIDDLT 138 2
27007 IIMIDDLT 345	27119 IIMIDDLT 138 2	2	21.8	21.8	19	114.7	380	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	25.6	25.7	23	111.2	380	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	517.2	391.3	478	108.2	381	27007 IIMIDDLT 138 2
27007 IIMIDDLT 345	27119 IIMIDDLT 138 2	2	483.9	366	478	101.2	381	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	21.8	21.8	19	114.7	381	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	25.6	25.7	23	111.2	381	27007 IIMIDDLT 138 2
27007 IIMIDDLT 345	27119 IIMIDDLT 138 1	1	21.8	21.8	19	114.7	381	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	21.8	21.8	19	114.7	381	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	21	21.8	19	110.4	382	27007 IIMIDDLT 138 2
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	24.4	25.7	23	105.9	382	27007 IIMIDDLT 138 2
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	147.4	144.4	143	103.1	382	27007 IIMIDDLT 138 2
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	22.5	21.8	19	118.4	383	27008 IIMIL CK 345 1
27051 IADAMS 138	27148 IITYRONE 138	1	26.3	25.7	23	114.4	383	27008 IIMIL CK 345 1
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	97.2	97.3	97	100.2	384	27008 IIMIL CK 345 1
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	144.7	144.4	143	101.2	384	27008 IIMIL CK 345 1
29411 2OLILYJ69.0	29634 2WOODLN69.0	1	21.9	21.8	19	115.4	384	27008 IIMIL CK 345 1
27051 IADAMS 138	27148 IITYRONE 138	1	25.8	25.7	23	112.3	384	27008 IIMIL CK 345 1
27161 IIAIKEN 69.0	27253 IIMIDDLT69.0	1	97.2	97.3	97	100.2	385	27008 IIMIL CK 345 1
29359 2OHODGEN69.0	29419 2OMAGNOL69.0	1	144.7	144.4	143	101.2	385	27008 IIMIL CK 345 1

** From bus	** To bus	** ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.9	21.8	19	115.5	385	27008 11MIL CK 345 27121 11MILL C 138 2
29411 20LILYJT69.0	29634 20WOODLN69.0	25.8	25.7	23	112.3	385	27008 11MIL CK 345 27121 11MILL C 138 2
27051 11ADAMS 138	27148 11TYRONE 138	97	97.3	97	100	386	27009 11NORTHS 345 27010 11PADDDYW 345 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	146	144.4	143	102.1	386	27009 11NORTHS 345 27010 11PADDDYW 345 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	22	21.8	19	115.7	386	27009 11NORTHS 345 27010 11PADDDYW 345 1
29411 20LILYJT69.0	29634 20WOODLN69.0	25.9	25.7	23	112.6	387	27009 11NORTHS 345 27010 11PADDDYW 345 1
27051 11ADAMS 138	27148 11TYRONE 138	97	97.3	97	100	387	27009 11NORTHS 345 27010 11PADDDYW 345 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	146	144.4	143	102.1	387	27009 11NORTHS 345 27125 11NORTHS 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	22	21.8	19	115.7	387	27009 11NORTHS 345 27125 11NORTHS 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	25.9	25.7	23	112.6	387	27009 11NORTHS 345 27125 11NORTHS 138 1
27051 11ADAMS 138	27148 11TYRONE 138	97.2	97.3	97	100.2	388	27010 11PADDDYW 345 27131 11P WEST 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	145.1	144.4	143	101.5	388	27010 11PADDDYW 345 27131 11P WEST 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	22.1	21.8	19	116.3	388	27010 11PADDDYW 345 27131 11P WEST 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	25.9	25.7	23	112.8	388	27010 11PADDDYW 345 27131 11P WEST 138 1
27051 11ADAMS 138	27148 11TYRONE 138	97.3	97.3	97	100.3	389	27011 11PINEVI 345 27038 11PINEVI 161 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	144.3	144.4	143	100.9	389	27011 11PINEVI 345 27038 11PINEVI 161 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.1	21.8	19	116.5	389	27011 11PINEVI 345 27038 11PINEVI 161 1
29411 20LILYJT69.0	29634 20WOODLN69.0	24.9	25.7	23	113.5	389	27011 11PINEVI 345 27038 11PINEVI 161 1
27051 11ADAMS 138	27148 11TYRONE 138	97.3	97.3	97	100.3	390	27012 11SMITH 345 27142 11SMITH 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	144.3	144.4	143	100.9	390	27012 11SMITH 345 27142 11SMITH 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.1	21.8	19	110.9	390	27012 11SMITH 345 27142 11SMITH 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	24.9	25.7	23	108.3	390	27012 11SMITH 345 27142 11SMITH 138 1
27051 11ADAMS 138	27148 11TYRONE 138	21.7	21.8	19	107.1	391	27013 11TRIMBL 345 27147 11TRIMBL 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	153.2	144.4	143	114	391	27013 11TRIMBL 345 27147 11TRIMBL 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.7	21.8	19	110.6	391	27013 11TRIMBL 345 27147 11TRIMBL 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	25.4	25.7	23	100.1	392	27013 11TRIMBL 345 27147 11TRIMBL 138 1
27051 11ADAMS 138	27148 11TYRONE 138	97.1	97.3	97	100.1	392	27013 11TRIMBL 345 27147 11TRIMBL 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	157.1	80.2	135	111.4	392	27013 11TRIMBL 345 27147 11TRIMBL 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.2	21.8	19	107.3	392	27013 11TRIMBL 345 27147 11TRIMBL 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	24.7	25.7	23	120	393	27014 11W FRNK 345 27151 11W FRNK 138 1
27051 11ADAMS 138	27148 11TYRONE 138	162	84.7	135	119.9	393	27014 11W FRNK 345 27151 11W FRNK 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	151.1	74.7	135	116.4	393	27014 11W FRNK 345 27151 11W FRNK 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	157.1	80.2	135	106.9	393	27014 11W FRNK 345 27151 11W FRNK 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	152.9	144.4	143	113.6	393	27014 11W FRNK 345 27151 11W FRNK 138 1
27051 11ADAMS 138	27148 11TYRONE 138	21.6	21.8	19	116.9	394	27015 11W FRNK 345 27153 11W FRNK 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	26.9	25.7	23	104.1	394	27015 11W FRNK 345 27153 11W FRNK 138 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	124.5	97.3	97	102	394	27015 11W FRNK 345 27153 11W FRNK 138 1
29411 20LILYJT69.0	29634 20WOODLN69.0	298.7	237.9	287	115.9	394	27015 11W FRNK 345 27153 11W FRNK 138 1
27051 11ADAMS 138	27148 11TYRONE 138	145.9	144.4	143	116.4	394	27015 11W FRNK 345 27153 11W FRNK 138 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	22	21.8	19	100.2	395	27016 11ALCALD 161 27026 11ELIHU 161 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	26.8	25.7	23	101	395	27016 11ALCALD 161 27026 11ELIHU 161 1
29411 20LILYJT69.0	29634 20WOODLN69.0	97.2	97.3	97	119.3	395	27016 11ALCALD 161 27026 11ELIHU 161 1
27051 11ADAMS 138	27148 11TYRONE 138	144.4	144.4	143	114.8	395	27016 11ALCALD 161 27026 11ELIHU 161 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	26.4	25.7	23	100.3	396	27016 11ALCALD 161 27026 11ELIHU 161 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	26.4	25.7	23	100.9	396	27016 11ALCALD 161 27027 11FARLEY 161 1
29411 20LILYJT69.0	29634 20WOODLN69.0	144.3	144.4	143	113.4	396	27016 11ALCALD 161 27027 11FARLEY 161 1
27051 11ADAMS 138	27148 11TYRONE 138	21.6	21.8	19	111	396	27016 11ALCALD 161 27027 11FARLEY 161 1
27161 11AIKEN 69.0	27253 11MIDDLT69.0	25.5	25.7	23	100.9	397	27017 11ARNOLD 161 27023 11DELVIN 161 1
29359 20HODGEN69.0	29419 20MAGNOL69.0	144.3	144.4	143			

***	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	397	27017 IARNOLD	161 27023
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.5	25.7	23	111	397	27017 IARNOLD	161 27023
27024	11DORCHE	161	27032 11MORCHE	161	99.6	99.6	60.6	94	106	398	27017 IARNOLD	161 27024
27051	11ADAMS	138	27148 11TYRONE	138	97.2	97.2	97.3	97	100.2	398	27017 IARNOLD	161 27024
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.3	144.4	143	100.9	398	27017 IARNOLD	161 27024
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	398	27017 IARNOLD	161 27024
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	398	27017 IARNOLD	161 27024
27051	11ADAMS	138	27148 11TYRONE	138	97.4	97.4	97.3	97	100.4	399	27017 IARNOLD	161 27024
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	101	399	27017 IARNOLD	161 27030
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	399	27017 IARNOLD	161 27030
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.8	25.7	23	112	399	27017 IARNOLD	161 27030
27051	11ADAMS	138	27148 11TYRONE	138	97.1	97.1	97.3	97	100.1	400	27017 IARNOLD	161 27030
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.3	144.4	143	100.9	400	27017 IARNOLD	161 27165
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	400	27017 IARNOLD	161 27165
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	400	27017 IARNOLD	161 27165
27051	11ADAMS	138	27148 11TYRONE	138	97.3	97.3	97.3	97	100.3	401	27018 IARTEMU	161 27166
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	101	401	27018 IARTEMU	161 27166
27235	11KU PK	69.0	27265 11PINEVI69.0	1	100.2	100.2	72.8	82	122.2	401	27018 IARTEMU	161 27166
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	402	27018 IARTEMU	161 27328
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	402	27018 IARTEMU	161 27328
27051	11ADAMS	138	27148 11TYRONE	138	97.3	97.3	97.3	97	100.3	402	27018 IARTEMU	161 27328
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	100.3	403	27020 ILCORY	161 27021
27235	11KU PK	69.0	27265 11PINEVI69.0	1	100.2	100.2	72.8	82	122.2	403	27020 ILCORY	161 27021
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	403	27020 ILCORY	161 27021
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	403	27020 ILCORY	161 27021
27051	11ADAMS	138	27148 11TYRONE	138	97.3	97.3	97.3	97	100.3	404	27020 ILCORY	161 27021
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	101	404	27020 ILCORY	161 27021
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.9	21.8	19	115.5	404	27020 ILCORY	161 27028
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	404	27020 ILCORY	161 27028
27051	11ADAMS	138	27148 11TYRONE	138	97.3	97.3	97.3	97	100.3	405	27020 ILCORY	161 27028
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	143	101	405	27020 ILCORY	161 27028
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.9	21.8	19	115.2	405	27020 ILCORY	161 27035
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	405	27020 ILCORY	161 27035
27051	11ADAMS	138	27148 11TYRONE	138	97.3	97.3	97.3	97	100.3	405	27020 ILCORY	161 27035
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.3	144.4	143	100.3	406	27021 ILCORY	161 27035
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	406	27021 ILCORY	161 27190
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	406	27021 ILCORY	161 27190
27051	11ADAMS	138	27148 11TYRONE	138	97.2	97.2	97.3	97	100.2	407	27022 ILCORITTE	161 27033
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.3	144.4	143	100.9	407	27022 ILCORITTE	161 27033
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.6	21.8	19	113.9	407	27022 ILCORITTE	161 27033
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	407	27022 ILCORITTE	161 27033
27051	11ADAMS	138	27148 11TYRONE	138	97.2	97.2	97.3	97	100.2	408	27022 ILCORITTE	161 27035
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.3	144.4	143	100.9	408	27022 ILCORITTE	161 27035
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.7	21.8	19	114.4	408	27022 ILCORITTE	161 27035

**	From bus	**	**	To bus	**	dContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	408	27022 IICRITTE	161 27035 11MORGNF 161 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	409	27022 IICRITTE	161 27191 11CRITTE69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	100.9	409	27022 IICRITTE	161 27191 11CRITTE69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.7	409	27022 IICRITTE	161 27191 11CRITTE69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.9	409	27022 IICRITTE	161 27191 11CRITTE69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	100.9	410	27023 11DELVIN	161 27045 11WI TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		22	21.8	21.8	19	115.8	410	27023 11DELVIN	161 27045 11WI TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.6	25.7	25.7	23	111.5	410	27023 11DELVIN	161 27045 11WI TAP 161 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.4	97.3	97.3	97	100.4	411	27024 11DORCHE	161 27032 11MBODE 161 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	101	411	27024 11DORCHE	161 27032 11MBODE 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.8	411	27024 11DORCHE	161 27032 11MBODE 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.8	25.7	25.7	23	112	411	27024 11DORCHE	161 27032 11MBODE 161 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	412	27024 11DORCHE	161 27032 11MBODE 161 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	101	412	27024 11DORCHE	161 27196 11DORCHE69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.8	412	27024 11DORCHE	161 27196 11DORCHE69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.8	412	27024 11DORCHE	161 27196 11DORCHE69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	413	27024 11DORCHE	161 27196 11DORCHE69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	100.9	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.8	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.8	413	27024 11DORCHE	161 27196 11DORCHE69.0 2
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.2	414	27025 11EARL N	161 27042 11RQ TAP 161 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	101	414	27025 11EARL N	161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		22.1	21.8	21.8	19	116.2	415	27025 11EARL N	161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.8	25.7	25.7	23	112.1	415	27025 11EARL N	161 27042 11RQ TAP 161 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	100.9	416	27025 11EARL N	161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.8	416	27025 11EARL N	161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.9	416	27025 11EARL N	161 27042 11RQ TAP 161 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	417	27025 11EARL N	161 27042 11RQ TAP 161 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	100.9	417	27025 11EARL N	161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.7	417	27025 11EARL N	161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.9	417	27025 11EARL N	161 27042 11RQ TAP 161 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	418	27026 11ELIHU	161 27198 11EARL N69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	101	418	27026 11ELIHU	161 27198 11EARL N69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	115	418	27026 11ELIHU	161 27198 11EARL N69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.9	418	27026 11ELIHU	161 27198 11EARL N69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	419	27026 11ELIHU	161 27200 11ELIHU 69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	101	419	27026 11ELIHU	161 27200 11ELIHU 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	115	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.9	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
27051	11ADAMS	138 27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	420	27026 11ELIHU	161 27200 11ELIHU 69.0 2
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1		144.4	144.4	144.4	143	101	420	27026 11ELIHU	161 27200 11ELIHU 69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0 1		21.8	21.8	21.8	19	114.9	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
29411	20LILYJ69.0	29634	20WOODLN69.0 1		25.7	25.7	25.7	23	111.9	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	444	27037	11PINEVL 161 27328 11ARTM T 161 1
27235	11KU PK 69.0	27265	11PINEVI69.0	1	86.3	72.8	82	105.2	444	27037	11PINEVL 161 27328 11ARTM T 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	115	444	27037	11PINEVL 161 27328 11ARTM T 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	444	27037	11PINEVL 161 27328 11ARTM T 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	112	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	446	27038	11PINEVI 161 27265 11PINEVI69.0 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	446	27038	11PINEVI 161 27265 11PINEVI69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	446	27038	11PINEVI 161 27265 11PINEVI69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	446	27038	11PINEVI 161 27265 11PINEVI69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	447	27039	11POCKET 161 27040 11POCK N 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.2	447	27039	11POCKET 161 27040 11POCK N 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	115	447	27039	11POCKET 161 27040 11POCK N 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.2	447	27039	11POCKET 161 27040 11POCK N 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.2	448	27039	11POCKET 161 27040 11POCK N 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.2	448	27039	11POCKET 161 27040 11POCK N 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	115	448	27039	11POCKET 161 27040 11POCK N 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	112.2	448	27039	11POCKET 161 27040 11POCK N 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.2	449	27041	11RVR Q 161 27042 11RQ TAP 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	449	27041	11RVR Q 161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	449	27041	11RVR Q 161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	449	27041	11RVR Q 161 27042 11RQ TAP 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	450	27041	11RVR Q 161 27042 11RQ TAP 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	450	27041	11RVR Q 161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	450	27041	11RVR Q 161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	450	27041	11RVR Q 161 27042 11RQ TAP 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	451	27043	11S PADU 161 27270 11RVR Q69.0 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	451	27043	11S PADU 161 27270 11RVR Q69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	451	27043	11S PADU 161 27270 11RVR Q69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	451	27043	11S PADU 161 27270 11RVR Q69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	451	27043	11S PADU 161 27270 11RVR Q69.0 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	451	27043	11S PADU 161 27270 11RVR Q69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	451	27043	11S PADU 161 27270 11RVR Q69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	451	27043	11S PADU 161 27270 11RVR Q69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	452	27044	11W IRVI 161 27045 11WI TAP 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	452	27044	11W IRVI 161 27045 11WI TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	452	27044	11W IRVI 161 27045 11WI TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	452	27044	11W IRVI 161 27045 11WI TAP 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	452	27044	11W IRVI 161 27045 11WI TAP 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	453	27044	11W IRVI 161 27045 11WI TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	453	27044	11W IRVI 161 27045 11WI TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	453	27044	11W IRVI 161 27045 11WI TAP 161 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	453	27044	11W IRVI 161 27045 11WI TAP 161 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	454	27046	11WALKER 161 27293 11WALKER69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	454	27046	11WALKER 161 27293 11WALKER69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	454	27046	11WALKER 161 27293 11WALKER69.0 1
27029	11GRAHVL 161	27218	11GRAHVL69.0	1	84	37.6	72	116.6	455	27047	11WICKLI 161 27298 11WICKLI69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	455	27047	11WICKLI 161 27298 11WICKLI69.0 1
27161	IIAIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	455	27047	11WICKLI 161 27298 11WICKLI69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	455	27047	11WICKLI 161 27298 11WICKLI69.0 1

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.2	97.3	25.7	23	111.9	455	27047 11WICKLI
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97.3	97	100.2	456	27048 113832
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	144.4	143	100.8	456	27048 113832
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.7	456	27048 113832
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.2	97.3	25.7	23	111.7	456	27048 113832
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97.3	97	100.2	457	27048 113832
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	144.4	143	100.8	457	27048 113832
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	457	27048 113832
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.2	97.3	25.7	23	111.6	457	27048 113832
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97.3	97	100.3	458	27048 113832
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	144.4	143	101	458	27048 113832
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	458	27048 113832
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.9	458	27048 113832
27051	11ADAMS	138	27148 11TYRONE	138	1	97.4	97.3	97.3	97	100.4	459	27049 113842
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	147.9	144.4	144.4	144.4	143	103.4	459	27049 113842
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	459	27049 113842
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.9	459	27049 113842
27051	11ADAMS	138	27148 11TYRONE	138	1	97.4	97.3	97.3	97	100.4	460	27049 113842
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	147.3	144.4	144.4	144.4	143	103	460	27049 113842
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	460	27049 113842
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.9	460	27049 113842
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97.3	97	100.3	461	27050 113870
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	146.5	144.4	144.4	144.4	143	102.5	462	27050 113870
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.9	462	27050 113870
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.9	462	27050 113870
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97.3	97	100.3	463	27050 113870
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	145.1	144.4	144.4	144.4	143	101.5	463	27050 113870
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	463	27050 113870
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.8	463	27050 113870
27051	11ADAMS	138	27148 11TYRONE	138	1	97.2	97.3	97.3	97	105.9	464	27051 11ADAMS
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	144.4	143	101	464	27051 11ADAMS
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	464	27051 11ADAMS
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.9	464	27051 11ADAMS
27051	11ADAMS	138	27148 11TYRONE	138	1	99	97.3	97.3	97	102	465	27051 11ADAMS
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	144.4	143	100.9	465	27051 11ADAMS
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	465	27051 11ADAMS
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.9	465	27051 11ADAMS
27051	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	144.4	144.4	143	101	466	27051 11ADAMS
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	466	27051 11ADAMS
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	97.3	97.3	25.7	23	111.8	466	27051 11ADAMS
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	143.6	144.4	144.4	144.4	143	100.4	467	27051 11ADAMS
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	21.8	19	115	467	27051 11ADAMS
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	25.7	23	111.3	467	27051 11ADAMS
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	144.4	144.4	143	100.9	468	27051 11ADAMS

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	468	27051	11ADAMS 69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	468	27051	11ADAMS 69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.2	97.3	97.3	97	100.2	469	27052	11ALNGU 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	145	144.4	143	143	101.4	469	27052	11ALNGU 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	469	27052	11ALNGU 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	469	27052	11ALNGU 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.2	97.3	97.3	97	100.2	470	27052	11ALNGU 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	145	144.4	143	143	101.4	470	27052	11ALNGU 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	470	27052	11ALNGU 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	470	27052	11ALNGU 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	101	471	27053	11AEEFLI 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	471	27053	11AEEFLI 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	471	27053	11AEEFLI 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		98.7	97.3	97.3	97	101.8	472	27053	11AEEFLI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	100.9	472	27053	11AEEFLI 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	472	27053	11AEEFLI 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	472	27053	11AEEFLI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	101	473	27053	11AEEFLI 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	473	27053	11AEEFLI 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	473	27053	11AEEFLI 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.2	97.3	97.3	97	100.2	474	27054	11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	146.4	144.4	143	143	102.4	474	27054	11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	475	27054	11ASHBOT 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	475	27054	11ASHBOT 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	476	27054	11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	146.1	144.4	143	143	102.2	476	27054	11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	476	27054	11ASHBOT 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	476	27054	11ASHBOT 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.2	97.3	97.3	97	100.2	477	27055	11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.1	144.4	143	143	100.8	477	27055	11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	477	27055	11ASHBOT 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	477	27055	11ASHBOT 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.2	97.3	97.3	97	100.2	478	27055	11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	101	478	27055	11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	478	27055	11ASHBOT 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	112	478	27055	11ASHBOT 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	479	27055	11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	143	101.1	479	27055	11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	479	27055	11ASHBOT 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	479	27055	11ASHBOT 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1		97.3	97.3	97.3	97	100.3	480	27055	11ASHBOT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	143	101.1	480	27055	11ASHBOT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	480	27055	11ASHBOT 138 1
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	480	27055	11ASHBOT 138 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	481	27055 11ASHBOT	138	27318	11GRADE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	143.1	144.4	143	100.1	481	27055 11ASHBOT	138	27318	11GRADE	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	25.7	21.8	19	114.6	481	27055 11ASHBOT	138	27318	11GRADE	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	481	27055 11ASHBOT	138	27318	11GRADE	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	482	27056 11ASHBY	138	27121	11MILL C	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	482	27056 11ASHBY	138	27121	11MILL C	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	25.8	21.8	19	115.2	482	27056 11ASHBY	138	27121	11MILL C	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.1	482	27056 11ASHBY	138	27121	11MILL C	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	483	27056 11ASHBY	138	27121	11MILL C	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	483	27056 11ASHBY	138	27134	11PLSRDG	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	25.7	21.8	19	115	483	27056 11ASHBY	138	27134	11PLSRDG	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112	483	27056 11ASHBY	138	27134	11PLSRDG	138	1
27051	11ADAMS	138	27148	11TYRONE	138	103.9	97.3	97	107.1	484	27057 11BKR LN	138	27064	11BRWN N	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	484	27057 11BKR LN	138	27064	11BRWN N	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	25.8	25.8	19	114.7	484	27057 11BKR LN	138	27064	11BRWN N	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.4	484	27057 11BKR LN	138	27064	11BRWN N	138	1
27051	11ADAMS	138	27148	11TYRONE	138	102	97.3	97	105.2	485	27057 11BKR LN	138	27101	11HIGBY	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	485	27057 11BKR LN	138	27101	11HIGBY	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	25.8	25.8	19	114.7	485	27057 11BKR LN	138	27101	11HIGBY	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.1	485	27057 11BKR LN	138	27101	11HIGBY	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.1	97.3	97	100.1	486	27058 11BARDST	138	27063	11BRWNCT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.8	144.4	143	101.3	487	27058 11BARDST	138	27124	11NELSON	138	1
27229	11HODGEN69.0	29359	20HODGEN69.0	1	40.4	36.5	36.5	40	100.9	487	27058 11BARDST	138	27124	11NELSON	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	21.8	19	113.9	487	27058 11BARDST	138	27124	11NELSON	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	23	25.7	25.7	23	100.1	487	27058 11BARDST	138	27124	11NELSON	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.6	144.4	143	101.8	488	27058 11BARDST	138	27169	11BARDST69.0	1	
27229	11HODGEN69.0	29359	20HODGEN69.0	1	46	36.5	36.5	40	115.1	488	27058 11BARDST	138	27169	11BARDST69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	20.3	21.8	21.8	19	106.9	488	27058 11BARDST	138	27169	11BARDST69.0	1	
29462	20NELSON69.0	29610	20WEARDJ69.0	1	87.3	49.6	49.6	72	121.2	488	27058 11BARDST	138	27169	11BARDST69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	489	27059 11BEARGR	138	27104	11JEFFJC	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145	144.4	143	101.4	489	27059 11BEARGR	138	27104	11JEFFJC	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	489	27059 11BEARGR	138	27104	11JEFFJC	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.6	489	27059 11BEARGR	138	27104	11JEFFJC	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.3	490	27059 11BEARGR	138	27104	11JEFFJC	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	490	27059 11BEARGR	138	27114	11LYNDON	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.8	490	27059 11BEARGR	138	27114	11LYNDON	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	490	27059 11BEARGR	138	27114	11LYNDON	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	491	27059 11BEARGR	138	27125	11NORTHS	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145	144.4	143	101.4	491	27059 11BEARGR	138	27125	11NORTHS	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	491	27059 11BEARGR	138	27125	11NORTHS	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	491	27059 11BEARGR	138	27125	11NORTHS	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	492	27059 11BEARGR	138	27154	11WATRSD	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	492	27059 11BEARGR	138	27154	11WATRSD	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	492	27059 11BEARGR	138	27154	11WATRSD	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	492	27059 11BEARGR	138	27154	11WATRSD	138	1

**	From bus	**	**	To bus	**	ContMVA	Baseflow	Rating	Loading%	Ncon	Contingency							
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	493	27059	11BEARGR	138	27154	11WATRS	138	2	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	143	101	493	27059	11BEARGR	138	27154	11WATRS	138	2	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	19	114.8	493	27059	11BEARGR	138	27154	11WATRS	138	2	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	25.7	23	111.9	493	27059	11BEARGR	138	27154	11WATRS	138	2	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.1	97	100.1	494	27059	11BEARGR	138	27170	11BEARGR	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	151.7	143	106.1	494	27059	11BEARGR	138	27170	11BEARGR	69.0	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.6	494	27059	11BEARGR	138	27170	11BEARGR	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.6	23	111.5	494	27059	11BEARGR	138	27170	11BEARGR	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.1	97	100.1	495	27060	11BLUELI	138	27122	11MUD	LA	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.7	143	101.2	495	27060	11BLUELI	138	27122	11MUD	LA	138	1
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.9	19	115.2	495	27060	11BLUELI	138	27122	11MUD	LA	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	25.8	23	112.2	495	27060	11BLUELI	138	27122	11MUD	LA	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.2	97	100.3	496	27060	11BLUELI	138	27322	11BLUELI	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.5	143	100.3	496	27060	11BLUELI	138	27322	11BLUELI	69.0	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.9	496	27060	11BLUELI	138	27322	11BLUELI	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	23	111.9	496	27060	11BLUELI	138	27322	11BLUELI	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.3	97	100.3	497	27061	11BONNIE	138	27173	11BONNI	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.4	143	101	497	27061	11BONNIE	138	27173	11BONNI	69.0	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	22	19	115.8	497	27061	11BONNIE	138	27173	11BONNI	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.9	23	112.8	497	27061	11BONNIE	138	27173	11BONNI	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.2	97	100.2	498	27061	11BONNIE	138	27335	11LEBNW	138	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.5	143	101	498	27061	11BONNIE	138	27335	11LEBNW	138	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	23.5	19	123.8	498	27061	11BONNIE	138	27335	11LEBNW	138	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	27.8	23	120.8	498	27061	11BONNIE	138	27335	11LEBNW	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.3	97	100.3	498	27061	11BONNIE	138	27335	11LEBNW	138	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.5	143	101.1	499	27061	11BONNIE	138	27337	11MERIDT	138	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	22.9	19	120.7	499	27061	11BONNIE	138	27337	11MERIDT	138	1	
29571	20STEPHN	69.0	29606	20UPTON	69.0	1	27.3	23	118.5	499	27061	11BONNIE	138	27337	11MERIDT	138	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	26.3	19	138.6	499	27061	11BONNIE	138	27337	11MERIDT	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.3	97	100.3	500	27062	11BRCKNG	138	27084	11ETHEL	138	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	143.8	143	100.6	500	27062	11BRCKNG	138	27084	11ETHEL	138	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.8	500	27062	11BRCKNG	138	27084	11ETHEL	138	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	23	111.9	500	27062	11BRCKNG	138	27084	11ETHEL	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.3	97	100.3	501	27062	11BRCKNG	138	27084	11ETHEL	138	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	151.2	143	105.7	501	27062	11BRCKNG	138	27102	11HRSTBR	138	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.8	501	27062	11BRCKNG	138	27102	11HRSTBR	138	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	23	111.8	501	27062	11BRCKNG	138	27102	11HRSTBR	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.1	97	100.1	502	27062	11BRCKNG	138	27177	11BRCKNG	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	161.9	143	113.2	502	27062	11BRCKNG	138	27177	11BRCKNG	69.0	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.7	502	27062	11BRCKNG	138	27177	11BRCKNG	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	23	111.6	502	27062	11BRCKNG	138	27177	11BRCKNG	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.3	97	100.3	503	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.4	143	100.9	503	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.8	503	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	23	111.9	503	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	97.3	97	100.3	504	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	144.4	143	100.9	504	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	
29411	20LILY	69.0	29634	20WOODLN	69.0	1	21.8	19	114.8	504	27063	11BRWNCT	138	27177	11BRCKNG	69.0	1	

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	504	27063	11BRWNCT	138	27066	11BRWNT1	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	505	27063	11BRWNCT	138	27067	11BRWNT2	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	505	27063	11BRWNCT	138	27067	11BRWNT2	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	505	27063	11BRWNCT	138	27067	11BRWNT2	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	505	27063	11BRWNCT	138	27067	11BRWNT2	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	506	27064	11BRWN	138	27066	11BRWNT1	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	506	27064	11BRWN	138	27066	11BRWNT1	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	506	27064	11BRWN	138	27066	11BRWNT1	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	506	27064	11BRWN	138	27066	11BRWNT1	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	101.7	97.3	97	104.9	508	27064	11BRWN	138	27078	11CLAYS	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	508	27064	11BRWN	138	27078	11CLAYS	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.7	508	27064	11BRWN	138	27078	11CLAYS	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.8	25.8	25.8	23	112.2	508	27064	11BRWN	138	27078	11CLAYS	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	103.5	97.3	97	106.7	509	27064	11BRWN	138	27101	11HIGBY	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	509	27064	11BRWN	138	27101	11HIGBY	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.7	509	27064	11BRWN	138	27101	11HIGBY	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.8	25.8	25.8	23	112.3	509	27064	11BRWN	138	27101	11HIGBY	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	100	97.3	97	103.1	510	27064	11BRWN	138	27132	11PISSGAH	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	510	27064	11BRWN	138	27132	11PISSGAH	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	510	27064	11BRWN	138	27132	11PISSGAH	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.8	25.8	25.8	23	112	510	27064	11BRWN	138	27132	11PISSGAH	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.1	97.3	97	100.1	511	27064	11BRWN	138	27148	11TYRONE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	511	27064	11BRWN	138	27148	11TYRONE	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.9	511	27064	11BRWN	138	27148	11TYRONE	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.7	511	27064	11BRWN	138	27148	11TYRONE	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	512	27065	11BRWN	138	27066	11BRWNT1	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	512	27065	11BRWN	138	27066	11BRWNT1	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.9	512	27065	11BRWN	138	27066	11BRWNT1	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.8	25.8	25.8	23	112.1	512	27065	11BRWN	138	27066	11BRWNT1	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	513	27065	11BRWN	138	27067	11BRWNT2	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	513	27065	11BRWN	138	27067	11BRWNT2	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.9	513	27065	11BRWN	138	27067	11BRWNT2	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.8	25.8	25.8	23	112.1	513	27065	11BRWN	138	27067	11BRWNT2	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	98.8	97.3	97	101.8	514	27065	11BRWN	138	27088	11FAWKES	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.2	144.4	144.4	143	100.9	514	27065	11BRWN	138	27088	11FAWKES	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.9	21.9	21.9	19	115.3	514	27065	11BRWN	138	27088	11FAWKES	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	26.2	26.2	26.2	26.2	23	113.8	514	27065	11BRWN	138	27088	11FAWKES	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	515	27065	11BRWN	138	27088	11FAWKES	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	515	27065	11BRWN	138	27088	11FAWKES	138	1
27285	11SPRINGF69.0	29459	20N SPR	69.0	1	27.5	144.4	144.4	143	100.9	515	27065	11BRWN	138	27118	11MERC	138	1
29326	20FRCKBJ69.0	29634	20WOODLN69.0	1	27	27	19.7	19.7	19	144.7	515	27065	11BRWN	138	27118	11MERC	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	24.4	24.4	21.8	21.8	23	117.3	515	27065	11BRWN	138	27118	11MERC	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	30.5	30.5	25.7	25.7	19	128.4	515	27065	11BRWN	138	27118	11MERC	138	1
27080	11DANVIL	138	27193	11DANVIL69.0	1	130.5	103.3	103.3	129	132.6	515	27065	11BRWN	138	27118	11MERC	138	1
										101.2	516	27065	11BRWN	138	27150	11W CLIF	138	1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency								
27156	11WC-DD	138	27295	11WC-DD	69.0	194.9	97.5	143	136.3	516	27065	11BRWN	P	138	27150	11W	CLIF	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	516	27065	11BRWN	P	138	27150	11W	CLIF	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.1	516	27065	11BRWN	P	138	27150	11W	CLIF	138	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	26.5	25.7	25.7	23	115.2	516	27065	11BRWN	P	138	27150	11W	CLIF	138	1
27051	11ADAMS	138	27148	11TYRONE	138	97.1	97.3	97	100.1	517	27065	11BRWN	P	138	27156	11WC-DD	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	517	27065	11BRWN	P	138	27156	11WC-DD	138	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	517	27065	11BRWN	P	138	27156	11WC-DD	138	1	
27051	11ADAMS	138	27148	11TYRONE	138	97.5	97.3	97	100.5	517	27065	11BRWN	P	138	27156	11WC-DD	138	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	518	27068	11BUTLER	138	27073	11CARN T	138	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	518	27068	11BUTLER	138	27073	11CARN T	138	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.1	518	27068	11BUTLER	138	27073	11CARN T	138	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.6	519	27068	11BUTLER	138	27092	11GHENT	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	520	27069	11CAMPGR	138	27071	11CNE RN	138	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	520	27069	11CAMPGR	138	27071	11CNE RN	138	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	520	27069	11CAMPGR	138	27071	11CNE RN	138	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	521	27069	11CAMPGR	138	27130	11PADDYR	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	521	27069	11CAMPGR	138	27130	11PADDYR	138	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	521	27069	11CAMPGR	138	27130	11PADDYR	138	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	521	27069	11CAMPGR	138	27130	11PADDYR	138	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	522	27070	11CANAL	138	27130	11PADDYR	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.1	144.4	143	101.5	522	27070	11CANAL	138	27131	11P WEST	138	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	522	27070	11CANAL	138	27131	11P WEST	138	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	522	27070	11CANAL	138	27131	11P WEST	138	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	523	27070	11CANAL	138	27131	11P WEST	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	523	27070	11CANAL	138	27154	11WATRS	138	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	523	27070	11CANAL	138	27154	11WATRS	138	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	523	27070	11CANAL	138	27154	11WATRS	138	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	523	27070	11CANAL	138	27154	11WATRS	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	524	27070	11CANAL	138	27180	11CANAL	69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	524	27070	11CANAL	138	27180	11CANAL	69.0	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	524	27070	11CANAL	138	27180	11CANAL	69.0	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	525	27070	11CANAL	138	27180	11CANAL	69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101.1	525	27070	11CANAL	138	27180	11CANAL	69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	525	27070	11CANAL	138	27180	11CANAL	69.0	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	525	27070	11CANAL	138	27180	11CANAL	69.0	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.2	97.3	97	100.2	526	27071	11CNE RN	138	27180	11CANAL	69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.1	144.4	143	101.5	526	27071	11CNE RN	138	27180	11CANAL	69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115.8	526	27071	11CNE RN	138	27180	11CANAL	69.0	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.9	25.7	25.7	23	112.4	526	27071	11CNE RN	138	27180	11CANAL	69.0	1		
27051	11ADAMS	138	27148	11TYRONE	138	97.3	97.3	97	100.3	527	27071	11CNE RN	138	27130	11PADDYR	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	527	27071	11CNE RN	138	27130	11PADDYR	138	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	527	27071	11CNE RN	138	27130	11PADDYR	138	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	527	27071	11CNE RN	138	27130	11PADDYR	138	1		

**	From bus	**	**	To bus	**	d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	528	27071 11CNE RN 138 27181 11CANERN69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.6	144.4	143	101.1	528	27071 11CNE RN 138 27181 11CANERN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	528	27071 11CNE RN 138 27181 11CANERN69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.9	528	27071 11CNE RN 138 27181 11CANERN69.0 1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	529	27071 11CNE RN 138 27181 11CANERN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			144.6	144.4	143	101.1	529	27071 11CNE RN 138 27181 11CANERN69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0	1			21.8	21.8	19	114.8	529	27071 11CNE RN 138 27181 11CANERN69.0 2
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	529	27071 11CNE RN 138 27181 11CANERN69.0 2
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		21.8	21.8	19	114.8	529	27071 11CNE RN 138 27181 11CANERN69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			25.7	25.7	23	111.9	529	27071 11CNE RN 138 27181 11CANERN69.0 2
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	530	27071 11CNE RN 138 27181 11CANERN69.0 3
29411	20LILYJ69.0	29634	20WOODLN69.0	1			144.6	144.4	143	101.1	530	27071 11CNE RN 138 27181 11CANERN69.0 3
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	530	27071 11CNE RN 138 27181 11CANERN69.0 3
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	101.1	531	27072 11CN RN6 138 27321 11BRIDG 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	531	27072 11CN RN6 138 27321 11BRIDG 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.9	531	27072 11CN RN6 138 27321 11BRIDG 138 1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	531	27072 11CN RN6 138 27321 11BRIDG 138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		98.1	97.3	97	101.1	532	27073 11CARN T 138 27074 11CARTW 138 1
27233	11KENTON69.0	27280	11SHARON69.0	1			144.4	144.4	143	100.9	532	27073 11CARN T 138 27074 11CARTW 138 1
27280	11SHARON69.0	29243	20BRACKN69.0	1			49.7	30.7	45	110.4	532	27073 11CARN T 138 27074 11CARTW 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			33.5	16.5	28	119.6	532	27073 11CARN T 138 27074 11CARTW 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			21.8	21.8	19	114.8	532	27073 11CARN T 138 27074 11CARTW 138 1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	532	27073 11CARN T 138 27074 11CARTW 138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		25.8	25.7	23	112	532	27073 11CARN T 138 27074 11CARTW 138 1
27233	11KENTON69.0	27280	11SHARON69.0	1			97.2	97.3	97	100.2	532	27073 11CARN T 138 27074 11CARTW 138 1
27280	11SHARON69.0	29243	20BRACKN69.0	1			144.4	144.4	143	101.1	533	27073 11CARN T 138 27105 11KENTON 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	533	27073 11CARN T 138 27105 11KENTON 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.8	533	27073 11CARN T 138 27105 11KENTON 138 1
27051	11ADAMS	138	27148	11TYRONE	138	1	98.1	97.3	97	101.1	533	27073 11CARN T 138 27105 11KENTON 138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	100.9	534	27074 11CARN T 138 27182 11CARTN69.0 1
27233	11KENTON69.0	27280	11SHARON69.0	1			49.7	30.7	45	100.4	534	27074 11CARN T 138 27182 11CARTN69.0 1
27280	11SHARON69.0	29243	20BRACKN69.0	1			33.5	16.5	28	119.6	534	27074 11CARN T 138 27182 11CARTN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	534	27074 11CARN T 138 27182 11CARTN69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	114.8	534	27074 11CARN T 138 27182 11CARTN69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		146	144.4	143	102.1	534	27074 11CARN T 138 27182 11CARTN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.6	535	27075 11CARROL 138 27083 11DW CRN 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.6	535	27075 11CARROL 138 27083 11DW CRN 138 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.6	144.4	143	101.1	536	27075 11CARROL 138 27112 11LOCKPO 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.7	536	27075 11CARROL 138 27112 11LOCKPO 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			26	25.7	23	113.1	536	27075 11CARROL 138 27112 11LOCKPO 138 1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.5	97.3	97	100.5	537	27075 11CARROL 138 27183 11CARROL69.0 1
27075	11CARROL	138	27183	11CARROL69.0	2		91	54.6	72	126.3	537	27075 11CARROL 138 27183 11CARROL69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		145.1	144.4	143	101.5	537	27075 11CARROL 138 27183 11CARROL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.7	537	27075 11CARROL 138 27183 11CARROL69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.7	537	27075 11CARROL 138 27183 11CARROL69.0 1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.6	97.3	97	100.6	538	27075 11CARROL 138 27183 11CARROL69.0 2
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		145.5	144.4	143	101.7	538	27075 11CARROL 138 27183 11CARROL69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.7	538	27075 11CARROL 138 27183 11CARROL69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.6	538	27075 11CARROL 138 27183 11CARROL69.0 2
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	539	27076 11CENTRF 138 27119 11MIDDLT 138 1

**	From bus	**	**	To bus	**	dContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	539	27076	11CENTRF 138 27119 11MIDDLT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	539	27076	11CENTRF 138 27119 11MIDDLT 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	539	27076	11CENTRF 138 27119 11MIDDLT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	153.2	144.4	143	107.1	540	27076	11CENTRF 138 27147 11TRIMBL 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114	540	27076	11CENTRF 138 27147 11TRIMBL 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.4	25.7	23	110.6	540	27076	11CENTRF 138 27147 11TRIMBL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	178.3	144.4	143	124.7	541	27076	11CENTRF 138 27184 11CENTR 69.0 1
27319	11COLLN69.0	27320	11COLLN 138 1	1	136.9	111.7	129	106.2	541	27076	11CENTRF 138 27184 11CENTR 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.3	541	27076	11CENTRF 138 27184 11CENTR 69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.5	25.7	23	110.8	541	27076	11CENTRF 138 27184 11CENTR 69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.4	97.3	97	100.4	542	27077	11CLARK 138 27088 11FAWKES 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	542	27077	11CLARK 138 27088 11FAWKES 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	542	27077	11CLARK 138 27088 11FAWKES 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.4	97.3	97	100.4	542	27077	11CLARK 138 27088 11FAWKES 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.4	542	27077	11CLARK 138 27088 11FAWKES 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	543	27077	11CLARK 138 27143 11SPENC 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	543	27077	11CLARK 138 27143 11SPENC 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	98.2	97.3	97	101.3	544	27077	11CLARK 138 27143 11SPENC 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101.3	544	27077	11CLARK 138 27186 11CLARK 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	544	27077	11CLARK 138 27186 11CLARK 69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.7	544	27077	11CLARK 138 27186 11CLARK 69.0 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	99.7	97.3	97	102.7	545	27078	11CLAYS 138 27101 11HIGBY 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	545	27078	11CLAYS 138 27101 11HIGBY 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	545	27078	11CLAYS 138 27101 11HIGBY 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.1	545	27078	11CLAYS 138 27101 11HIGBY 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.2	97.3	97	100.3	546	27079	11CLVRPR 138 27094 11GR STL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	546	27079	11CLVRPR 138 27094 11GR STL 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22	21.8	19	115.8	546	27079	11CLVRPR 138 27094 11GR STL 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.2	546	27079	11CLVRPR 138 27094 11GR STL 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.3	97.3	97	100.3	547	27079	11CLVRPR 138 27099 11HARDBG 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	547	27079	11CLVRPR 138 27099 11HARDBG 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	547	27079	11CLVRPR 138 27099 11HARDBG 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	547	27079	11CLVRPR 138 27099 11HARDBG 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.2	97.3	97	100.2	548	27079	11CLVRPR 138 27144 11TIPTOP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	548	27079	11CLVRPR 138 27144 11TIPTOP 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	548	27079	11CLVRPR 138 27144 11TIPTOP 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	548	27079	11CLVRPR 138 27144 11TIPTOP 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.5	97.3	97	100.5	549	27080	11DANVIL 138 27118 11MERC 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.7	144.4	143	101.2	549	27080	11DANVIL 138 27118 11MERC 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.4	21.8	19	112.5	549	27080	11DANVIL 138 27118 11MERC 138 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.3	25.7	23	109.8	549	27080	11DANVIL 138 27118 11MERC 138 1
27051	11ADAMS 138	27148	11TYRONE 138 1	1	97.5	97.3	97	100.5	550	27080	11DANVIL 138 27193 11DANVIL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.7	144.4	143	101.2	550	27080	11DANVIL 138 27193 11DANVIL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.4	21.8	19	112.5	550	27080	11DANVIL 138 27193 11DANVIL69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.3	25.7	23	109.8	550	27080	11DANVIL 138 27193 11DANVIL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	146.5	144.4	143	102.5	551	27081	11DAY-WA 138 27083 11DW CRN 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.6	551	27081	11DAY-WA 138 27083 11DW CRN 138 1

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.6	25.7	25.7	23	111.5	551	27081	11DAY-WA	138	27083	11DW CRN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	146.8	144.4	143	143	102.6	552	27081	11DAY-WA	138	27123	11NAS	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	19	114.5	552	27081	11DAY-WA	138	27123	11NAS	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.6	25.7	23	23	111.4	552	27081	11DAY-WA	138	27123	11NAS	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	553	27082	11DIXIE	138	27130	11PADDYR	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.2	144.4	143	143	101.5	553	27082	11DIXIE	138	27130	11PADDYR	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	19	114.6	553	27082	11DIXIE	138	27130	11PADDYR	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	23	111.7	553	27082	11DIXIE	138	27130	11PADDYR	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	554	27084	11ETHEL	138	27202	11ETHEL	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	101	554	27084	11ETHEL	138	27202	11ETHEL	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	19	114.8	554	27084	11ETHEL	138	27202	11ETHEL	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	23	111.9	554	27084	11ETHEL	138	27202	11ETHEL	69.0	1
27100	11HARDN	138	27222	11HARDN	69.0	1	181.6	111	172	105.6	555	27085	11ETOWN	138	27100	11HARDN	138	1
27138	11ROGERS	138	27274	11ROGERS69.0	1	105	79	102	102	103	555	27085	11ETOWN	138	27100	11HARDN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.2	144.4	143	143	101.6	555	27085	11ETOWN	138	27100	11HARDN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.4	144.4	143	143	101.7	556	27085	11ETOWN	138	27124	11NELSON	138	1
27229	11HODGEN69.0	29359	20HODGEN69.0	1	1	45.6	36.5	40	40	114.1	556	27085	11ETOWN	138	27124	11NELSON	138	1
29310	20ETOWN	69.0	29599	20TUNHLLJ69.0	1	41	19.3	37	37	110.8	556	27085	11ETOWN	138	27124	11NELSON	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.4	21.8	19	19	112.5	556	27085	11ETOWN	138	27124	11NELSON	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	557	27085	11ETOWN	138	27203	11ETOWN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	101	557	27085	11ETOWN	138	27203	11ETOWN	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	20	21.8	19	19	105.5	557	27085	11ETOWN	138	27203	11ETOWN	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	26.2	25.7	23	23	114.1	557	27085	11ETOWN	138	27203	11ETOWN	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	558	27086	11FARM T	138	27087	11FARMER	138	1
27137	11RODBRN	138	27273	11RODBRN69.0	1	51.4	35	40	40	128.4	558	27086	11FARM T	138	27087	11FARMER	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	100.9	558	27086	11FARM T	138	27087	11FARMER	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	19	114.8	558	27086	11FARM T	138	27087	11FARMER	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	23	111.8	558	27086	11FARM T	138	27087	11FARMER	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.1	97.3	97	97	100.1	559	27086	11FARM T	138	27143	11SPENC	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.3	144.4	143	143	100.9	559	27086	11FARM T	138	27143	11SPENC	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	19	114.8	559	27086	11FARM T	138	27143	11SPENC	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	25.8	25.7	23	112	559	27086	11FARM T	138	27143	11SPENC	138	1
27137	11RODBRN	138	27273	11RODBRN69.0	1	97.4	97.3	97	97	100.4	560	27086	11FARM T	138	27143	11SPENC	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	42.4	35	40	40	106	560	27086	11FARM T	138	27336	11SHARKE	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.4	144.4	143	143	101	560	27086	11FARM T	138	27336	11SHARKE	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	19	114.9	560	27086	11FARM T	138	27336	11SHARKE	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	25.9	25.7	23	112.4	560	27086	11FARM T	138	27336	11SHARKE	138	1
27137	11RODBRN	138	27273	11RODBRN69.0	1	97.3	97.3	97	97	100.3	561	27087	11FARMER	138	27207	11FARMER69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	51.3	35	40	40	128.3	561	27087	11FARMER	138	27207	11FARMER69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.4	144.4	143	143	100.9	561	27087	11FARMER	138	27207	11FARMER69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	19	114.8	561	27087	11FARMER	138	27207	11FARMER69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	25.7	23	111.8	561	27087	11FARMER	138	27207	11FARMER69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.4	97.3	97	97	100.4	562	27088	11FAWKES	138	27209	11FAWKES69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.4	144.4	143	143	101	562	27088	11FAWKES	138	27209	11FAWKES69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	21.8	21.8	19	19	114.9	562	27088	11FAWKES	138	27209	11FAWKES69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	25.7	25.7	23	111.7	562	27088	11FAWKES	138	27209	11FAWKES69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.5	97.3	97	97	100.5	563	27088	11FAWKES	138	27209	11FAWKES69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	143	101	563	27088	11FAWKES	138	27209	11FAWKES69.0	2	2

**	From bus	**	**	To bus	**	c	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	563	27088 11FAWKES 138 27209 11FAWKES69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	563	27088 11FAWKES 138 27209 11FAWKES69.0 2
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.3	97.3	97.3	97	100.3	564	27088 11FAWKES 138 27334 11FAWK T 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	564	27088 11FAWKES 138 27334 11FAWK T 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	564	27088 11FAWKES 138 27334 11FAWK T 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	564	27088 11FAWKES 138 27334 11FAWK T 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.2	97.2	97.2	97	100.2	565	27089 11FERNVL 138 27127 11OKOLON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	565	27089 11FERNVL 138 27127 11OKOLON 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	565	27089 11FERNVL 138 27127 11OKOLON 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	565	27089 11FERNVL 138 27127 11OKOLON 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.2	97.2	97.2	97	100.2	566	27089 11FERNVL 138 27155 11WATTRS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	566	27089 11FERNVL 138 27155 11WATTRS 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	566	27089 11FERNVL 138 27155 11WATTRS 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	566	27089 11FERNVL 138 27155 11WATTRS 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.2	97.2	97.2	97	100.3	567	27089 11FERNVL 138 27211 11FERNVL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.5	144.4	144.4	143	101	567	27089 11FERNVL 138 27211 11FERNVL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	567	27089 11FERNVL 138 27211 11FERNVL69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	567	27089 11FERNVL 138 27211 11FERNVL69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.2	97.2	97.2	97	100.3	568	27089 11FERNVL 138 27211 11FERNVL69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.5	144.4	144.4	143	101	568	27089 11FERNVL 138 27211 11FERNVL69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	568	27089 11FERNVL 138 27211 11FERNVL69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	568	27089 11FERNVL 138 27211 11FERNVL69.0 2
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.2	97.2	97.2	97	100.7	569	27089 11FERNVL 138 27318 11GRADE 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	143.4	144.4	144.4	143	100.3	569	27089 11FERNVL 138 27318 11GRADE 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.7	569	27089 11FERNVL 138 27318 11GRADE 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	569	27089 11FERNVL 138 27318 11GRADE 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.7	97.3	97.3	97	100.7	570	27090 11FLEMIN 138 27093 11GODDRD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	570	27090 11FLEMIN 138 27093 11GODDRD 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.9	21.8	21.8	19	115	570	27090 11FLEMIN 138 27093 11GODDRD 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	26	25.7	25.7	23	113.2	570	27090 11FLEMIN 138 27093 11GODDRD 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.7	97.3	97.3	97	100.7	571	27090 11FLEMIN 138 27157 11WEDONI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	571	27090 11FLEMIN 138 27157 11WEDONI 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.9	21.8	21.8	19	115	571	27090 11FLEMIN 138 27157 11WEDONI 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	26	25.7	25.7	23	113.2	571	27090 11FLEMIN 138 27157 11WEDONI 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.7	97.3	97.3	97	101.1	572	27091 11FERT E 138 27140 11SHADRA 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.6	144.4	144.4	143	101.1	572	27091 11FERT E 138 27140 11SHADRA 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.7	572	27091 11FERT E 138 27140 11SHADRA 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	26	25.7	25.7	23	113	572	27091 11FERT E 138 27140 11SHADRA 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.5	97.3	97.3	97	100.8	573	27091 11FERT E 138 27148 11TYRONE 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.1	144.4	144.4	143	100.8	573	27091 11FERT E 138 27148 11TYRONE 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	573	27091 11FERT E 138 27148 11TYRONE 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	25.7	23	112.1	573	27091 11FERT E 138 27148 11TYRONE 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.5	97.3	97.3	97	101.2	574	27091 11FERT E 138 27151 11W FRNK 138 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.7	144.4	144.4	143	101.2	574	27091 11FERT E 138 27151 11W FRNK 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.7	574	27091 11FERT E 138 27151 11W FRNK 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.9	25.7	25.7	23	112.5	574	27091 11FERT E 138 27151 11W FRNK 138 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.5	97.3	97.3	97	100.5	575	27091 11FERT E 138 27214 11FERT E69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	1	144.6	144.4	144.4	143	101.1	575	27091 11FERT E 138 27214 11FERT E69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	575	27091 11FERT E 138 27214 11FERT E69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	25.7	23	112	575	27091 11FERT E 138 27214 11FERT E69.0 1
27051	11ADAMS 138	27148	11TYRONE 138	1	1	97.5	97.3	97.3	97	100.5	576	27091 11FERT E 138 27214 11FERT E69.0 2

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	576	27091 11FFRT E
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	576	27091 11FFRT E
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	23	112	576	27091 11FFRT E
27051	11ADAMS	138	27148	11TYRONE 138	1	97.5	97.3	97	100.5	577	27091 11FFRT E
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	577	27091 11FFRT E
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	577	27091 11FFRT E
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	23	112	577	27091 11FFRT E
27051	11ADAMS	138	27148	11TYRONE 138	1	102	97.3	97	105.2	578	27091 11FFRT E
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	578	27092 11GHENT
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	578	27092 11GHENT
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.9	25.7	23	23	112.6	578	27092 11GHENT
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	147.7	144.4	143	103.3	579	27092 11GHENT
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.4	579	27092 11GHENT
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	23	23	111.3	579	27092 11GHENT
27051	11ADAMS	138	27148	11TYRONE 138	1	141.4	97.3	97	145.8	580	27092 11GHENT
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	72.7	54.6	72	101	580	27092 11GHENT
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	147.2	144.4	143	102.9	580	27092 11GHENT
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.7	21.8	19	19	114.4	580	27092 11GHENT
27051	11ADAMS	138	27148	11TYRONE 138	1	25.9	25.7	23	112.8	580	27092 11GHENT
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.5	97.3	97	100.5	581	27093 11GODDRD
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	144.4	144.4	143	101	581	27093 11GODDRD
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.8	21.8	19	19	114.9	581	27093 11GODDRD
27051	11ADAMS	138	27148	11TYRONE 138	1	25.8	25.7	23	112.4	581	27093 11GODDRD
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.2	97.3	97	100.2	582	27094 11GR STL
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	144.3	144.4	143	100.9	582	27094 11GR STL
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.7	21.8	19	19	114.1	582	27094 11GR STL
27051	11ADAMS	138	27148	11TYRONE 138	1	25.5	25.7	23	111	582	27094 11GR STL
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.3	97.3	97	100.3	583	27094 11GR STL
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	144.4	144.4	143	101	583	27094 11GR STL
29411	20LILYJ69.0	29634	20WOODLN69.0	1	22	21.8	19	19	115.9	583	27094 11GR STL
27051	11ADAMS	138	27148	11TYRONE 138	1	25.9	25.7	23	112.8	583	27094 11GR STL
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.3	97.3	97	100.3	583	27094 11GR STL
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	144.4	144.4	143	100.3	584	27094 11GR STL
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.8	21.8	19	19	114.8	584	27094 11GR STL
27051	11ADAMS	138	27148	11TYRONE 138	1	25.7	25.7	23	111.9	584	27094 11GR STL
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.3	97.3	97	100.3	585	27095 11GR RVR
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	144.4	144.4	143	101	585	27095 11GR RVR
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.7	21.8	19	19	114.1	585	27095 11GR RVR
27051	11ADAMS	138	27148	11TYRONE 138	1	25.9	25.7	23	112.7	585	27095 11GR RVR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	97.3	97.3	97	100.3	586	27095 11GR RVR
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	159	93.4	158	100.6	586	27095 11GR RVR
29411	20LILYJ69.0	29634	20WOODLN69.0	1	144.4	144.4	143	143	101	586	27095 11GR RVR
27051	11ADAMS	138	27148	11TYRONE 138	1	21.7	21.8	19	114.1	586	27095 11GR RVR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	21.7	21.8	19	112.7	585	27095 11GR RVR
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	25.9	25.7	23	112.7	585	27095 11GR RVR
29411	20LILYJ69.0	29634	20WOODLN69.0	1	144.4	144.4	143	143	100.3	586	27095 11GR RVR
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	586	27095 11GR RVR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	21.7	21.8	19	114.1	586	27095 11GR RVR
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	25.9	25.7	23	112.6	586	27095 11GR RVR
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97	100.3	587	27095 11GR RVR	
27051	11ADAMS	138	27148	11TYRONE 138	1	144.4	144.4	143	100.9	587	27095 11GR RVR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	21.8	21.8	19	114.9	587	27095 11GR RVR
29359	20HODGEN	69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	111.9	587	27095 11GR RVR
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	23	111.9	587	27095 11GR RVR

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	588	27095 11GR RVR	138	27216	11GR RVR	69.0	2
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	588	27095 11GR RVR	138	27216	11GR RVR	69.0	2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	588	27095 11GR RVR	138	27216	11GR RVR	69.0	2
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	588	27095 11GR RVR	138	27216	11GR RVR	69.0	2
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	100.9	589	27097 11HAEFLI	138	27103	11BM N	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	589	27097 11HAEFLI	138	27103	11BM N	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	589	27097 11HAEFLI	138	27103	11BM N	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	103.5	97.3	97	106.7	590	27097 11HAEFLI	138	27149	11VILEY	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.5	144.4	143	101	590	27097 11HAEFLI	138	27149	11VILEY	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	590	27097 11HAEFLI	138	27149	11VILEY	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	25.7	23	112.2	590	27097 11HAEFLI	138	27149	11VILEY	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	144.5	97.3	97	107.9	591	27097 11HAEFLI	138	27149	11VILEY	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.5	144.4	143	101	591	27097 11HAEFLI	138	27153	11W LEKN	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.9	591	27097 11HAEFLI	138	27153	11W LEKN	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	25.7	23	112.3	591	27097 11HAEFLI	138	27153	11W LEKN	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.1	97.3	97	100.1	592	27097 11HAEFLI	138	27153	11W LEKN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	592	27097 11HAEFLI	138	27220	11HAEFLN69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	592	27097 11HAEFLI	138	27220	11HAEFLN69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	25.7	23	112.1	592	27097 11HAEFLI	138	27220	11HAEFLN69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	593	27098 11HANCOC	138	27220	11HAEFLN69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	145.3	144.4	143	101.6	593	27098 11HANCOC	138	27220	11HAEFLN69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	593	27098 11HANCOC	138	27220	11HAEFLN69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.8	593	27098 11HANCOC	138	27220	11HAEFLN69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	594	27098 11HANCOC	138	27221	11HANCOC69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	145.2	144.4	143	101.5	594	27098 11HANCOC	138	27221	11HANCOC69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	594	27098 11HANCOC	138	27221	11HANCOC69.0	1	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.8	594	27098 11HANCOC	138	27221	11HANCOC69.0	1	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	595	27099 11HARDN	138	27100	11HARDN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	595	27099 11HARDN	138	27100	11HARDN	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21	21.8	21.8	19	110.6	595	27099 11HARDN	138	27100	11HARDN	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25	25.7	25.7	23	108.7	595	27099 11HARDN	138	27100	11HARDN	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	596	27100 11HARDN	138	27138	11ROGERS	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.5	144.4	143	101	596	27100 11HARDN	138	27138	11ROGERS	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	89.7	89.7	89.7	79	113.6	596	27100 11HARDN	138	27138	11ROGERS	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	20.9	20.9	20.9	19	109.9	596	27100 11HARDN	138	27138	11ROGERS	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	25.5	25.7	23	110.7	596	27100 11HARDN	138	27222	11HARDN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	97.2	97.3	97	100.2	597	27100 11HARDN	138	27222	11HARDN	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	144.5	144.4	144.4	143	101	597	27100 11HARDN	138	27222	11HARDN	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	20.3	20.3	20.3	19	107.1	597	27100 11HARDN	138	27222	11HARDN	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.3	598	27100 11HARDN	138	27222	11HARDN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	598	27100 11HARDN	138	27222	11HARDN	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	25.9	25.7	25.7	23	112.4	598	27100 11HARDN	138	27222	11HARDN	69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	98.5	98.5	98.5	23	112.4	598	27100 11HARDN	138	27222	11HARDN	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	144.4	97.3	97	101.6	599	27101 11HIGBY	138	27107	11ANSWD	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	1	144.4	144.4	143	101	599	27101 11HIGBY	138	27107	11ANSWD	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	599	27101 11HIGBY	138	27107	11ANSWD	138	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.8	25.7	25.7	23	112.2	599	27101 11HIGBY	138	27107	11ANSWD	138	1

**	From bus	**	**	To bus	**	d	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051	11ADAMS	138	27148	11TYRONE	138	1	102.3	97.3	97	105.5	600	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	101	600	27101 11HIGBY
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	600	27101 11HIGBY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	112	600	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	101	601	27101 11HIGBY
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.9	601	27101 11HIGBY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	112.1	601	27101 11HIGBY
27051	11ADAMS	138	27148	11TYRONE	138	1	98.7	97.3	97	101.8	602	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	101	602	27101 11HIGBY
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.9	602	27101 11HIGBY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	112.3	602	27101 11HIGBY
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.5	144.4	143	101	603	27101 11HIGBY
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	603	27101 11HIGBY
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	112.4	603	27101 11HIGBY
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	604	27102 11HRSTBR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.8	144.4	143	101.3	604	27102 11HRSTBR
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	604	27102 11HRSTBR
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	111.9	604	27102 11HRSTBR
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	605	27102 11HRSTBR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		147.8	144.4	143	103.3	605	27102 11HRSTBR
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	605	27102 11HRSTBR
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.9	605	27102 11HRSTBR
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.3	144.4	143	100.9	606	27103 11IBM N
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	606	27103 11IBM N
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.9	606	27103 11IBM N
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	607	27104 11JEFFJC
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.9	144.4	143	101.3	607	27104 11JEFFJC
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	607	27104 11JEFFJC
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.7	607	27104 11JEFFJC
27051	11ADAMS	138	27148	11TYRONE	138	1	97.8	97.3	97	100.8	608	27105 11KENTON
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.5	144.4	143	101	608	27105 11KENTON
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.9	21.8	19	115	608	27105 11KENTON
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			26.1	25.7	23	113.3	608	27105 11KENTON
27051	11ADAMS	138	27148	11TYRONE	138	1	98.2	97.3	97	101.2	609	27105 11KENTON
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	101	609	27105 11KENTON
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.7	609	27105 11KENTON
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.8	25.7	23	112.1	609	27105 11KENTON
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	610	27105 11KENTON
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.4	144.4	143	101	610	27105 11KENTON
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.8	21.8	19	114.8	610	27105 11KENTON
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.9	610	27105 11KENTON
27051	11ADAMS	138	27148	11TYRONE	138	1	97.5	97.3	97	100.5	611	27106 11KNOB C
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.6	144.4	143	101.1	611	27106 11KNOB C
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.6	21.8	19	113.9	611	27106 11KNOB C
29411	20LILYJTJ69.0	29634	20WOODLN69.0	1			25.7	25.7	23	111.7	611	27106 11KNOB C
27051	11ADAMS	138	27148	11TYRONE	138	1	97.4	97.3	97	100.4	612	27106 11KNOB C
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1		144.6	144.4	143	101.1	612	27106 11KNOB C
29359	20HODGEN69.0	29419	20MAGNOL69.0	1			21.7	21.8	19	114.1	612	27106 11KNOB C

**	From bus	**	**	To bus	**	ContMVA	Baseflow	Rating	Loadings	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.7	612	27106	11KNOB C 138 27135 11POND C 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.3	98.5	97.3	97	101.6	613	27107	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	613	27107	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	19	114.8	613	27107	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.8	25.7	25.7	23	112.2	613	27107	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.5	97.3	97.3	97	100.5	614	27108	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	100.9	614	27108	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	24.9	24.9	24.9	19	130.9	614	27108	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	23.4	23.4	23.4	23	101.6	614	27108	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.3	97.3	97.3	97	100.3	615	27108	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	100.8	615	27108	11LANSWD 138 27238 11LANSWD69.0 1
27285	11SPRNGE69.0	29459	20N SPR 69.0 1	23.9	23.9	23.9	19	125.6	615	27108	11LANSWD 138 27238 11LANSWD69.0 1
29326	20FRCKB69.0	29634	20WOODLN69.0 1	24.9	24.9	24.9	23	108.3	615	27108	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	24.1	24.1	24.1	19	127.1	615	27108	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	29.7	29.7	29.7	23	129.3	615	27108	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97	100.2	616	27108	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	616	27108	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.7	21.7	21.7	19	114.4	616	27108	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	27.2	27.2	27.2	23	118.2	616	27108	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97	100.2	617	27108	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	617	27108	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.7	21.7	21.7	19	114.4	617	27108	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	27.2	27.2	27.2	23	118.2	617	27108	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97	100.2	618	27108	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	618	27108	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	23	23	23	19	121	618	27108	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	27.2	27.2	27.2	23	118.3	618	27108	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97	100.2	619	27109	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	619	27109	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	20.9	20.9	20.9	19	109.8	619	27109	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.4	25.4	25.4	23	110.4	619	27109	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97	100.2	620	27109	11LANSWD 138 27238 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	620	27109	11LANSWD 138 27238 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	20.9	20.9	20.9	19	109.9	620	27109	11LANSWD 138 27238 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.4	25.4	25.4	23	110.4	620	27109	11LANSWD 138 27238 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.5	97.5	97.5	97	100.5	621	27110	11LANSWD 138 27240 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	621	27110	11LANSWD 138 27240 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	19	114.8	621	27110	11LANSWD 138 27240 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	23	111.7	621	27110	11LANSWD 138 27240 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97	100.2	622	27110	11LANSWD 138 27240 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.3	144.3	144.3	143	100.9	622	27110	11LANSWD 138 27240 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	19	114.9	622	27110	11LANSWD 138 27240 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	23	111.9	622	27110	11LANSWD 138 27240 11LANSWD69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.5	97.5	97.5	97	100.5	623	27111	11LANSWD 138 27243 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	143	101	623	27111	11LANSWD 138 27243 11LANSWD69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	19	114.8	623	27111	11LANSWD 138 27243 11LANSWD69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	23	111.7	623	27111	11LANSWD 138 27243 11LANSWD69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.6	144.6	144.6	143	101.1	624	27112	11LANSWD 138 27243 11LANSWD69.0 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	624	27112 ILOCKPO	138 27140 11SHADRA 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	26	26	25.7	23	113	624	27112 ILOCKPO	138 27140 11SHADRA 138 1
27113	11LOUDON	138 27247	11LOUD B69.0	1	145.6	145.6	105.4	129	112.9	625	27113 11LOUDON	138 27246 11LOUD A69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	625	27113 11LOUDON	138 27246 11LOUD A69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	625	27113 11LOUDON	138 27246 11LOUD A69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	625	27113 11LOUDON	138 27246 11LOUD A69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.4	144.4	143	101	626	27113 11LOUDON	138 27247 11LOUD B69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	626	27113 11LOUDON	138 27247 11LOUD B69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	112	626	27113 11LOUDON	138 27247 11LOUD B69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97.2	97.3	97.3	97	100.3	627	27114 11LYNDON	138 27119 11MIDDLT 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	150.5	144.4	144.4	143	105.3	627	27114 11LYNDON	138 27119 11MIDDLT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	627	27114 11LYNDON	138 27119 11MIDDLT 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	627	27114 11LYNDON	138 27119 11MIDDLT 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97.1	97.3	97.3	97	100.1	628	27114 11LYNDON	138 27250 11LYND S69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	153.8	144.4	144.4	143	107.5	628	27114 11LYNDON	138 27250 11LYND S69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	628	27114 11LYNDON	138 27250 11LYND S69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.5	628	27114 11LYNDON	138 27250 11LYND S69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97.2	97.3	97.3	97	100.2	629	27115 11MAGAZI	138 27154 11WATRSD 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	145.8	144.4	144.4	143	101.9	629	27115 11MAGAZI	138 27154 11WATRSD 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	114.7	629	27115 11MAGAZI	138 27154 11WATRSD 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.9	21.8	21.8	19	115.1	630	27116 11MANSLSI	138 27121 11MILL C 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97.2	97.3	97.3	97	100.2	630	27116 11MANSLSI	138 27121 11MILL C 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	630	27116 11MANSLSI	138 27121 11MILL C 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.8	25.7	25.7	23	112	630	27116 11MANSLSI	138 27121 11MILL C 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	23	111.4	631	27119 11MIDDLT	138 27253 11MIDDLT69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97	97.3	97.3	97	100	631	27119 11MIDDLT	138 27253 11MIDDLT69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8	21.8	21.8	19	114.6	631	27119 11MIDDLT	138 27253 11MIDDLT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	25.7	23	111.4	631	27119 11MIDDLT	138 27253 11MIDDLT69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	164	144.4	144.4	143	114.7	632	27119 11MIDDLT	138 27253 11MIDDLT69.0 2
27051	11ADAMS	138 27148	11TYRONE 138 1	1	21.8	21.8	21.8	19	114.6	632	27119 11MIDDLT	138 27253 11MIDDLT69.0 2
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	25.6	25.7	25.7	23	111.4	632	27119 11MIDDLT	138 27253 11MIDDLT69.0 2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	25.7	23	111.4	632	27119 11MIDDLT	138 27253 11MIDDLT69.0 2
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.8	21.8	21.8	19	114.6	633	27119 11MIDDLT	138 27253 11MIDDLT69.0 3
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97	97.3	97.3	97	100	633	27119 11MIDDLT	138 27253 11MIDDLT69.0 3
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8	21.8	21.8	19	114.6	633	27119 11MIDDLT	138 27253 11MIDDLT69.0 3
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	25.7	23	111.4	633	27119 11MIDDLT	138 27253 11MIDDLT69.0 3
29411	20LILYJ69.0	29634	20WOODLN69.0	1	164	144.4	144.4	143	114.7	634	27119 11MIDDLT	138 27320 11COLLIN 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	21.8	21.8	21.8	19	114.6	634	27119 11MIDDLT	138 27320 11COLLIN 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	25.6	25.7	25.7	23	111.5	634	27119 11MIDDLT	138 27320 11COLLIN 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	25.7	23	111.5	634	27119 11MIDDLT	138 27320 11COLLIN 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97.3	97	100.3	635	27119 11MIDDLT	138 27332 11BG PWK 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	148.6	144.4	144.4	143	103.9	635	27119 11MIDDLT	138 27332 11BG PWK 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	21.8	21.8	21.8	19	114.8	635	27119 11MIDDLT	138 27332 11BG PWK 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	635	27119 11MIDDLT	138 27332 11BG PWK 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	635	27119 11MIDDLT	138 27332 11BG PWK 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	101.4	97.3	97.3	97	104.6	636	27120 11MIDWAY	138 27153 11W LEXN 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	636	27120 11MIDWAY	138 27153 11W LEXN 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	636	27120 11MIDWAY	138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.9	25.7	25.7	23	112.6	636	27120 11MIDWAY	138 27153 11W LEXN 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	1	97.3	97.3	97.3	97	100.3	637	27121 11MILL C	138 27321 11BRIDGP 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	637	27121 11MILL C	138 27321 11BRIDGP 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	637	27121 11MILL C	138 27321 11BRIDGP 138 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loadings ⁸	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	637	27121 1LMILL C	138 27321 11BRIDP 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.2	97.3	97	100.2	638	27122 1LMUD LA	138 27127 11OKOLON 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.3	144.3	144.4	144.4	143	100.9	638	27122 1LMUD LA	138 27127 11OKOLON 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.9	638	27122 1LMUD LA	138 27127 11OKOLON 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.8	25.8	25.7	25.7	23	112	638	27122 1LMUD LA	138 27127 11OKOLON 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.3	97.3	97	100.2	639	27122 1LMUD LA	138 27256 11MUD LA69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.6	144.6	144.4	144.4	143	101.2	639	27122 1LMUD LA	138 27256 11MUD LA69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.8	639	27122 1LMUD LA	138 27256 11MUD LA69.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	25.7	23	111.9	639	27122 1LMUD LA	138 27256 11MUD LA69.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.3	97.3	97.3	97.3	97	100.3	640	27126 11OHIO C	138 27141 11SHREWS 138 1
27126	11OHIO C	138 27259	11OHIO C69.0 1	144.7	144.7	144.4	144.4	60	116	640	27126 11OHIO C	138 27141 11SHREWS 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	76.4	76.4	49.6	49.6	69	110.8	640	27126 11OHIO C	138 27141 11SHREWS 138 1
27203	11ETOWN	69.0 29390	20KARGLE69.0 1	21	21	21.8	21.8	19	110.8	640	27126 11OHIO C	138 27141 11SHREWS 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	25.7	25.7	25.7	25.7	23	119	640	27126 11OHIO C	138 27141 11SHREWS 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	27.4	27.4	25.7	25.7	23	119	640	27126 11OHIO C	138 27141 11SHREWS 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	19.4	19.4	12.9	12.9	19	101.9	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	144.4	143	101.2	641	27126 11OHIO C	138 27141 11SHREWS 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.7	21.7	21.8	21.8	19	114.2	641	27126 11OHIO C	138 27141 11SHREWS 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	25.7	23	111.8	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	146.5	146.5	144.4	144.4	143	102.5	642	27128 11OC TAP	138 27129 11OWEN C 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.5	642	27128 11OC TAP	138 27129 11OWEN C 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.6	25.6	25.7	25.7	23	111.1	642	27128 11OC TAP	138 27129 11OWEN C 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	142.8	142.8	97.3	97.3	97	147.3	643	27128 11OC TAP	138 27139 11SCOTT 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.3	144.3	144.4	144.4	143	100.9	643	27128 11OC TAP	138 27139 11SCOTT 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.8	643	27128 11OC TAP	138 27139 11SCOTT 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	26.1	26.1	25.7	25.7	23	113.5	643	27128 11OC TAP	138 27139 11SCOTT 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.3	97.3	97	100.2	644	27130 11PADDYR	138 27131 11P WEST 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.1	144.1	144.4	144.4	143	100.8	644	27130 11PADDYR	138 27131 11P WEST 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	22	22	21.8	21.8	19	115.6	644	27130 11PADDYR	138 27131 11P WEST 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	25.7	23	111.8	644	27130 11PADDYR	138 27131 11P WEST 138 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.2	97.2	97.3	97.3	97	100.2	645	27130 11PADDYR	138 27315 11PR 3 M99.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.9	144.9	144.4	144.4	143	101.4	645	27130 11PADDYR	138 27315 11PR 3 M99.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	111.7	645	27130 11PADDYR	138 27315 11PR 3 M99.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	25.7	23	111.6	645	27130 11PADDYR	138 27315 11PR 3 M99.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.3	97.3	97.3	97.3	97	100.3	646	27130 11PADDYR	138 27316 11PR4 M99.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	144.4	143	100.9	646	27130 11PADDYR	138 27316 11PR4 M99.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.8	646	27130 11PADDYR	138 27316 11PR4 M99.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	25.7	23	111.9	646	27130 11PADDYR	138 27316 11PR4 M99.0 1
27051	11ADAMS	138 27148	11TYRONE 138 1	97.3	97.3	97.3	97.3	97	100.3	647	27130 11PADDYR	138 27317 11PR4 M99.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	144.4	143	100.9	647	27130 11PADDYR	138 27317 11PR4 M99.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.8	647	27130 11PADDYR	138 27317 11PR4 M99.0 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.7	25.7	25.7	25.7	23	111.9	647	27130 11PADDYR	138 27317 11PR4 M99.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.4	144.4	144.4	144.4	143	101	648	27132 11PISGAH	138 27153 11W LEXN 138 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.8	648	27132 11PISGAH	138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN69.0 1	25.8	25.8	25.7	25.7	23	112.1	648	27132 11PISGAH	138 27153 11W LEXN 138 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0 1	144.7	144.7	144.4	144.4	143	101.2	649	27132 11PISGAH	138 27266 11PISGAH69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0 1	21.8	21.8	21.8	21.8	19	114.6	649	27132 11PISGAH	138 27266 11PISGAH69.0 1

**	From	bus	**	**	To	bus	**	Cont	Cont	Base	Flow	Rating	Load	Ncon	Contingency	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	26	25.7	23	113.2	649	27132	11PISGAH	138	27266	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.4	97.3	97	100.4	650	27135	11POND	C	138	27144
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.6	144.4	143	101.1	650	27135	11POND	C	138	27144
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.7	21.8	19	114.1	650	27135	11POND	C	138	27144
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.7	650	27135	11POND	C	138	27144
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	651	27137	11RODBRN	138	27273	
27087	11FARMER	138	27207	11FARMER	69.0	1	53	32.7	48	110.4	651	27137	11RODBRN	138	27273	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	100.9	651	27137	11RODBRN	138	27273	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	651	27137	11RODBRN	138	27273	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	651	27137	11RODBRN	138	27273	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.5	97.3	97	100.5	652	27137	11RODBRN	138	27273	
27137	11RODBRN	138	27273	11RODBRN	69.0	1	44.9	35	40	112.2	652	27137	11RODBRN	138	27336	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	101	652	27137	11RODBRN	138	27336	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.9	652	27137	11RODBRN	138	27336	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.9	25.7	23	112.6	652	27137	11RODBRN	138	27336	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	97	100.2	653	27138	11ROGERS	138	27274	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.5	144.4	143	101	653	27138	11ROGERS	138	27274	
27203	11ETOWN	69.0	29591	20THARP	69.0	1	89.7	52.7	79	113.6	653	27138	11ROGERS	138	27274	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	20.9	21.8	19	109.9	653	27138	11ROGERS	138	27274	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.4	25.7	23	110.7	653	27138	11ROGERS	138	27274	
27051	11ADAMS	138	27148	11TYRONE	138	1	100.1	97.3	97	103.2	654	27139	11SCOTT	138	27274	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	101	654	27139	11SCOTT	138	27145	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	654	27139	11SCOTT	138	27145	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	654	27139	11SCOTT	138	27145	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.3	144.4	143	100.9	655	27139	11SCOTT	138	27194	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	655	27139	11SCOTT	138	27194	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	655	27139	11SCOTT	138	27194	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.4	97.3	97	100.4	656	27141	11SHREWS	138	27337	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.6	144.4	143	101.2	656	27141	11SHREWS	138	27337	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	23.4	21.8	19	123	656	27141	11SHREWS	138	27337	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	27.8	25.7	23	121	656	27141	11SHREWS	138	27337	
29571	20STEPHN	69.0	29606	20UPTON	J69.0	1	33.5	12.9	19	176.2	656	27141	11SHREWS	138	27337	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	657	27142	11SMITH	138	27261	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	100.9	657	27142	11SMITH	138	27261	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	657	27142	11SMITH	138	27261	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	657	27142	11SMITH	138	27261	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	658	27142	11SMITH	138	27261	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	100.9	658	27142	11SMITH	138	27261	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	658	27142	11SMITH	138	27261	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	658	27142	11SMITH	138	27261	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	659	27142	11SMITH	138	27261	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	100.9	659	27142	11SMITH	138	27261	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	659	27142	11SMITH	138	27261	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	659	27142	11SMITH	138	27261	
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	97	100.3	660	27142	11SMITH	138	27261	
27161	11AIKEN	69.0	27253	11MIDDLT	69.0	1	144.4	144.4	143	100.9	660	27142	11SMITH	138	27261	
29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1	21.8	21.8	19	114.8	660	27142	11SMITH	138	27261	
29411	20LILY	J69.0	29634	20WOODLN	69.0	1	25.7	25.7	23	111.9	660	27142	11SMITH	138	27261	

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency			
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	97	661 27142 11SMITH	138 27261 11OMU	69.0	5
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	143	661 27142 11SMITH	138 27261 11OMU	69.0	5
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	19	661 27142 11SMITH	138 27261 11OMU	69.0	5
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	23	661 27142 11SMITH	138 27261 11OMU	69.0	5
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	97	662 27142 11SMITH	138 27261 11OMU	69.0	6
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	143	662 27142 11SMITH	138 27261 11OMU	69.0	6
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	19	662 27142 11SMITH	138 27261 11OMU	69.0	6
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	23	662 27142 11SMITH	138 27261 11OMU	69.0	6
27051	11ADAMS	138	27148	11TYRONE	138	1	98	97.3	101	97	663 27143 11SPENC	138 27284 11SPENC	69.0	1
27087	11FARMER	138	27207	11FARMER69.0	1	52.9	32.7	48	110.1	48	663 27143 11SPENC	138 27284 11SPENC	69.0	1
27137	11RODRN	138	27273	11RODRN69.0	1	41.6	35	40	104.1	40	663 27143 11SPENC	138 27284 11SPENC	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	143	663 27143 11SPENC	138 27284 11SPENC	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	19	663 27143 11SPENC	138 27284 11SPENC	69.0	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.6	23	663 27143 11SPENC	138 27284 11SPENC	69.0	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	100.2	97	664 27145 11TOYT	138 27146 11TOYT S	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	143	664 27145 11TOYT	138 27146 11TOYT S	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	19	664 27145 11TOYT	138 27146 11TOYT S	138	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	23	664 27145 11TOYT	138 27146 11TOYT S	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	26	25.7	113.3	23	665 27148 11TYRONE	138 27151 11W FRNK	138	04
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	115.4	97	665 27148 11TYRONE	138 27151 11W FRNK	138	04
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.3	19	665 27148 11TYRONE	138 27151 11W FRNK	138	04
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	26.7	25.7	25.7	23	116.3	23	665 27148 11TYRONE	138 27151 11W FRNK	138	04
27051	11ADAMS	138	27148	11TYRONE	138	1	105.2	97.3	108.5	97	666 27148 11TYRONE	138 27289 11TYRONE69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	143	666 27148 11TYRONE	138 27289 11TYRONE69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	19	666 27148 11TYRONE	138 27289 11TYRONE69.0	1	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.3	23	666 27148 11TYRONE	138 27289 11TYRONE69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	105.2	97.3	108.5	97	667 27149 11VILEY	138 27153 11W LEYN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	143	667 27149 11VILEY	138 27153 11W LEYN	138	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	19	667 27149 11VILEY	138 27153 11W LEYN	138	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.3	23	667 27149 11VILEY	138 27153 11W LEYN	138	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.1	97.3	100.1	97	668 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	143	668 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	19	668 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.9	25.7	25.7	23	113.2	23	668 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.2	97.3	100.2	97	669 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	147.6	144.4	143	103.2	143	669 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.9	19	669 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.5	25.7	25.7	23	112.7	23	669 27150 11W CLIF	138 27290 11W CLIF69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	98.6	97.3	101.6	97	670 27151 11W FRNK	138 27291 11W FRNK69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	147.6	144.4	143	103.2	143	670 27151 11W FRNK	138 27291 11W FRNK69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	21.8	19	114.4	19	670 27151 11W FRNK	138 27291 11W FRNK69.0	1	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.5	25.7	25.7	23	111	23	670 27151 11W FRNK	138 27291 11W FRNK69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	97	671 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101	143	671 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	19	671 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	23	671 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97.3	100.3	97	672 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	104.7	48	672 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	104.7	48	672 27155 11WATTRS	138 27294 11WATTRS69.0	1	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	50.3	50.3	50.3	48	101.4	143	672 27155 11WATTRS	138 27294 11WATTRS69.0	1	1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading\$	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	672	27155 11WATTRS 138 27294 11WATTRS69.0 2
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	672	27155 11WATTRS 138 27294 11WATTRS69.0 2
27051	11ADAMS	138 27148	11TYRONE	138 1	97.1	97.1	97.3	97	100.1	673	27156 11WC-DD 138 27295 11WC-DD 69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.5	144.4	143	101	673	27156 11WC-DD 138 27295 11WC-DD 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	673	27156 11WC-DD 138 27295 11WC-DD 69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	26.1	26.1	25.7	23	113.3	673	27156 11WC-DD 138 27295 11WC-DD 69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.2	97.2	97.3	97	100.2	674	27158 116659 T69.0 27249 11LYNDON69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	146.1	146.1	144.4	143	102.2	674	27158 116659 T69.0 27249 11LYNDON69.0 EQ
27319	11COLLIN69.0	27320	11COLLIN 138 1	129.4	111.7	111.7	111.7	129	100.3	674	27158 116659 T69.0 27249 11LYNDON69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	674	27158 116659 T69.0 27249 11LYNDON69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	97.3	97.3	97.3	97	100.3	675	27158 116659 T69.0 27287 11TAYLOR69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.5	144.4	143	101.1	675	27158 116659 T69.0 27287 11TAYLOR69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	675	27158 116659 T69.0 27287 11TAYLOR69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	675	27158 116659 T69.0 27287 11TAYLOR69.0 EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	676	27158 116659 T69.0 27319 11COLLIN69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	162.4	144.4	144.4	143	113.6	677	27159 116686 T69.0 27184 11CENTR 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	677	27159 116686 T69.0 27184 11CENTR 69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.6	677	27159 116686 T69.0 27184 11CENTR 69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.4	97.4	97.3	97	100.4	678	27159 116686 T69.0 27319 11COLLIN69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	25.7	25.7	25.7	23	111.9	678	27159 116686 T69.0 27319 11COLLIN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	678	27159 116686 T69.0 27319 11COLLIN69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	679	27159 116686 T69.0 27329 116658 T69.0 EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.2	97.2	97.3	97	100.2	679	27159 116686 T69.0 27329 116658 T69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	149.3	144.4	144.4	143	104.4	679	27159 116686 T69.0 27329 116658 T69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	679	27159 116686 T69.0 27329 116658 T69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	679	27159 116686 T69.0 27329 116658 T69.0 EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	98	97.3	97.3	97	101	681	27160 11ADAMS 69.0 27220 11HAEFLN69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	681	27160 11ADAMS 69.0 27220 11HAEFLN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	681	27160 11ADAMS 69.0 27220 11HAEFLN69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	681	27160 11ADAMS 69.0 27220 11HAEFLN69.0 EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	682	27161 11AIKEN 69.0 27253 11MIDDLT69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	682	27161 11AIKEN 69.0 27253 11MIDDLT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	682	27161 11AIKEN 69.0 27253 11MIDDLT69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	682	27161 11AIKEN 69.0 27253 11MIDDLT69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	683	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	25.7	25.7	25.7	23	111.6	683	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	683	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.8	25.7	23	111.9	683	27161 11AIKEN 69.0 27263 11OXMOOR69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	684	27161 11AIKEN 69.0 27329 116658 T69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.4	144.4	143	112	684	27161 11AIKEN 69.0 27329 116658 T69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	684	27161 11AIKEN 69.0 27329 116658 T69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.6	25.6	25.7	23	111.5	684	27161 11AIKEN 69.0 27329 116658 T69.0 1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	685	27162 11ALNGU69.0 27180 11CANAL 69.0 EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.5	144.4	144.4	143	101	685	27162 11ALNGU69.0 27180 11CANAL 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	685	27162 11ALNGU69.0 27180 11CANAL 69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	685	27162 11ALNGU69.0 27180 11CANAL 69.0 EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	686	27162 11ALNGU69.0 27181 11CANERN69.0 1

** From bus	** To bus	** CContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.5	144.4	143	101	686	27162 11ALNGU69.0	27181 11CANERN69.0 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	686	27162 11ALNGU69.0	27181 11CANERN69.0 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	686	27162 11ALNGU69.0	27181 11CANERN69.0 1
27051 11ADAMS 138 27148 11TYRONE 138 1	144.4	144.4	97	100.3	687	27162 11ALNGU69.0	27217 11GRADY 69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	687	27162 11ALNGU69.0	27217 11GRADY 69.0 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	687	27162 11ALNGU69.0	27217 11GRADY 69.0 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	687	27162 11ALNGU69.0	27217 11GRADY 69.0 1
27051 11ADAMS 138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	688	27162 11ALNGU69.0	27264 11PADDYS69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	101	688	27162 11ALNGU69.0	27264 11PADDYS69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	688	27162 11ALNGU69.0	27264 11PADDYS69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	688	27162 11ALNGU69.0	27264 11PADDYS69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.2	97.3	97	100.2	689	27162 11ALNGU69.0	27278 11SEMINO69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.5	144.4	143	101	689	27162 11ALNGU69.0	27278 11SEMINO69.0 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	689	27162 11ALNGU69.0	27278 11SEMINO69.0 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.8	689	27162 11ALNGU69.0	27278 11SEMINO69.0 1
27051 11ADAMS 138 27148 11TYRONE 138 1	144.4	144.4	143	100.9	690	27163 11AMERI 69.0	27220 11HAEFLN69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	690	27163 11AMERI 69.0	27220 11HAEFLN69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	690	27163 11AMERI 69.0	27220 11HAEFLN69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	690	27163 11AMERI 69.0	27220 11HAEFLN69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.8	97.3	97	100.8	691	27163 11AMERI 69.0	27225 11HIGB A69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	101	691	27163 11AMERI 69.0	27225 11HIGB A69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	691	27163 11AMERI 69.0	27225 11HIGB A69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	691	27163 11AMERI 69.0	27225 11HIGB A69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	692	27163 11AMERI 69.0	27252 11MED CN69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	101	692	27163 11AMERI 69.0	27252 11MED CN69.0 1
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	692	27163 11AMERI 69.0	27252 11MED CN69.0 1
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.8	25.7	23	112	693	27165 11ARNOLD69.0	27204 11EVARTS69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	693	27165 11ARNOLD69.0	27204 11EVARTS69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	693	27165 11ARNOLD69.0	27204 11EVARTS69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	693	27165 11ARNOLD69.0	27204 11EVARTS69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	693	27165 11ARNOLD69.0	27204 11EVARTS69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.2	97.3	97	100.3	694	27165 11ARNOLD69.0	27248 11LYNCH 69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	100.9	694	27165 11ARNOLD69.0	27248 11LYNCH 69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	694	27165 11ARNOLD69.0	27248 11LYNCH 69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.8	694	27165 11ARNOLD69.0	27248 11LYNCH 69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	695	27166 11ARTEMU69.0	27171 11BIMBLE69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.4	144.4	143	101	695	27166 11ARTEMU69.0	27171 11BIMBLE69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	695	27166 11ARTEMU69.0	27171 11BIMBLE69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	695	27166 11ARTEMU69.0	27171 11BIMBLE69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.2	97.3	97	100.3	696	27167 11ASHBOT69.0	27278 11SEMINO69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	145	144.4	143	101.4	696	27167 11ASHBOT69.0	27278 11SEMINO69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.9	696	27167 11ASHBOT69.0	27278 11SEMINO69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	696	27167 11ASHBOT69.0	27278 11SEMINO69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	697	27167 11ASHBOT69.0	27333 116676 T69.0 EQ
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144.3	144.4	143	100.9	697	27167 11ASHBOT69.0	27333 116676 T69.0 EQ
29359 20HODGEN69.0 29419 20MAGNOL69.0 1	21.8	21.8	19	114.8	697	27167 11ASHBOT69.0	27333 116676 T69.0 EQ
29411 20LILYJT69.0 29634 20WOODLN69.0 1	25.7	25.7	23	111.9	697	27167 11ASHBOT69.0	27333 116676 T69.0 EQ
27051 11ADAMS 138 27148 11TYRONE 138 1	97.3	97.3	97	100.3	698	27168 11BARD I69.0	27169 11BARDST69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT69.0 1	144	144.4	143	100.7	698	27168 11BARD I69.0	27169 11BARDST69.0 1

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loadings	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.7	21.8	19	119.6	698	27168	11BARD 169.0	27169	11BARDST69.0	1
29462	20NELSON69.0	29610	20MBARDJ69.0	1	81.2	49.6	72	112.8	698	27168	11BARD 169.0	27169	11BARDST69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.7	699	27169	11BARDST69.0	27212	11FINCHV69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	143.4	143	100.3	699	27169	11BARDST69.0	27212	11FINCHV69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.2	21.8	19	111.5	699	27169	11BARDST69.0	27212	11FINCHV69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.3	700	27169	11BARDST69.0	27258	11NEWHAV69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	143	100.9	700	27169	11BARDST69.0	27258	11NEWHAV69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	20.9	21.8	19	110.3	700	27169	11BARDST69.0	27258	11NEWHAV69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	27	25.7	23	117.4	700	27169	11BARDST69.0	27258	11NEWHAV69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97	100.3	701	27170	11BEARGR69.0	27189	11CLIFTO69.0	E2
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.1	143	101.5	701	27170	11BEARGR69.0	27189	11CLIFTO69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	701	27170	11BEARGR69.0	27189	11CLIFTO69.0	E2
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	701	27170	11BEARGR69.0	27189	11CLIFTO69.0	E2
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.3	702	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.2	143	101.5	702	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	702	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	702	27170	11BEARGR69.0	27189	11CLIFTO69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.3	703	27170	11BEARGR69.0	27251	11MADISO69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	143	143	100	703	27170	11BEARGR69.0	27251	11MADISO69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	703	27170	11BEARGR69.0	27251	11MADISO69.0	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	703	27170	11BEARGR69.0	27251	11MADISO69.0	1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97	100.2	704	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.8	143	101.9	704	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	704	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	704	27170	11BEARGR69.0	27287	11TAYLOR69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.3	705	27171	11BTMBLE69.0	27235	11KU PK 69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	705	27171	11BTMBLE69.0	27235	11KU PK 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	705	27171	11BTMBLE69.0	27235	11KU PK 69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	705	27171	11BTMBLE69.0	27235	11KU PK 69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.3	706	27171	11BTMBLE69.0	27245	11LONDON69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	706	27171	11BTMBLE69.0	27245	11LONDON69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	706	27171	11BTMBLE69.0	27245	11LONDON69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	706	27171	11BTMBLE69.0	27245	11LONDON69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	143.7	143	100.5	707	27172	11BND 69.0	27245	11LONDON69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115.2	707	27172	11BND 69.0	27245	11LONDON69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	26.9	25.7	23	117	707	27172	11BND 69.0	27245	11LONDON69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	101.1	97	104.2	708	27172	11BND 69.0	27289	11TYRONE69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.7	143	101.2	708	27172	11BND 69.0	27289	11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.6	21.8	19	113.9	708	27172	11BND 69.0	27289	11TYRONE69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	27.2	25.7	23	118.3	708	27172	11BND 69.0	27289	11TYRONE69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.6	143	101.1	709	27172	11BND 69.0	27290	11W CLIF69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.5	709	27172	11BND 69.0	27290	11W CLIF69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	26	25.7	23	113.2	709	27172	11BND 69.0	27290	11W CLIF69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97	100.3	710	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	143	101	710	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	22.2	21.8	19	116.8	710	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	26.1	25.7	23	113.6	710	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.8	97	100.8	711	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	711	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	711	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.7	23	111.3	711	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	712	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	712	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.5	712	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.5	712	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	713	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	713	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	713	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	713	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	715	27177	11BRCKNG69.0	27227	11HLCRST69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	715	27177	11BRCKNG69.0	27227	11HLCRST69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	715	27177	11BRCKNG69.0	27227	11HLCRST69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	716	27177	11BRCKNG69.0	27263	11OXMOOR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	716	27177	11BRCKNG69.0	27263	11OXMOOR69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	716	27177	11BRCKNG69.0	27263	11OXMOOR69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	716	27177	11BRCKNG69.0	27263	11OXMOOR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	717	27178	11BROMLY69.0	27183	11CARROL69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	717	27178	11BROMLY69.0	27183	11CARROL69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.2	718	27179	11BEATY69.0	27292	11W IRVI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	718	27179	11BEATY69.0	27292	11W IRVI69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	718	27179	11BEATY69.0	27292	11W IRVI69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	719	27180	11CANAL 69.0	27217	11GRADY 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	719	27180	11CANAL 69.0	27217	11GRADY 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	719	27180	11CANAL 69.0	27217	11GRADY 69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.2	720	27180	11CANAL 69.0	27251	11MADISO69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	720	27180	11CANAL 69.0	27251	11MADISO69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	720	27180	11CANAL 69.0	27251	11MADISO69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	721	27181	11CANERN69.0	27208	11FARNSL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	721	27181	11CANERN69.0	27208	11FARNSL69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	721	27181	11CANERN69.0	27208	11FARNSL69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.2	722	27181	11CANERN69.0	27281	11SHIVEL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	722	27181	11CANERN69.0	27281	11SHIVEL69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	722	27181	11CANERN69.0	27281	11SHIVEL69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	723	27183	11CARROL69.0	27325	11EMINEN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	723	27183	11CARROL69.0	27325	11EMINEN69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.7	23	110.9	723	27183	11CARROL69.0	27325	11EMINEN69.0	EQ

**	From bus	**	**	To bus	**	c	ContMVA	BaseFlow	Rating	Loadings	Ncon	Contingency
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	143.2	144.4	143	100.1	724	27184	11CENTR 69.0 27325 11EMINEN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.6	724	27184	11CENTR 69.0 27325 11EMINEN69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	23	111.4	724	27184	11CENTR 69.0 27325 11EMINEN69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	725	27186	11CLARK 69.0 27284 11SPENC 69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	725	27186	11CLARK 69.0 27284 11SPENC 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	725	27186	11CLARK 69.0 27284 11SPENC 69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	725	27186	11CLARK 69.0 27284 11SPENC 69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	98.2	97.3	97	101.2	726	27186	11CLARK 69.0 27299 11WINCHS69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	726	27186	11CLARK 69.0 27299 11WINCHS69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	726	27186	11CLARK 69.0 27299 11WINCHS69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	726	27186	11CLARK 69.0 27299 11WINCHS69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	727	27187	11CLAY 69.0 27202 11ETHEL 69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	143	101.1	727	27187	11CLAY 69.0 27202 11ETHEL 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	727	27187	11CLAY 69.0 27202 11ETHEL 69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	727	27187	11CLAY 69.0 27202 11ETHEL 69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	727	27187	11CLAY 69.0 27202 11ETHEL 69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	145.5	144.4	143	101.8	728	27187	11CLAY 69.0 27221 11HANCOC69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	728	27187	11CLAY 69.0 27221 11HANCOC69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	728	27187	11CLAY 69.0 27221 11HANCOC69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	729	27187	11CLAY 69.0 27251 11MADISO69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	143.7	144.4	143	100.5	729	27187	11CLAY 69.0 27251 11MADISO69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	729	27187	11CLAY 69.0 27251 11MADISO69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	729	27187	11CLAY 69.0 27251 11MADISO69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	98.3	97.3	97	101.3	730	27188	11CLAY 69.0 27282 11SHLBYV69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	146.5	144.4	143	102.4	730	27188	11CLAY 69.0 27282 11SHLBYV69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	730	27188	11CLAY 69.0 27282 11SHLBYV69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.6	25.7	25.7	23	111.4	730	27188	11CLAY 69.0 27282 11SHLBYV69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	100.1	97.3	97	103.2	731	27188	11CLAY 69.0 27291 11W FRNK69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	147.7	144.4	143	103.3	731	27188	11CLAY 69.0 27291 11W FRNK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.5	731	27188	11CLAY 69.0 27291 11W FRNK69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.5	25.7	25.7	23	110.9	731	27188	11CLAY 69.0 27291 11W FRNK69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	732	27189	11CLIFT069.0 27227 11HLCRST69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	147.1	144.4	143	102.9	732	27189	11CLIFT069.0 27227 11HLCRST69.0 1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	732	27189	11CLIFT069.0 27227 11HLCRST69.0 1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	732	27189	11CLIFT069.0 27227 11HLCRST69.0 1
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	733	27190	11CORYDO69.0 27198 11EARL N69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	733	27190	11CORYDO69.0 27198 11EARL N69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	733	27190	11CORYDO69.0 27198 11EARL N69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	733	27190	11CORYDO69.0 27198 11EARL N69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	734	27190	11CORYDO69.0 27215 11GR STL69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	734	27190	11CORYDO69.0 27215 11GR STL69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	734	27190	11CORYDO69.0 27215 11GR STL69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112	734	27190	11CORYDO69.0 27215 11GR STL69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	735	27190	11CORYDO69.0 27255 11MORGNF69.0 EQ
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	735	27190	11CORYDO69.0 27255 11MORGNF69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	735	27190	11CORYDO69.0 27255 11MORGNF69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	735	27190	11CORYDO69.0 27255 11MORGNF69.0 EQ
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	736	27191	11CRITTE69.0 27269 11PRINCE69.0 E2

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	736	27191 11CRITTE69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	736	27191 11CRITTE69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	736	27191 11CRITTE69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	737	27191 11CRITTE69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	737	27191 11CRITTE69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	737	27191 11CRITTE69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	737	27191 11CRITTE69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	738	27192 11CYNTH 69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	738	27192 11CYNTH 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	738	27192 11CYNTH 69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	738	27192 11CYNTH 69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	739	27193 11DANVIL69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	739	27193 11DANVIL69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.9	21.8	19	115.3	739	27193 11DANVIL69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.3	739	27193 11DANVIL69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	98.4	97	101.4	740	27195 11DIXDAM69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	740	27195 11DIXDAM69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	740	27195 11DIXDAM69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.7	740	27195 11DIXDAM69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.5	97	100.5	741	27195 11DIXDAM69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	741	27195 11DIXDAM69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.4	741	27195 11DIXDAM69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112.1	741	27195 11DIXDAM69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	101	97	104.1	742	27195 11DIXDAM69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	742	27195 11DIXDAM69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115	742	27195 11DIXDAM69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.6	742	27195 11DIXDAM69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	743	27196 11DORCHE69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	743	27196 11DORCHE69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	743	27196 11DORCHE69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	743	27196 11DORCHE69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	744	27198 11EARL N69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	744	27198 11EARL N69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	744	27198 11EARL N69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	744	27198 11EARL N69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	745	27198 11EARL N69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	745	27198 11EARL N69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	745	27198 11EARL N69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	745	27198 11EARL N69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	746	27198 11EARL N69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	746	27198 11EARL N69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	746	27198 11EARL N69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	746	27198 11EARL N69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	747	27198 11EARL N69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	747	27198 11EARL N69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	747	27198 11EARL N69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	747	27198 11EARL N69.0
27051	11ADAMS	138	27148	11TYRONE	138	1	97.3	97	100.3	748	27200 11ELIHTU 69.0
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.3	748	27200 11ELIHTU 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	111.9	748	27200 11ELIHTU 69.0
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	100.3	748	27200 11ELIHTU 69.0

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	748	27200	11FERG S69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	19	115.3	748	27200	11FERG S69.0	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.2	748	27200	11FERG S69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	749	27200	11WOFFOR69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	749	27200	11WOFFOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.5	749	27200	11WOFFOR69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.7	749	27200	11WOFFOR69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	750	27202	11FERNVL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.6	144.4	143	101.1	750	27202	11FERNVL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	750	27202	11FERNVL69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	750	27202	11FERNVL69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	751	27202	11WATRS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	145	144.4	143	101.4	751	27202	11WATRS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	751	27202	11WATRS69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	751	27202	11WATRS69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.3	751	27202	11WATRS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101.3	752	27203	11HARDN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.4	21.8	19	112.6	752	27203	11HARDN 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.7	752	27203	11HARDN 69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	752	27203	11HARDN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	753	27203	11HARDN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.4	21.8	19	112.8	753	27203	11HARDN 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	753	27203	11HARDN 69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.1	97.3	97	100.1	754	27203	11HODGEN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.7	144.4	143	101.2	754	27203	11HODGEN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	27.1	25.7	23	117.9	754	27203	11HODGEN69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97	100.3	755	27203	11ROGERS69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	144.4	144.4	143	100.9	755	27203	11ROGERS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	21.9	21.8	19	115.1	755	27203	11ROGERS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	23	111.7	755	27203	11ROGERS69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97	100.3	756	27204	11HARLAN69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	144.4	144.4	143	100.9	756	27204	11HARLAN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	21.8	21.8	19	114.8	756	27204	11HARLAN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	23	111.9	756	27204	11HARLAN69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97	100.3	757	27204	11POCKET69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	144.4	144.4	143	101	757	27204	11POCKET69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	21.8	21.8	19	114.8	757	27204	11POCKET69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	23	111.9	757	27204	11POCKET69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	97.2	97.3	97	100.3	758	27205	11LEITCH69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	144.4	144.4	143	101	758	27205	11LEITCH69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	21.1	21.8	19	111.1	758	27205	11LEITCH69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	23	111.2	758	27205	11LEITCH69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	97.4	97.3	97	100.4	759	27206	11SWEETH69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	144.4	144.4	143	101	759	27206	11SWEETH69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	76.8	46.4	72	106.7	759	27206	11SWEETH69.0	EQ
27230	11HOFEVL69.0	29399	20LAURLC69.0	1	21.8	21.8	19	114.7	759	27206	11SWEETH69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.7	759	27206	11SWEETH69.0	EQ
29411	20LILYTJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	759	27206	11SWEETH69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.3	760	27206	11WOFFOR69.0	EQ

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	760	27206	11FARLEY69.0	27300
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	760	27206	11FARLEY69.0	27300
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	760	27206	11FARLEY69.0	27300
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	761	27207	11FARMER69.0	27273
27137	11RODBRN 138	27273	11RODBRN69.0	1	46	35	40	115	761	27207	11FARMER69.0	27273
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	761	27207	11FARMER69.0	27284
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	761	27207	11FARMER69.0	27284
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	761	27207	11FARMER69.0	27284
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	762	27207	11FARMER69.0	27284
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	762	27207	11FARMER69.0	27284
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	762	27207	11FARMER69.0	27284
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	762	27207	11FARMER69.0	27284
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	763	27208	11FARNSL69.0	27264
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	763	27208	11FARNSL69.0	27264
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	763	27208	11FARNSL69.0	27264
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	763	27208	11FARNSL69.0	27264
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	764	27208	11FARNSL69.0	27281
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	764	27208	11FARNSL69.0	27281
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	764	27208	11FARNSL69.0	27281
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	764	27208	11FARNSL69.0	27281
27051	11ADAMS 138	27148	11TYRONE 138	1	97.6	97.3	97	100.6	765	27209	11FAWKES69.0	27225
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	765	27209	11FAWKES69.0	27225
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	765	27209	11FAWKES69.0	27225
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.8	765	27209	11FAWKES69.0	27225
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.3	766	27209	11FAWKES69.0	27243
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	766	27209	11FAWKES69.0	27243
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	766	27209	11FAWKES69.0	27243
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	766	27209	11FAWKES69.0	27243
27051	11ADAMS 138	27148	11TYRONE 138	1	144.3	144.4	143	100.9	767	27209	11FAWKES69.0	27243
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	21.8	21.8	19	114.8	767	27209	11FAWKES69.0	27243
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	23	111.9	767	27209	11FAWKES69.0	27243
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.2	97.3	97	100.2	768	27212	11FINCHV69.0	27244
27051	11ADAMS 138	27148	11TYRONE 138	1	144.3	144.4	143	100.8	768	27212	11FINCHV69.0	27244
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	21.8	21.8	19	114.6	768	27212	11FINCHV69.0	27244
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.6	25.7	23	111.4	768	27212	11FINCHV69.0	27244
29411	20LILYJ69.0	29634	20WOODLN69.0	1	158.7	144.4	143	111	769	27212	11FINCHV69.0	27253
27051	11ADAMS 138	27148	11TYRONE 138	1	24.7	25.7	23	107.3	769	27212	11FINCHV69.0	27253
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	97.5	97.3	97	100.5	770	27214	11FERT 69.0	27289
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	144.3	144.4	143	100.9	770	27214	11FERT 69.0	27289
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.8	21.8	19	112.4	770	27214	11FERT 69.0	27289
27051	11ADAMS 138	27148	11TYRONE 138	1	25.8	25.7	23	114.8	771	27214	11FERT 69.0	27291
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	143.7	144.4	143	100.5	771	27214	11FERT 69.0	27291
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	771	27214	11FERT 69.0	27291
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112.4	771	27214	11FERT 69.0	27291
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	772	27215	11GR STL69.0	27261
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	772	27215	11GR STL69.0	27261

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	772	27215 11GR STL69.0	27261 11OMU 69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.8	772	27215 11GR STL69.0	27261 11OMU 69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	773	27216 11GR RVR69.0	27228 11HILLSI69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	100.9	773	27216 11GR RVR69.0	27228 11HILLSI69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	773	27216 11GR RVR69.0	27228 11HILLSI69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	773	27216 11GR RVR69.0	27228 11HILLSI69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	774	27216 11GR RVR69.0	27232 11INDIAN69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	101.1	774	27216 11GR RVR69.0	27232 11INDIAN69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	774	27216 11GR RVR69.0	27232 11INDIAN69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	774	27216 11GR RVR69.0	27232 11INDIAN69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	775	27216 11GR RVR69.0	27271 11RQ TAP69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	100.9	775	27216 11GR RVR69.0	27271 11RQ TAP69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	775	27216 11GR RVR69.0	27271 11RQ TAP69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	775	27216 11GR RVR69.0	27271 11RQ TAP69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.2	776	27217 11GRADY 69.0	27264 11PADDYS69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	101.1	776	27217 11GRADY 69.0	27264 11PADDYS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	776	27217 11GRADY 69.0	27264 11PADDYS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.8	776	27217 11GRADY 69.0	27264 11PADDYS69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	777	27218 11GRAHMV69.0	27298 11WICKLI69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	100.9	777	27218 11GRAHMV69.0	27298 11WICKLI69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	777	27218 11GRAHMV69.0	27298 11WICKLI69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	777	27218 11GRAHMV69.0	27298 11WICKLI69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	778	27218 11GRAHMV69.0	27298 11WICKLI69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	100.9	778	27218 11GRAHMV69.0	27298 11WICKLI69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	778	27218 11GRAHMV69.0	27298 11WICKLI69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	778	27218 11GRAHMV69.0	27298 11WICKLI69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	779	27219 11GRBURG69.0	27288 11TAYLRC69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	101.1	779	27219 11GRBURG69.0	27288 11TAYLRC69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.3	21.8	19	111.9	779	27219 11GRBURG69.0	27288 11TAYLRC69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.9	25.7	23	112.7	779	27219 11GRBURG69.0	27288 11TAYLRC69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	144.3	144.4	143	100.9	780	27220 11HAFFLN69.0	27241 11LEX PL69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	21.8	21.8	19	114.8	780	27220 11HAFFLN69.0	27241 11LEX PL69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	25.7	25.7	23	111.9	780	27220 11HAFFLN69.0	27241 11LEX PL69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	97.2	97.3	97	100.3	781	27221 11HANCOC69.0	27278 11SEMINO69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	144.6	144.4	143	101.1	781	27221 11HANCOC69.0	27278 11SEMINO69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	21.8	21.8	19	114.8	781	27221 11HANCOC69.0	27278 11SEMINO69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	781	27221 11HANCOC69.0	27278 11SEMINO69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	781	27221 11HANCOC69.0	27278 11SEMINO69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	782	27222 11HARLAN69.0	27272 11ROCKY 69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.4	144.4	143	100.9	782	27222 11HARLAN69.0	27272 11ROCKY 69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	782	27222 11HARLAN69.0	27272 11ROCKY 69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.9	782	27222 11HARLAN69.0	27272 11ROCKY 69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	98.1	97.3	97	101.2	783	27226 11HIGB 69.0	27238 11LANSWDW69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.3	144.4	143	100.9	783	27226 11HIGB 69.0	27238 11LANSWDW69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	783	27226 11HIGB 69.0	27238 11LANSWDW69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	23	111.8	783	27226 11HIGB 69.0	27238 11LANSWDW69.0
27051	11ADAMS	138	27148 11TYRONE	138	1	98.5	97.3	97	101.6	784	27226 11HIGB 69.0	27252 11MED CN69.0
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	1	144.3	144.4	143	100.9	784	27226 11HIGB 69.0	27252 11MED CN69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	19	114.8	784	27226 11HIGB 69.0	27252 11MED CN69.0

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loadings	Ncon	Contingency		
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	784	27226 1HIGB B69.0	27252 11MED CN69.0	1
27051	11ADAMS	138 27148	11TYRONE	138 1	101.1	97.3	97.3	97	104.2	785	27226 1HIGB B69.0	27289 11TYRONE69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.2	144.4	144.4	143	100.8	785	27226 1HIGB B69.0	27289 11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	115	785	27226 1HIGB B69.0	27289 11TYRONE69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.7	25.7	23	111	785	27226 1HIGB B69.0	27289 11TYRONE69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	786	27228 1HILLSI69.0	27232 11INDIAN69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	786	27228 1HILLSI69.0	27232 11INDIAN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	786	27228 1HILLSI69.0	27232 11INDIAN69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	786	27228 1HILLSI69.0	27232 11INDIAN69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	787	27228 1HILLSI69.0	27270 11RIVR Q69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	787	27228 1HILLSI69.0	27270 11RIVR Q69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	787	27228 1HILLSI69.0	27270 11RIVR Q69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	787	27228 1HILLSI69.0	27270 11RIVR Q69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.2	97.3	97.3	97	100.3	788	27230 1HOPEWL69.0	27286 11SWEETH69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	788	27230 1HOPEWL69.0	27286 11SWEETH69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	788	27230 1HOPEWL69.0	27286 11SWEETH69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	788	27230 1HOPEWL69.0	27286 11SWEETH69.0	1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	789	27231 11IMBODE69.0	27248 11LYNCH 69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	789	27231 11IMBODE69.0	27248 11LYNCH 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	789	27231 11IMBODE69.0	27248 11LYNCH 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	789	27231 11IMBODE69.0	27248 11LYNCH 69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	790	27231 11IMBODE69.0	27268 11POCKET69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	790	27231 11IMBODE69.0	27268 11POCKET69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	790	27231 11IMBODE69.0	27268 11POCKET69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	790	27231 11IMBODE69.0	27268 11POCKET69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	791	27232 11INDIAN69.0	27259 11OHIO C69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	791	27232 11INDIAN69.0	27259 11OHIO C69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	791	27232 11INDIAN69.0	27259 11OHIO C69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112	791	27232 11INDIAN69.0	27259 11OHIO C69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.6	97.3	97.3	97	100.6	792	27233 11KENTON69.0	27280 11SHARON69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	792	27233 11KENTON69.0	27280 11SHARON69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.7	792	27233 11KENTON69.0	27280 11SHARON69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	792	27233 11KENTON69.0	27280 11SHARON69.0	1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.4	97.3	97.3	97	100.4	793	27235 11KU PK 69.0	27265 11PINEVI69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	793	27235 11KU PK 69.0	27265 11PINEVI69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	793	27235 11KU PK 69.0	27265 11PINEVI69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.8	25.7	25.7	23	112	793	27235 11KU PK 69.0	27265 11PINEVI69.0	1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	794	27235 11KU PK 69.0	27265 11PINEVI69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	794	27235 11KU PK 69.0	27265 11PINEVI69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	794	27235 11KU PK 69.0	27265 11PINEVI69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	794	27235 11KU PK 69.0	27265 11PINEVI69.0	1
27051	11ADAMS	138 27148	11TYRONE	138 1	97.3	97.3	97.3	97	100.3	795	27235 11KU PK 69.0	27300 11WOFFOR69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	795	27235 11KU PK 69.0	27300 11WOFFOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.9	795	27235 11KU PK 69.0	27300 11WOFFOR69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	795	27235 11KU PK 69.0	27300 11WOFFOR69.0	EQ
27051	11ADAMS	138 27148	11TYRONE	138 1	97.2	97.3	97.3	97	100.3	796	27236 11KY DAM69.0	27269 11PRINCE69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	796	27236 11KY DAM69.0	27269 11PRINCE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.5	796	27236 11KY DAM69.0	27269 11PRINCE69.0	EQ

**	From bus	**	**	To bus	**	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.8	796	27236 1IKY DAM69.0	27269	11PRINCE69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	97.3	97.3	97	100.3	797	27236 1IKY DAM69.0	27276	11S PADU69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.4	144.4	143	143	100.9	797	27236 1IKY DAM69.0	27276	11S PADU69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	19	114.8	797	27236 1IKY DAM69.0	27276	11S PADU69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	23	111.9	797	27236 1IKY DAM69.0	27276	11S PADU69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	97.4	97.3	97	100.4	798	27237 11LANCS 69.0	27331	11E BERN69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	144.3	144.4	143	143	100.9	798	27237 11LANCS 69.0	27331	11E BERN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.9	21.8	21.8	19	115.2	798	27237 11LANCS 69.0	27331	11E BERN69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	25.7	25.7	23	111.9	799	27237 11LANCS 69.0	27331	11E BERN69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	97.1	97.3	97	97	100.2	799	27238 11ANSDW69.0	27247	11LOUD B69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	144.4	144.4	143	143	100.9	799	27238 11ANSDW69.0	27247	11LOUD B69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	21.8	21.8	21.8	19	114.8	799	27238 11ANSDW69.0	27247	11LOUD B69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	25.7	25.7	23	111.9	800	27238 11ANSDW69.0	27247	11LOUD B69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	97.1	97.3	97	97	100.1	801	27239 11EBANO69.0	27285	11SPRNGF69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	144.4	144.4	143	143	101	801	27239 11EBANO69.0	27285	11SPRNGF69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	22.1	22.5	21.8	19	116.1	801	27239 11EBANO69.0	27285	11SPRNGF69.0	1
27051	11ADAMS	138	27148 11TYRONE	138	1	23.8	19.7	23	103.4	801	27239 11EBANO69.0	27285	11SPRNGF69.0	1
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	21.4	21.8	21.8	19	112.4	801	27239 11EBANO69.0	27285	11SPRNGF69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	27.5	25.7	25.7	23	119.6	801	27239 11EBANO69.0	27285	11SPRNGF69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.3	97.3	97	97	100.3	802	27239 11EBANO69.0	27285	11SPRNGF69.0	1
27051	11ADAMS	138	27148 11TYRONE	138	1	144.3	144.4	143	100.9	802	27239 11EBANO69.0	27288	11TAYLRC69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	22.6	21.8	21.8	19	118.7	802	27239 11EBANO69.0	27288	11TAYLRC69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	24.9	25.7	25.7	23	108.2	802	27239 11EBANO69.0	27288	11TAYLRC69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.2	97.3	97	97	100.3	803	27240 11EITCH69.0	27259	11OHIO C69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	144.4	144.4	143	101	803	27240 11EITCH69.0	27259	11OHIO C69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	21.6	21.8	21.8	19	113.5	803	27240 11EITCH69.0	27259	11OHIO C69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.8	25.7	25.7	23	112.3	803	27240 11EITCH69.0	27259	11OHIO C69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	98.4	97.3	97	97	101.4	804	27241 11LEX PL69.0	27246	11LOUD A69.0	1
27051	11ADAMS	138	27148 11TYRONE	138	1	144.4	144.4	143	101	804	27241 11LEX PL69.0	27246	11LOUD A69.0	1
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	21.8	21.8	21.8	19	114.7	804	27241 11LEX PL69.0	27246	11LOUD A69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.8	804	27241 11LEX PL69.0	27246	11LOUD A69.0	1
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.2	97.3	97	97	100.2	805	27241 11LEX PL69.0	27252	11MED CN69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	144.4	144.4	143	100.9	805	27241 11LEX PL69.0	27252	11MED CN69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	21.8	21.8	21.8	19	114.8	805	27241 11LEX PL69.0	27252	11MED CN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.9	805	27241 11LEX PL69.0	27252	11MED CN69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	99.6	97.3	97	97	102.7	806	27241 11LEX PL69.0	27266	11PISGAH69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	144.3	144.4	143	100.9	806	27241 11LEX PL69.0	27266	11PISGAH69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	21.8	21.8	21.8	19	114.9	806	27241 11LEX PL69.0	27266	11PISGAH69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.6	806	27241 11LEX PL69.0	27266	11PISGAH69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.7	97.3	97	97	100.6	807	27241 11LEX PL69.0	27266	11PISGAH69.0	EQ
27051	11ADAMS	138	27148 11TYRONE	138	1	144.4	144.4	143	101	807	27241 11LEX PL69.0	27327	11BOURBN69.0	EQ
27161	11AIKEN	69.0	27253 11MIDDLT69.0	1	21.8	21.8	21.8	19	114.8	807	27241 11LEX PL69.0	27327	11BOURBN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	25.7	25.7	25.7	23	111.9	807	27241 11LEX PL69.0	27327	11BOURBN69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN69.0	1	97.2	97.3	97	97	100.2	808	27243 11LX REB69.0	27292	11W IRVI69.0	EQ

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	808	27243	11LK	REB69.0	27292	11W	IRVI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	808	27243	11LK	REB69.0	27292	11W	IRVI69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	808	27243	11LK	REB69.0	27292	11W	IRVI69.0	EQ
27051	11ADAMS 138	27148	11TYRONE 138	1	97.5	97.3	97	100.5	809	27244	11SC	TAP69.0	27282	11SHLBYV69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.8	19	114.2	809	27244	11SC	TAP69.0	27282	11SHLBYV69.0	EQ	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.4	25.7	23	110.3	809	27244	11SC	TAP69.0	27282	11SHLBYV69.0	EQ	
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	810	27245	11LONDON69.0	27267	11PITTSB69.0	1		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	810	27245	11LONDON69.0	27267	11PITTSB69.0	1		
27230	11HOPEWEL69.0	29399	20LAURLC69.0	1	76.9	46.4	72	106.8	810	27245	11LONDON69.0	27267	11PITTSB69.0	1		
27235	11KU PK 69.0	27265	11PINEVI69.0	1	88.1	72.8	82	107.5	810	27245	11LONDON69.0	27267	11PITTSB69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	810	27245	11LONDON69.0	27267	11PITTSB69.0	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.6	25.7	23	111.5	810	27245	11LONDON69.0	27267	11PITTSB69.0	1		
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	811	27245	11LONDON69.0	27267	11PITTSB69.0	1		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	811	27245	11LONDON69.0	27286	11SWEETH69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	811	27245	11LONDON69.0	27286	11SWEETH69.0	EQ		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	811	27245	11LONDON69.0	27286	11SWEETH69.0	EQ		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.3	144.4	143	100.9	812	27246	11LOUD	A69.0	27247	11LOUD	B69.0	1
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	812	27246	11LOUD	A69.0	27247	11LOUD	B69.0	1
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	812	27246	11LOUD	A69.0	27247	11LOUD	B69.0	1
27051	11ADAMS 138	27148	11TYRONE 138	1	97.5	97.3	97	100.5	813	27246	11LOUD	A69.0	27327	11BOURBN69.0	EQ	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	813	27246	11LOUD	A69.0	27327	11BOURBN69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	813	27246	11LOUD	A69.0	27327	11BOURBN69.0	EQ	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	813	27246	11LOUD	A69.0	27327	11BOURBN69.0	EQ	
27051	11ADAMS 138	27148	11TYRONE 138	1	97.4	97.3	97	100.4	814	27247	11LOUD	B69.0	27299	11WINCHS69.0	EQ	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	101	814	27247	11LOUD	B69.0	27299	11WINCHS69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	814	27247	11LOUD	B69.0	27299	11WINCHS69.0	EQ	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	814	27247	11LOUD	B69.0	27299	11WINCHS69.0	EQ	
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	815	27248	11YNCH	69.0	27268	11POCKET69.0	EQ	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	144.4	144.4	143	100.9	815	27248	11YNCH	69.0	27268	11POCKET69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	815	27248	11YNCH	69.0	27268	11POCKET69.0	EQ	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	815	27248	11YNCH	69.0	27268	11POCKET69.0	EQ	
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.2	816	27249	11YNDON69.0	27250	11LYND	S69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	816	27249	11YNDON69.0	27250	11LYND	S69.0	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.7	25.7	23	111.9	816	27249	11YNDON69.0	27250	11LYND	S69.0	1	
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	816	27249	11YNDON69.0	27250	11LYND	S69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	155.5	144.4	143	108.7	817	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	817	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	817	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	817	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	155.4	144.4	143	108.7	818	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	818	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	818	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
27051	11ADAMS 138	27148	11TYRONE 138	1	97.3	97.3	97	100.3	818	27249	11YNDON69.0	27253	11MIDDLT69.0	1		
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	155.4	144.4	143	108.7	819	27250	11YND	S69.0	27253	11MIDDLT69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.9	819	27250	11YND	S69.0	27253	11MIDDLT69.0	1	
29411	20LILYJT69.0	29634	20WOODLN69.0	1	25.8	25.7	23	112	819	27250	11YND	S69.0	27253	11MIDDLT69.0	1	
27051	11ADAMS 138	27148	11TYRONE 138	1	97.2	97.3	97	100.3	820	27250	11YND	S69.0	27263	11OXMOOR69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT69.0	1	158.5	144.4	143	110.9	820	27250	11YND	S69.0	27263	11OXMOOR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	19	114.8	820	27250	11YND	S69.0	27263	11OXMOOR69.0	1	

**	From bus	**	**	To bus	**	c	ContMVA	BaseFlow	Rating	Loading ³	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	820	27250 11LYND S69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.7	97.7	97.3	97	100.7	821	27254 11MILLRS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	101	821	27254 11MILLRS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	821	27254 11MILLRS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	112	821	27254 11MILLRS69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	822	27254 11MILLRS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	822	27254 11MILLRS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	822	27254 11MILLRS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	822	27254 11MILLRS69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	823	27254 11MILLRS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	823	27254 11MILLRS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	823	27254 11MILLRS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	823	27254 11MILLRS69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	824	27255 11MORGNF69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.3	824	27255 11MORGNF69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	824	27255 11MORGNF69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	824	27255 11MORGNF69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	825	27255 11MORGNF69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	825	27255 11MORGNF69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	825	27255 11MORGNF69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	825	27255 11MORGNF69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	826	27255 11MORGNF69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	826	27255 11MORGNF69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	826	27255 11MORGNF69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	826	27255 11MORGNF69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	827	27256 11MUD LA69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	827	27256 11MUD LA69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	827	27256 11MUD LA69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	827	27256 11MUD LA69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	828	27257 11NEBO
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	828	27257 11NEBO
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	828	27257 11NEBO
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	828	27257 11NEBO
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	829	27257 11NEBO
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	829	27257 11NEBO
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	829	27257 11NEBO
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	829	27257 11NEBO
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	830	27264 11PADDYS69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.9	144.4	144.4	143	101.4	830	27264 11PADDYS69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.6	830	27264 11PADDYS69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.7	830	27264 11PADDYS69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	831	27265 11PINEVI69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	831	27265 11PINEVI69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	831	27265 11PINEVI69.0
29411	20LILYJ69.0	29634	20WOODLN69.0	1	1	25.7	25.7	25.7	23	111.9	831	27265 11PINEVI69.0
27051	11ADAMS	138 27148	11TYRONE	138	1	97.3	97.3	97.3	97	100.3	832	27265 11PINEVI69.0
27161	11AIKEN	69.0 27253	11MIDDLT69.0	1	1	144.4	144.4	144.4	143	100.9	832	27265 11PINEVI69.0
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	1	21.8	21.8	21.8	19	114.8	832	27265 11PINEVI69.0

**	From bus	**	**	To bus	**	C	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	832	27265
27051	11ADAMS	138	27148	11TYRONE 138	1	100	97.3	97.3	97	103.1	833	27266
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	833	27266
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.9	833	27266
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.6	25.6	25.6	23	111.2	833	27266
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	834	27267
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	834	27267
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.7	834	27267
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	834	27267
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	835	27268
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	835	27268
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	835	27268
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	835	27268
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	835	27268
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	836	27269
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	836	27269
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	836	27269
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	837	27269
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	837	27269
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	837	27269
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	837	27269
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	838	27270
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	838	27270
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	838	27270
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	838	27270
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	839	27271
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	839	27271
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.9	839	27271
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	839	27271
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	840	27271
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	100.9	840	27271
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	840	27271
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	840	27271
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	841	27272
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.5	144.4	144.4	143	101	841	27272
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.8	841	27272
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	841	27272
27051	11ADAMS	138	27148	11TYRONE 138	1	97.3	97.3	97.3	97	100.3	842	27272
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.4	144.4	144.4	143	101	842	27272
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.7	842	27272
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.7	25.7	25.7	25.7	23	111.9	842	27272
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	146	144.4	144.4	143	102.1	843	27282
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.8	21.8	21.8	21.8	19	114.5	843	27282
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.6	25.6	25.6	25.6	23	111.1	843	27282
29359	20HODGEN69.0	29419	20MAGNOL69.0	1	21.7	21.7	21.7	21.7	19	114.3	844	27282
29411	20LILYJ69.0	29634	20WOODLN69.0	1	25.5	25.5	25.5	25.5	23	110.7	844	27282
27051	11ADAMS	138	27148	11TYRONE 138	1	97.5	97.3	97.3	97	100.5	845	27290
27161	11AIKEN	69.0	27253	11MIDDLT69.0	1	144.3	144.4	144.4	143	100.9	845	27290

** From bus	** To bus	** ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	845	27290 11W CLIF69.0
29411 20LILY69.0	29634 20WOODLN69.0	25.7	25.7	23	111.6	845	27290 11W CLIF69.0
27051 11ADAMS 138	27148 11TYRONE 138	97.3	97.3	97	100.3	846	27296 11WHTC T69.0
27161 11AIKEN 69.0	27253 11MIDDLT69.0	144.4	144.4	143	100.9	846	27296 11WHTC T69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.8	846	27296 11WHTC T69.0
29411 20LILY69.0	29634 20WOODLN69.0	25.7	25.7	23	111.9	846	27296 11WHTC T69.0
27161 11AIKEN 69.0	27253 11MIDDLT69.0	164	144.4	143	114.7	847	27319 11COLLIN69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.6	847	27319 11COLLIN69.0
29411 20LILY69.0	29634 20WOODLN69.0	25.6	25.7	23	111.5	847	27319 11COLLIN69.0
27051 11ADAMS 138	27148 11TYRONE 138	97.3	97.3	97	100.3	848	27322 11BLUJELI69.0
27161 11AIKEN 69.0	27253 11MIDDLT69.0	144.4	144.4	143	101	848	27322 11BLUJELI69.0
29359 20HODGEN69.0	29419 20MAGNOL69.0	21.8	21.8	19	114.9	848	27322 11BLUJELI69.0
29411 20LILY69.0	29634 20WOODLN69.0	25.7	25.7	23	111.9	848	27322 11BLUJELI69.0

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Cc: "Jerome Fohey" <JFohey@midwestiso.org>
Sent: Thursday, June 19, 2003 5:25 PM
Attach: 0619G243 Progress Report.doc
Subject: Project G243- Progress report 2

Attached, please find the second set of results for Thermal and Short Circuit Analysis of project G243 (120MW, Estill co KY). We are not planning to set up a conference call until we have stability analysis results.

Please send me your comments on the attached results no later than Tuesday June 17th.

Thanks
Diwakar

Diwakar Tewari
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<<0619G243 Progress Report.doc>>

Project G243 - Progress Report

The results published earlier for this project showed thermal overloads at the injection facilities because of the new generator of 120MW. Possible solutions to mitigate these overloads were discussed in the conference call held on June 13th. Based on the suggestions of the ad hoc group, the model was revised by:

- Including the 69kV detail near the West Irvine substation
- Implementing the network changes, submitted by EKPC, in their area
- Double circuiting the 161 kV line from W.Irvine to W. Irvine tap

Thermal analysis was repeated on the revised model and the results were presented in this document. Results show that double circuiting the line from W. Irvine to W. Irvine tap reduced the overloading at the transformer from 215% to 125%. This report also presents some upgrade options to be considered in order to connect the new generator to the grid without causing any thermal overloads near the interconnection point.

Short Circuit analysis was also performed after implementing the system upgrade at West Irvine. The ad hoc group will determine, after reviewing the results, whether any breaker replacements are required for this interconnection or not.

Thermal Analysis

Base Case

2001 series 2007 summer peak NERC MMWG base case

N-1 contingency analysis

Two sets of simulations were run with and without modeling the new generator in the base case. Study is run using PTI's MUST AC contingency analysis. After comparing the overloading level before and after including G243, the only overload identified as being considerably worsened by G243 is the following (for both dispatching mode – to north and to south):

Overloaded element	The transformer at West Irvine. (bus 27044- bus 27292)
Emergency rating	56 MVA
Overload level	125%
Contingency	27045 West Irvine Tap – 27023 Delvinta

N-2 Contingency analysis

N-2 contingency analysis is done with contingencies on elements above 100 kV. 1681 contingencies are selected as the most severe ones (severity index > 500) from DC contingency analysis. An AC analysis was then performed using these severe contingencies. The one element identified as being considerably worsened by G243 is the following (for both dispatching mode – to north and to south):

Overloaded element	The transformer at West Irvine. (bus 27044- bus 27292)
Emergency rating	56 MVA
Overload level	215%
Contingency	Db1:11DELVIN-11WI TAP + 11LR TAP-11WI TAP
	Db1:11DELVIN-11WI TAP + 11LR TAP 161-11LR TAP 138
	Db1:11W IRVI-11WI TAP ckt1 + 11W IRVI-11WI TAP ckt 2

FCITC analysis result

FCITC stands for First Contingency Incremental Transfer Capability. Transfers were simulated from Generator to North and Generator to South. Subsystem North consists of control areas in and north of Kentucky. Subsystem south consists of control areas in and south of Kentucky.

The result shows that by considering the overloading scenario in N-1 contingency analysis, the maximum output of G243 is about 49 MW.

A) Generator to North transfer

Study transfer level - 500.0 MW. Total violations: 5181

First violation - 60.0 MW.

Study transfer. From ESTILL_GEN To NORTH . Transfer level - 500.0 MW

AC FCITC	DC FCITC	Delta L: Limiting constraint FCITC C: Contingency description	PreShft Ncon	PostShf MVA/MW	AC_TDF MVA/MW	DC_TDF Rating	Average
49.4	60.0	-10.6 L:27044 11W IRVI 161 27292 11W IRVI69.0 1 C:27023 11DELVIN 161 27045 11WI TAP 161 1 411 Open 27023 11DELVIN 161 27045 11WI TAP 161 1	46.2	56.1	56.0	0.20099	0.19844
-161.6	98.8	-260.4 L:27230 11HOPEWL69.0 29399 20LAURLC69.0 1 C:27245 11LONDON69.0 27267 11PITTSB69.0 1 812 Open 27245 11LONDON69.0 27267 11PITTSB69.0 1	77.6	72.5	72.0	0.03138	-0.03447
119.6	135.3	-15.7 L:27023 11DELVIN 161 27045 11WI TAP 161 1 C:29387 20JKSMIT 138 29501 20POWELL 138 1 219 Open 29387 20JKSMIT 138 29501 20POWELL 138 1	151.5	200.7	201.0	0.41130	-0.40363
181.7	181.6	0.1 L:27088 11FAWKES 138 27334 11FAWK T 138 1 C:27023 11DELVIN 161 27045 11WI TAP 161 1 411 Open 27023 11DELVIN 161 27045 11WI TAP 161 1	102.4	165.0	165.0	0.34480	-0.35459
180.5	193.2	-12.7 L:27023 11DELVIN 161 27045 11WI TAP 161 1 C:27002 11ALCALD 345 27004 11BRWN N 345 1 359 Open 27002 11ALCALD 345 27004 11BRWN N 345 1	125.8	200.8	201.0	0.41564	-0.41133
182.2	193.8	-11.6 L:27023 11DELVIN 161 27045 11WI TAP 161 1 C:29500 20POWELL 161 29501 20POWELL 138 1 302 Open 29500 20POWELL 161 29501 20POWELL 138 1	131.4	201.0	201.0	0.38170	-0.37867
188.2	197.2	-9.0 L:27023 11DELVIN 161 27045 11WI TAP 161 1 Base Case	98.1	176.0	176.0	0.41384	-0.41371
168.3	199.1	-30.8 L:27044 11W IRVI 161 27292 11W IRVI69.0 1 C:27110 11LR TAP 138 27111 11LK REB 138 1 623 Open 27110 11LR TAP 138 27111 11LK REB 138 1	38.7	56.0	56.0	0.10278	0.10990
168.3	199.6	-31.3 L:27044 11W IRVI 161 27292 11W IRVI69.0 1 C:27111 11LK REB 138 27243 11LK REB69.0 1 625 Open 27111 11LK REB 138 27243 11LK REB69.0 1	38.7	56.0	56.0	0.10272	0.10990
199.1	212.3	-13.3 L:27088 11FAWKES 138 27334 11FAWK T 138 1 C:27110 11LR TAP 138 27111 11LK REB 138 1 623 Open 27110 11LR TAP 138 27111 11LK REB 138 1	119.3	165.0	165.0	0.22962	-0.24383

B) Generator to South transfer

Study transfer level - 500.0 MW. Total violations: 5201

First violation - 59.7 MW.

Study transfer. From ESTILL_GEN To SOUTH . Transfer level - 500.0 MW

AC FCITC	DC FCITC	Delta L: Limiting constraint FCITC C: Contingency description	PreShft Ncon	PostShf MVA/MW	AC_TDF MVA/MW	DC_TDF Rating	Average
49.1	59.7	-10.6 L:27044 11W IRVI 161 27292 11W IRVI69.0 1 C:27023 11DELVIN 161 27045 11WI TAP 161 1 411 Open 27023 11DELVIN 161 27045 11WI TAP 161 1	46.2	56.1	56.0	0.20211	0.19957
-150.2	91.8	-242.0 L:27230 11HOPEWL69.0 29399 20LAURLC69.0 1 C:27245 11LONDON69.0 27267 11PITTSB69.0 1 812 Open 27245 11LONDON69.0 27267 11PITTSB69.0 1	77.6	72.6	72.0	0.03324	-0.03707
117.4	132.1	-14.7 L:27023 11DELVIN 161 27045 11WI TAP 161 1 C:29387 20JKSMIT 138 29501 20POWELL 138 1 219 Open 29387 20JKSMIT 138 29501 20POWELL 138 1	151.5	201.0	201.0	0.42097	-0.41353
181.0	181.1	-0.1 L:27088 11FAWKES 138 27334 11FAWK T 138 1 C:27023 11DELVIN 161 27045 11WI TAP 161 1 411 Open 27023 11DELVIN 161 27045 11WI TAP 161 1	102.4	165.0	165.0	0.34611	-0.35555
176.0	187.8	-11.9 L:27023 11DELVIN 161 27045 11WI TAP 161 1 C:27002 11ALCALD 345 27004 11BRWN N 345 1 359 Open 27002 11ALCALD 345 27004 11BRWN N 345 1	125.8	201.0	201.0	0.42734	-0.42310
177.1	188.4	-11.3 L:27023 11DELVIN 161 27045 11WI TAP 161 1 C:29500 20POWELL 161 29501 20POWELL 138 1 302 Open 29500 20POWELL 161 29501 20POWELL 138 1	131.4	201.0	201.0	0.39283	-0.38960
184.5	193.2	-8.8 L:27023 11DELVIN 161 27045 11WI TAP 161 1 Base Case	98.1	175.9	176.0	0.42138	-0.42218
170.3	200.3	-30.1 L:27044 11W IRVI 161 27292 11W IRVI69.0 1 C:27110 11LR TAP 138 27111 11LK REB 138 1 623 Open 27110 11LR TAP 138 27111 11LK REB 138 1	38.7	56.1	56.0	0.10217	0.10923
170.3	200.8	-30.5 L:27044 11W IRVI 161 27292 11W IRVI69.0 1 C:27111 11LK REB 138 27243 11LK REB69.0 1 625 Open 27111 11LK REB 138 27243 11LK REB69.0 1	38.7	56.1	56.0	0.10212	0.10923
199.9	213.4	-13.5 L:27088 11FAWKES 138 27334 11FAWK T 138 1 C:27110 11LR TAP 138 27111 11LK REB 138 1 623 Open 27110 11LR TAP 138 27111 11LK REB 138 1	119.3	165.0	165.0	0.22896	-0.24256

Proposed System Upgrades

Based on the results of Thermal Analysis, following are the recommendations to mitigate the thermal overloading of the transformer at West Irvine:

- Option 1:** Double circuit the line from W.Irvine to W.Irvine tap and upgrade the 161/69kV transformer at W.Irvine
- Option 2:** Double circuit the line from W.Irvine to W.Irvine tap and add a parallel 161/69kV transformer at W.Irvine
- Option 3:** Double circuit the line from W.Irvine to W.Irvine tap and develop an operating guideline to run the generator at a lower output level, under the contingency of the branch W.Irvine tap - Delvinta.

Estimated cost for these system upgrades (based on rule-of-thumb estimate) will be presented in the final report.

Short Circuit Analysis

Base Case

LGEE's in-house model for Short Circuit Analysis.

Project Specific Changes

1. Project G031, 95MW in Livingston county, KY was added
2. Project G032, 95MW in Hancock county, KY was added.
3. Trimble county units 2,7,8,9,10 and associated upgrades were added

Short Circuit Simulations

The following scenarios were simulated to evaluate the effect of the new generator

- A) Base Case
- B) Study case (with G243 modeled)
- C) Base case with out new Trimble unit and upgrades
- D) Study case without new Trimble unit and upgrades

Comparison of A) and B) represents the scenario in which G243 connects after G218. Comparison of C) and D) represents the scenario when G243 connects before G218.

Results

Notation

(X)_I3 : Fault current in Amps under 3-phase fault in scenario (X)

(X)_I1: Fault current in Amps under Single line to ground fault in scenario (X)

$$\%I = \frac{\{(B)_I\} - \{(A)_I\}}{(A)_I} * 100$$

Table 1. Comparison of scenarios (A) and (B)

Bus.	Bus name	Area	(A)_I3	(B)_I3	%I3	(A)_I1	(B)_I1	%I1
438	W IRVINE 161	LGEE	5244	27768.7	429.5	4471.2	24083.4	438.6
439	W IRVN T 161	LGEE	5830.9	23140.9	296.9	5048.7	18745	271.3
435	LK REB T 161	LGEE	6566.4	10820.7	64.8	6562.3	9509.8	44.9
434	DELVINTA 161	LGEE	6715	10246.7	52.6	5888.3	7934.6	34.8
57877	BEATTYVJ 161	EKPC	5795.7	7916.4	36.6	5163.5	6350	23.0
458	LK REB T 138	LGEE	10935.7	14759.3	35.0	10959.4	13769.4	25.6
58833	GRNHALLJ 161	EKPC	5963.8	7956.8	33.4	5077.6	6128.6	20.7
58825	GRNHALL 161	EKPC	5739.2	7561.9	31.8	4806.7	5738	19.4
593	W IRVINE69.0	LGEE	6713.9	8799.4	31.1	6573.9	8831.8	34.3
60569	UNION CY 138	EKPC	10342.8	13464.3	30.2	9913.6	11958.5	20.6
459	LK REBA 138	LGEE	9558.8	12362.6	29.3	9319.3	11215.4	20.3
1906	DARKHOLL69.0	LGEE	6057.3	7655.3	26.4	5378.8	6722.1	25.0
1055	RICE TAP69.0	LGEE	6334.3	7893.4	24.6	5390.6	6549.8	21.5
1054	RICE STA69.0	LGEE	6297.4	7836.9	24.4	5348.2	6487.7	21.3
531	IRVINE 69.0	LGEE	5606.8	6908.8	23.2	4686.9	5621.5	19.9
452	FAWK TAP 138	LGEE	13644.7	16695.5	22.4	13769.7	15816.3	14.9
58569	FAWKESEK 138	EKPC	13673.7	16715.8	22.2	13811.8	15854.2	14.8
455	FAWKS KU 138	LGEE	13679.8	16720.8	22.2	13812.9	15853.9	14.8
60557	TYNER 161	EKPC	5595	6838.6	22.2	4989	5676.9	13.8
59133	JKSMITH 138	EKPC	11800	14100.4	19.5	14639.4	16938.7	15.7
539	LK REBA 69.0	LGEE	12596.2	14837.7	17.8	13705.6	15552.2	13.5
59917	POWELLCO 161	EKPC	4803.4	5638	17.4	4471.9	4944.5	10.6
589	WACO 69.0	LGEE	6824.9	7934.4	16.3	5148.8	5683.8	10.4
60485	THREEFKJ 138	EKPC	12097.2	14031.9	16.0	11178.6	12248.8	9.6
509	ESTL STO69.0	LGEE	4558.5	5266.7	15.5	3394.9	3751.6	10.5
59921	POWELLCO 138	EKPC	6505	7497.8	15.3	6053.2	6614.8	9.3

Table 2 Comparison of scenarios (C) and (D)

Bus	Bus name	Area	(C) I3	(D) I3	%I3	(C) I1	(D) I1	%I1
438	W IRVINE 161	LGEE	5242.3	27766.9	429.7	4470.4	24082.5	438.7
439	W IRVN T 161	LGEE	5828.9	23139	297.0	5047.7	18744.2	271.3
435	LK REB T 161	LGEE	6563.5	10818.6	64.8	6560.4	9508.7	44.9
434	DELVINTA 161	LGEE	6712.7	10245.5	52.6	5887.1	7934.1	34.8
57877	BEATTYVJ 161	EKPC	5793.9	7915.5	36.6	5162.6	6349.7	23.0
458	LK REB T 138	LGEE	10928.4	14753.2	35.0	10954.6	13765.8	25.7
58833	GRNHALLJ 161	EKPC	5962.1	7956	33.4	5076.7	6128.2	20.7
58825	GRNHALL 161	EKPC	5737.6	7561.2	31.8	4805.9	5737.7	19.4
593	W IRVINE69.0	LGEE	6712.7	8799.1	31.1	6573.1	8831.5	34.4
60569	UNION CY 138	EKPC	10336.4	13459.1	30.2	9909.6	11955.8	20.6
459	LK REBA 138	LGEE	9553.2	12358.3	29.4	9315.7	11213	20.4
1906	DARKHOLL69.0	LGEE	6056.4	7655.1	26.4	5378.3	6722	25.0
1055	RICE TAP69.0	LGEE	6333.2	7893.1	24.6	5390.1	6549.6	21.5
1054	RICE STA69.0	LGEE	6296.4	7836.6	24.5	5347.7	6487.5	21.3
531	IRVINE 69.0	LGEE	5606	6908.6	23.2	4686.6	5621.4	19.9
452	FAWK TAP 138	LGEE	13632.5	16684.8	22.4	13761.5	15809.9	14.9
58569	FAWKESEK 138	EKPC	13661.5	16705	22.3	13803.5	15847.7	14.8
455	FAWKS KU 138	LGEE	13667.5	16710	22.3	13804.5	15847.4	14.8
60557	TYNER 161	EKPC	5593.5	6837.9	22.2	4988.2	5676.6	13.8
59133	JKSMITH 138	EKPC	11792	14094	19.5	14631.1	16932.6	15.7
539	LK REBA 69.0	LGEE	12591.2	14834.4	17.8	13701.6	15549.8	13.5
59917	POWELLCO 161	EKPC	4802.1	5637.2	17.4	4471.1	4944.1	10.6
589	WACO 69.0	LGEE	6823.6	7933.8	16.3	5148.3	5683.6	10.4
60485	THREEFKJ 138	EKPC	12087.3	14023.6	16.0	11172.9	12244.6	9.6
509	ESTL STO69.0	LGEE	4558	5266.6	15.5	3394.7	3751.5	10.5
59921	POWELLCO 138	EKPC	6502.8	7496.4	15.3	6051.9	6614	9.3

The results shown in the table below represent a comparison of the effect of G243 when connected in 2006 (before G218) as opposed to the interconnection in 2007 (after G218).

In the table below:

2007_I: fault current in amps when G243 connected in 2007

Diff_I = 2006_I - 2007_I

= Incremental impact when G243 connected to the grid before G218

Table 3 A comparison of interconnection in 2007 versus that in 2006

Bus.	Bus name	Area	2007_I3	2006_I3	Diff_I3	2007_I1	2006_I1	Diff_I1
438	W IRVINE 161	LGEE	27768.7	27766.9	-1.8	24083.4	24082.5	-0.9
439	W IRVN T 161	LGEE	23140.9	23139	-1.9	18745	18744.2	-0.8
435	LK REB T 161	LGEE	10820.7	10818.6	-2.1	9509.8	9508.7	-1.1
434	DELVINTA 161	LGEE	10246.7	10245.5	-1.2	7934.6	7934.1	-0.5
57877	BEATTYVJ 161	EKPC	7916.4	7915.5	-0.9	6350	6349.7	-0.3
458	LK REB T 138	LGEE	14759.3	14753.2	-6.1	13769.4	13765.8	-3.6
58833	GRNHALLJ 161	EKPC	7956.8	7956	-0.8	6128.6	6128.2	-0.4
58825	GRNHALL 161	EKPC	7561.9	7561.2	-0.7	5738	5737.7	-0.3
593	W IRVINE69.0	LGEE	8799.4	8799.1	-0.3	8831.8	8831.5	-0.3
60569	UNION CY 138	EKPC	13464.3	13459.1	-5.2	11958.5	11955.8	-2.7
459	LK REBA 138	LGEE	12362.6	12358.3	-4.3	11215.4	11213	-2.4
1906	DARKHOLL69.0	LGEE	7655.3	7655.1	-0.2	6722.1	6722	-0.1
1055	RICE TAP69.0	LGEE	7893.4	7893.1	-0.3	6549.8	6549.6	-0.2
1054	RICE STA69.0	LGEE	7836.9	7836.6	-0.3	6487.7	6487.5	-0.2
531	IRVINE 69.0	LGEE	6908.8	6908.6	-0.2	5621.5	5621.4	-0.1
452	FAWK TAP 138	LGEE	16695.5	16684.8	-10.7	15816.3	15809.9	-6.4
58569	FAWKESEK 138	EKPC	16715.8	16705	-10.8	15854.2	15847.7	-6.5
455	FAWKS KU 138	LGEE	16720.8	16710	-10.8	15853.9	15847.4	-6.5
60557	TYNER 161	EKPC	6838.6	6837.9	-0.7	5676.9	5676.6	-0.3
59133	JKSMITH 138	EKPC	14100.4	14094	-6.4	16938.7	16932.6	-6.1
539	LK REBA 69.0	LGEE	14837.7	14834.4	-3.3	15552.2	15549.8	-2.4
59917	POWELLCO 161	EKPC	5638	5637.2	-0.8	4944.5	4944.1	-0.4
589	WACO 69.0	LGEE	7934.4	7933.8	-0.6	5683.8	5683.6	-0.2
60485	THREEFKJ 138	EKPC	14031.9	14023.6	-8.3	12248.8	12244.6	-4.2
509	ESTL STO69.0	LGEE	5266.7	5266.6	-0.1	3751.6	3751.5	-0.1
59921	POWELLCO 138	EKPC	7497.8	7496.4	-1.4	6614.8	6614	-0.8

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Sent: Thursday, July 03, 2003 4:50 PM
Attach: Op1-2.xls; Th_Stab.doc
Subject: Project G243 - Interconnection Evaluation Study Results

Attached, please find all the results for Project G243 Interconnection Evaluation Study. First draft of the report will be sent out by the end of next week. A conference call will be set up to discuss the draft report and the study results.

Let me know if you have any comments on the attached results.

Thanks

Diwakar

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<<Op1-2.xls>> <<Th_Stab.doc>>

Short Circuit Results

I3_BC Current in Amps under 3-phase fault in the Base Case
I3_OP2 Current in Amps under 3-phase fault in the Option 2(with G243 and associated upgrade Option 2 mode
I1_BC Current in Amps under 1L-G fault in the Base Case
I1_OP2 Current in Amps under 1L-G fault in the Option 2(with G243 and associated upgrade Option 2 modeled
%I Percentage increase in the fault current due to G243 (sorted max. to min.)

Bus.	Bus name	Area	I3_BC	I3_OP2	%I3	I1_BC	I1_OP2	%I1
438	[W IRVINE 161]	LGEE	5244	7377.5	40.7	4471.2	7800.1	74.5
593	[W IRVINE69.0]	LGEE	6713.9	9316.2	38.8	6573.9	10604.7	61.3
1906	[DARKHOLL69.0]	LGEE	6057.3	7921.4	30.8	5378.8	7526.6	39.9
439	[W IRVN T 161]	LGEE	5830.9	7612.9	30.6	5048.7	7784.1	54.2
1055	[RICE TAP69.0]	LGEE	6334.3	8031.1	26.8	5390.6	7110.7	31.9
1054	[RICE STA69.0]	LGEE	6297.5	7973	26.6	5348.2	7037.2	31.6
531	[IRVINE 69.0]	LGEE	5606.8	7038.9	25.5	4686.9	6075.1	29.6
435	[LK REB T 161]	LGEE	6566.5	7460.5	13.6	6562.3	7425.1	13.1
509	[ESTL STO69.0]	LGEE	4558.5	5152.4	13.0	3394.9	3796.6	11.8
434	[DELVINTA 161]	LGEE	6715	7500.8	11.7	5888.3	6567.5	11.5
589	[WACO 69.0]	LGEE	6824.9	7591.4	11.2	5148.8	5650.7	9.7
57877	[BEATTYVJ 161]	EKPC	5795.7	6307	8.8	5163.5	5548.8	7.5
1043	[MILLR CR69.0]	LGEE	4409.6	4789	8.6	3298.2	3531.7	7.1
458	[LK REB T 138]	LGEE	10935.8	11867.7	8.5	10959.5	11859.3	8.2
58833	[GRNHALLJ 161]	EKPC	5963.9	6455.7	8.2	5077.6	5433.2	7.0
58825	[GRNHALL 161]	EKPC	5739.3	6193.4	7.9	4806.7	5124.2	6.6
60569	[UNION CY 138]	EKPC	10342.9	11124.6	7.6	9913.6	10572.6	6.6
459	[LK REBA 138]	LGEE	9558.9	10272.2	7.5	9319.3	9934.5	6.6
539	[LK REBA 69.0]	LGEE	12596.3	13346.9	6.0	13705.6	14408.8	5.1
452	[FAWK TAP 138]	LGEE	13644.9	14455.5	5.9	13769.8	14389.3	4.5
58569	[FAWKESK 138]	EKPC	13673.9	14482.7	5.9	13811.9	14429.4	4.5
455	[FAWKS KU 138]	LGEE	13680	14488.8	5.9	13813	14430.5	4.5
60557	[TYNER 161]	EKPC	5595	5922.9	5.9	4989	5213.1	4.5
478	[BEAR TRA69.0]	LGEE	4996.4	5279.6	5.7	4271.2	4457.6	4.4
59133	[JKSMITH 138]	EKPC	11800	12416.5	5.2	14639.4	15283.1	4.4
57881	[BEATTYVL69.0]	EKPC	6161.8	6465.5	4.9	6987.1	7290.3	4.3
479	[BTTYV KU69.0]	LGEE	6153.8	6457.1	4.9	6960.6	7262.1	4.3
477	[RICHMD E69.0]	LGEE	10241.2	10732.6	4.8	9429	9756.9	3.5
59917	[POWELLCO 161]	EKPC	4803.5	5028.9	4.7	4471.9	4614.8	3.2
480	[BTTY 64969.0]	LGEE	5633.9	5887.3	4.5	5875.4	6089	3.6
60485	[THREEFKJ 138]	EKPC	12097.3	12632.4	4.4	11178.6	11504.7	2.9
59921	[POWELLCO 138]	EKPC	6505.1	6777.4	4.2	6053.2	6223.2	2.8
60489	[THREEFKS 138]	EKPC	11178.1	11633.3	4.1	9900.8	10155.8	2.6
58389	[DALE 138]	EKPC	13325.5	13837.7	3.8	13991.3	14374.3	2.7
518	[FAWKES 69.0]	LGEE	13750.6	14278.3	3.8	15160.5	15615.6	3.0
564	[RICHMOND69.0]	LGEE	10953.1	11365.7	3.8	9536.5	9768.1	2.4
57869	[BEATTYVD69.0]	EKPC	4645.5	4816	3.7	4307.1	4420.5	2.6
558	[BEREA T 69.0]	LGEE	8983.1	9309.2	3.6	7206.4	7366.7	2.2
557	[OKONITE 69.0]	LGEE	8765.9	9068.5	3.5	6914.1	7057.2	2.1
1901	[RICH IND69.0]	LGEE	8613.7	8898.2	3.3	6709.8	6840.3	1.9
471	[BG ORDN 69.0]	LGEE	7695.3	7933.4	3.1	5797.9	5901.2	1.8

568	[RICHMD J69.0]	LGEE	8679	8937.5	3.0	6718.2	6832.7	1.7
569	[RICHMD S69.0]	LGEE	9221	9495.6	3.0	7344.2	7471.3	1.7
566	[RICHMD 369.0]	LGEE	8917.1	9181.2	3.0	6985.4	7104.4	1.7
565	[RICHMD 269.0]	LGEE	8484.7	8730	2.9	6530.5	6638.2	1.6
58021	[BOONESTP 138]	EKPC	12581.3	12944.2	2.9	12311.3	12545.6	1.9
58037	[BOONSB N 138]	EKPC	12447.7	12802.7	2.9	12141.8	12369.6	1.9
59897	[PITTSBRG 161]	EKPC	5636.6	5797.3	2.9	5465.5	5574.1	2.0
567	[RICHMD 469.0]	LGEE	7541.1	7734.3	2.6	5557.4	5635.1	1.4
60641	[W.BEREA 138]	EKPC	5625.4	5758.9	2.4	4980.6	5053.3	1.5
59925	[POWELLCO69.0]	EKPC	8246	8428.3	2.2	9067.6	9221.4	1.7
60361	[STANTON 69.0]	EKPC	8158.3	8336.2	2.2	8833.2	8978.6	1.6

Thermal Results

After discussing the first set of thermal results with the ad hoc group, the study model was revised by implementing several changes, which include:

- Including the 69kV detail near the West Irvine substation
- Implementing the network changes, submitted by EKPC, in their area
- Using the new rating for the line from W. Irvine to W. Irvine tap, provided by LG&E.
- Double circuiting the 161 kV line from W.Irvine to W. Irvine tap
- Implementing option 1 and 2 for the transformer at W. Irvine sub.

N-1 and FCITC analysis were repeated on the revised model. Similar types of results were obtained under both the options.

N-1 results under option 1, dispatched to North

Element	Rating MVA	overload without G243	overload with G243	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	107.7%	112.8%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	130.5%	135%	27065 11BRWN P 138 27118 11MERCRCR 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	105.5%	29316 20FAWKES 138 29612 20WBBEREA 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	105.5%	29612 20WBBEREA 138 29614 20WBBEREA69.0 1

N-1 results under option 1, dispatched to South

Element	Rating MVA	overload without G243	overload with G243	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	107.7%	113.2%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	115.3%	120%	27108 11LEBANO 138 27118 11MERCRCR 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	106.1%	29316 20FAWKES 138 29612 20WBBEREA 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	106%	29612 20WBBEREA 138 29614 20WBBEREA69.0 1

Elements with more than 3% impact (difference with and without G243) of the new generator have been reported in these tables. Results show that injection point overloads have been alleviated by the system upgrades, however thermal overloads in 69kV systems were identified in the analysis.

N-1 results under option 2, dispatched to North

Element	Rating MVA	overload without G243	overload with G243	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	107.7%	112.8%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	130.5%	135%	27065 11BRWN P 138 27118 11MERCRCR 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	105.5%	29316 20FAWKES 138 29612 20WBBEREA 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	105.5%	29612 20WBBEREA 138 29614 20WBBEREA69.0 1

N-1 results under option 2, dispatched to South

Element	Rating MVA	overload without G243	overload with G243	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	107.7%	113.2%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	115.3%	120%	27108 11LEBANO 138 27118 11MERCRCR 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	106.1%	29316 20FAWKES 138 29612 20WBBEREA 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	102.2%	106%	29612 20WBBEREA 138 29614 20WBBEREA69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	130.5%	133.7%	27065 11BRWN P 138 27118 11MERCRCR 138 1

Results of FCITC analysis show that approx. 100 MW power can be transferred from W. Irvine substation, without hitting any constraints, when option 1 upgrades are in place. When option 2 upgrades are in place, approx. 94 MW can be transferred from the W. Irvine substation without hitting any constraints.

N-1 contingency analysis with Brown units at maximum output

Set Brown units at their maximum output. After comparing base case (neither G243 nor system upgrades is included) with the case containing G243 and system upgrades, no element is significantly adversely impacted by G243. However, the scenarios mostly worsened (difference > 3%) by G243 are listed below.

Dispatch 120MW to North: (Michigan area)

Element	Rating MVA	overload without G243&upgrade	overload with G243&upgrade	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	113.2%	118.4%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27077 11CLARK 138 27088 11FAWKES 138 1 LN	150	100.9%	105.6%	29231 20BOONST 138 29235 20BOONSB 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	109.6%	113.4%	29316 20FAWKES 138 29612 20WBBEREA 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	109.6%	113.4%	29612 20WBBEREA 138 29614 20WBBEREA69.0 1
27023 11DELVIN 161 27045 11WI TAP 161 1 LN	201	N/A	106.6%	29387 20JKSMIT 138 29501 20POWELL 138 1

Dispatch 120MW to South: (Southern Cos)

Element	Rating MVA	overload without G243&upgrade	overload with G243&upgrade	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	113.2%	118.8%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	151.2%	155.8%	27108 11LEBANO 138 27118 11MERCRCR 138 1
27077 11CLARK 138 27088 11FAWKES 138 1 LN	150	100.9%	105.5%	29231 20BOONST 138 29235 20BOONSB 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	109.6%	114%	29316 20FAWKES 138 29612 20WBBEREA 138 1
27209 11FAWKES69.0 29283 20CROOKJ69.0 1 LN	54	109.6%	114%	29612 20WBBEREA 138 29614 20WBBEREA69.0 1
27285 11SPRNGF69.0 29459 20N SPR 69.0 1 LN	19	148.3%	151.4%	27065 11BRWN P 138 27118 11MERCRCR 138 1
27023 11DELVIN 161 27045 11WI TAP 161 1 LN	201	N/A	107.3%	29387 20JKSMIT 138 29501 20POWELL 138 1
27108 11LEBANO 138 27118 11MERCRCR 138 1 LN	181	N/A	100.4%	27002 11ALCALD 345 27004 11BRWN N 345 1

N-1 contingency analysis with Brown units at minimum output

Set the Brown units at a minimum case (unit 1 with 48 MW and unit 2 with 89MW). After comparing base case (neither G243 nor system upgrades is included) with the case containing G243 and system upgrades, scenarios with the largest differences (>3%) are listed below. The only noticeable element is the line 27088 (11FAWKES 138) to 27334 (11FAWK T 138), which is not overloaded in base case, but could be overloaded up to 110% when G243 is included.

Dispatch 120MW to North: (Michigan area)

Element	Rating MVA	loading without G243&upgrade	overload with G243&upgrade	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	102.9%	108.1%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	N/A	101.9%	29231 20BOONST 138 29235 20BOONSB 138 1
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	N/A	103%	27023 11DELVIN 161 27045 11WI TAP 161 1
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	97% < 100%	110.1%	27110 11LR TAP 138 27111 11LK REB 138 1
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	97% < 100%	110.1%	27111 11LK REB 138 27243 11LK REB69.0 1

Dispatch 120MW to South: (Southern Cos)

Element	Rating MVA	loading without G243&upgrade	overload with G243&upgrade	Contingency
27230 11HOPEWL69.0 29399 20LAURLC69.0 1 LN	72	113.2%	108.4%	27245 11LONDON69.0 27267 11PITTSB69.0 1
27113 11LOUDON 138 29202 20AVON 138 1 LN	287	107.9%	110.9%	27065 11BRWN P 138 27088 11FAWKES 138 1
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	N/A	101.9%	29231 20BOONST 138 29235 20BOONSB 138 1
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	N/A	103.1%	27023 11DELVIN 161 27045 11WI TAP 161 1
27088 11FAWKES 138 27334 11FAWK T 138 1	165	97% < 100%	110.1%	27110 11LR TAP 138 27111 11LK REB 138 1

LN				
27088 11FAWKES 138 27334 11FAWK T 138 1 LN	165	97% < 100%	110.1%	27111 11LK REB 138 27243 11LK REB69.0 1

Transient Stability Analysis

The purpose of transient stability analysis is to evaluate the ability of the system to remain in synchronism after the disturbances in the system near the point of interconnection. Three phase fault with normal clearing and Three phase fault followed by Single line to ground fault (Stuck Circuit Breaker Pole scenario) were simulated around the point of interconnection. Voltage and rotor angle were monitored on all the Generators in LG&E and EKPC area.

System was found stable after running 3-phase fault and stuck pole scenarios at all the locations listed below. There was no event of instability observed even if the proposed unit connects before implementing the system upgrades identified in G218 study. Critical Clearing Time (CCT) for a 3-phase fault at W.Irvine 161kV bus was found to be **18 cycles**. CCT for a 3-phase fault at the same bus without G218 upgrades was found to be **17.5 cycle**

List of fault scenarios run in the stability study

Fault No.	Faulted bus	Line opened to clear the fault		Normal clearing time (Cycles)	Delayed clearing time (Cycles)
		From	To		
1	W Irvine161	W Irvine161	W Irvine tap	7	19
2	W Irvine161	W Irvine161	W Irvine69	7	19
3	WI tap161	WI tap161	Delvin161	7	19
4	WI tap161	WI tap161	W Irvine161	7	19
5	WI tap161	WI tap161	LR Tap161	7	19
6	Delvin161	Delvin161	WI tap161	7	19
7	Delvin161	Delvin161	GRNHLJ161	7	19
8	LRtap161	LRtap161	WI tap161	7	19
9	LRtap138	LRtap138	LK Reb138	7	19
10	LRtap138	LRtap138	JK Smit138	7	19
11	JKSmit 138	JKSmit 138	Powell138	7	19
12	JKSmit 138	JKSmit 138	LRtap138	7	19
13	JKSmit 138	JKSmit 138	Spenc138	7	19
14	JKSmit 138	JKSmit 138	Dale 138	7	19