

COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON
ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of

THE APPLICATION OF ESTILL)
COUNTY ENERGY PARTNERS, LLC,)
FOR A CERTIFICATE TO CONSTRUCT) CASE NO. 2002-00172
A COAL COMBUSTION/ELECTRIC)
GENERATING FACILITY)

ECEP/MISO/TVA CORRESPONDENCE

From: "gerard mack" <gerardmack@earthlink.net>
To: <jrgardner@tva.gov>
Cc: "Tirone, Joseph G." <jtirone@McGuireWoods.com>
Sent: Tuesday, August 10, 2004 5:57 PM
Attach: Project G243 - Interconnection Evaluation Study Results.eml; Project G243- Progress report 2.eml; Answer to the question asked in G243 Study Kick off Meeting.eml; G243 Interim result review meeting.eml; Project G243--Revised N-2 results.eml
Subject: Estill County Energy Partners, LLC ("ECEP")

John:

I have attached a few example MISO emails which were sent to Alfred Corbett in TVA's Planning Department. There was also a long sequence of draft Interconnection Evaluation Study Reports provided to Mr. Corbett which, for brevity, I have not attached to this email.

I can understand that the ECEP interconnection, being only 120 MW at 161-kV and not located near TVA's system, did not create a high degree of TVA concern during the MISO interconnection evaluation process. The interconnection evaluation study has resulted in an Interconnection and Operating Agreement between MISO, KU and ECEP which was executed on April 8, 2004 and accepted by the FERC on May 27, 2004 in Docket No. ER04-751-000.

My records show that TVA: was informed of the ECEP project; was provided all ECEP, MISO and KU documents during the evaluation process; was invited to participate in all evaluation meetings via conference call; was asked to comment on the results of MISO and KU interim analyses; had opportunity to request data and analyses from ECEP, MISO and KU during the evaluation process; and was consulted on the contents of the final Interconnection Evaluation Study Report.

ECEP's formal public hearing on our siting application is scheduled for August 24, 2004. I would appreciate if you could send a revised letter to the Kentucky State Board on Electric Generation and Transmission Siting as soon as possible to correct the previous statements that TVA was not involved in our interconnection evaluation process and that further interconnection system impact studies are required.

I would be happy to provide you a summary of ECEP project data in your format. My email address is gerardmack@earthlink.net and my contact information is as below.

Thanks,
Gerry Mack

Gerard B. Mack
121 Hermitage Road
Charlotte, NC 28207

(704) 332-2399 office
(704) 907-2847 cell
(704) 375-9455 fax

From: "Diwakar Tewari" <dtewari@midwestiso.org>
To: "Alfred corbett (E-mail)" <abcorbett@tva.gov>; "Darrin Adams (E-mail)" <darrin.adams@lgeenergy.com>; "Diwakar Tewari" <dtewari@midwestiso.org>; "Gerard B. Mack (E-mail)" <gerardmack@msn.com>; "Greg McKinney (E-mail)" <gregm@ekpc.com>; "Kun Zhu" <kzhu@midwestiso.org>; "Mary Jane Warner (E-mail)" <mj@ekpc.com>; "Michael. Toll (E-mail)" <michael.toll@lgeenergy.com>; "Mike Spurlock (E-mail)" <mikes@ekpc.com>; "Paul Johnson (E-mail)" <pjohnson@aep.com>; "Raja Srivastava" <RSrivastava@midwestiso.org>
Sent: Wednesday, May 21, 2003 4:47 PM
Subject: Answer to the question asked in G243 Study Kick off Meeting

There was a question in the study kick off meeting of Estill Co. project G243, about the MISO process. MISO promised that time, to get back to the ad hoc group with the answer. Following is the Miscellaneous item 5 of the meeting minutes which was not answered at the time of meeting.

"LGEE asked a question on MISO procedure to handle higher queued project (associated with system upgrade) with later in service date. The question was related to the study process and MISO policy in the cases where a project lower in the queue connects prior to the project above it and the higher queued project has some system upgrades not implemented yet. MISO promised to find all possible answers to this question and get back to the ad hoc group soon."

Answer:

At the time of studying the lower queued project, a sensitivity will be performed, without including the higher queued project in the base case. This would be done to determine if the lower queued project requires the system upgrades associated with the higher queued project. If yes, then the lower queued project will pay for those upgrades until the higher queued project is ready to connect. At that time the lower queued project will get the cost of system upgrades back from the higher queued project.

In addition to this, if there is a new set of system upgrades required when both the projects are in service, the lower queued project will have to pay for those upgrades.

Talking specifically about this project (G243, in-service date 2006), a sensitivity will be performed without including Trimble Co. project (G218, in service date 2007) in the base case to determine what requires for this project to connect in 2006.

Let me know if you have any questions on this.

Thanks

Diwakar

Diwakar Tewari
Interconnection Engineering
Midwest ISO Inc.
701 City Center Dr.
Carmel IN 46032
317-249-5715

From: "Diwakar Tewari" <dtewari@midwestiso.org>
To: "Alfred corbett (E-mail)" <abcorbett@tva.gov>; "Darrin Adams (E-mail)" <darrin.adams@lgeenergy.com>; "Diwakar Tewari" <dtewari@midwestiso.org>; "Gerard B. Mack (E-mail 2)" <gerardmack@msn.com>; "Gerard B. Mack (E-mail)" <gerardmack@earthlink.net>; "Greg McKinney (E-mail)" <gregm@ekpc.com>; "Kun Zhu" <kzhu@midwestiso.org>; "Mary Jane Warner (E-mail)" <mj@ekpc.com>; "Michael. Toll (E-mail)" <michael.toll@lgeenergy.com>; "Mike Spurlock (E-mail)" <mikes@ekpc.com>; "Paul Johnson (E-mail)" <pjohnson@aep.com>; "Raja Srivastava" <RSrivastava@midwestiso.org>
Cc: "Jerome Fohey" <JFohey@midwestiso.org>
Sent: Wednesday, June 11, 2003 5:57 PM
Attach: Agenda0613.doc
Subject: G243 Interim result review meeting

When: Friday, June 13, 2003 8:00 AM-9:30 AM (GMT-05:00) Indiana (East).
Where: 317-295-5583

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Dial In Number: 317-295-5583

Attached, please find the meeting agenda.

Thanks

<<Agenda0613.doc>>

Agenda - G243 Interim Result review Meeting

Load flow Results

1. Discussion on Load flow results
2. Proposal to alleviate the overloads at the injection facilities
 - A parallel 161/69 kV transformer
 - Replacement of existing transformer
 - Re-conductering the line from West Irvine to West Irvine tap
 - Any other thoughts?

Short Circuit Results

3. Discussion on Short Circuit Results
 - Are the existing breakers capable of handling the increased fault current due to the new generator?

Transient Stability Analysis

4. Plan to have the results ready by June 23
5. List of fault scenarios to be simulated:

3-phase fault and Stuck breaker pole scenario on the following branches

From	To	Normal clearing	Delayed clearing
W Irvine161	W Irvine tap	7 cy	19 cy
W Irvine161	W Irvine69	7	19
WI tap161	Delvin161	7	19
WI tap161	W Irvine161	7	19
WI tap161	LR Tap161	7	19
Delvin161	WI tap161	7	19
Delvin161	GRNHLJ161	7	19
LRtap161	WI tap161	7	19
LRtap138	LK Reb138	7	19
LRtap138	JK Smit138	7	19
JKSmit 138	Powell138	7	19
JKSmit 138	LRtap138	7	19
JKSmit 138	Spenc138	7	19
Dale 138	TFJ	7	19
Tyron69	Tyron138	10	22
Spurlock345	Avon345	4	17
Spurlock138	Kenton138	7	19
BrownN138	BKR LN138	7	19
BrownN138	Higby138	7	19
Trimble345	Clifty345	4	17

From: "Diwakar Tewari" <dtewari@midwestiso.org>
To: "Alfred corbett (E-mail)" <abcorbett@tva.gov>; "Darrin Adams (E-mail)" <darrin.adams@lgeenergy.com>; "Diwakar Tewari" <dtewari@midwestiso.org>; "Gerard B. Mack (E-mail 2)" <gerardmack@msn.com>; "Gerard B. Mack (E-mail)" <gerardmack@earthlink.net>; "Greg McKinney (E-mail)" <gregm@ekpc.com>; "Kun Zhu" <kzhu@midwestiso.org>; "Mary Jane Warner (E-mail)" <mj@ekpc.com>; "Michael. Toll (E-mail)" <michael.toll@lgeenergy.com>; "Mike Spurlock (E-mail)" <mikes@ekpc.com>; "Paul Johnson (E-mail)" <pbjohnson@aep.com>; "Raja Srivastava" <RSrivastava@midwestiso.org>
Sent: Thursday, June 12, 2003 5:34 PM
Attach: BriefReport_revised5.doc; viol_bc.xls; voil_north.xls; voil_south.xls
Subject: Project G243--Revised N-2 results

Please ignore the N-2 results sent in the G243 Progress Report earlier.
Revised results (word doc) for double contingency analysis are attached here. Original spreadsheets for N-1 results are also attached, in case you are interested in looking at the actual flows and ratings of the lines.

Thanks

Diwakar Tewari

<<BriefReport_revised5.doc>> <<viol_bc.xls>> <<voil_north.xls>> <<voil_south.xls>>

N-2 contingency analysis

N-2 contingency analysis is done with contingencies on elements above 100 kV. 2683 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 following scenarios are considered as being significantly worsened by G243.

Case North: (dispatch to north)

Element	Overload without G243	Overload with G243	Contingency
27044 11W IRVI 161 27292 11W IRVI69.0 1 TR	N/A	216.9%	Dbl:11W IRVI-11WI TAP + 11LR TAP-11LK REB
27045 11WI TAP 161 27023 11DELVIN 161 1 LN	102.4%	138.3%	Dbl:20BOONST-20DALE + 20JKSMIT-20POWELL
27045 11WI TAP 161 27023 11DELVIN 161 1 LN	129.6%	164.6%	Dbl:11POCKET-11POCK N + 11PINEVI-11PINEVI
27044 11W IRVI 161 27045 11WI TAP 161 1 LN	N/A	152.6%	Dbl:11POCKET-11POCK N + 11PINEVI-11PINEVI

Case South: (dispatch to south)

Element	Overload without G243	Overload with G243	Contingency
27044 11W IRVI 161 27292 11W IRVI69.0 1 TR	N/A	216.9%	Dbl:11W IRVI-11WI TAP + 11LR TAP-11LK REB
27045 11WI TAP 161 27023 11DELVIN 161 1 LN	102.4%	139.1%	Dbl:20BOONST-20DALE + 20JKSMIT-20POWELL
27045 11WI TAP 161 27023 11DELVIN 161 1 LN	129.6%	165.2%	Dbl:11POCKET-11POCK N + 11PINEVI-11PINEVI
27044 11W IRVI 161 27045 11WI TAP 161 1 LN	N/A	152.9%	Dbl:11POCKET-11POCK N + 11PINEVI-11PINEVI

Branch Violations

*** MUST 5.0 *** FRI, MAY 30 2003 14:23 ***
 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	**	**
27023 11DELVIN 161 27045 11WI TAP	144.6	82.3	144.6	142	101.8		** Base Case	**	69.0 29284 20CYNTH 69.0 1
27044 11W IRVI 161 27045 11WI TAP	82.3	35.2	82.3	74	111.2		** Base Case	**	69.0 29284 20CYNTH 69.0 1
27137 11RODBRN 138 27273 11RODBRN	35.2	144	35.2	33	106.5		** Base Case	**	69.0 29284 20CYNTH 69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT	144	22	144	143	100.7		** Base Case	**	69.0 29284 20CYNTH 69.0 1
29359 20HODGEN 69.0 29419 20MAGNOL	22	25.1	22	19	115.6		** Base Case	**	69.0 29514 20RENAKR 69.0 1
29411 20LILY TJ69.0 29634 20WOODLN	25.1	144.6	25.1	23	109.3		** Base Case	**	69.0 29514 20RENAKR 69.0 1
27023 11DELVIN 161 27045 11WI TAP	144.9	82.3	144.6	142	102.1		1 29191 203M	**	69.0 29284 20CYNTH 69.0 1
27044 11W IRVI 161 27045 11WI TAP	82.3	144	82.3	74	111.2		1 29191 203M	**	69.0 29284 20CYNTH 69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT	144	22	144	143	100.7		1 29191 203M	**	69.0 29284 20CYNTH 69.0 1
29359 20HODGEN 69.0 29419 20MAGNOL	22	25.1	22	19	115.8		1 29191 203M	**	69.0 29514 20RENAKR 69.0 1
29411 20LILY TJ69.0 29634 20WOODLN	25.1	144.6	25.1	23	109.3		1 29191 203M	**	69.0 29514 20RENAKR 69.0 1
27023 11DELVIN 161 27045 11WI TAP	145.1	82.3	144.6	142	102.2		2 29191 203M	**	69.0 29514 20RENAKR 69.0 1
27044 11W IRVI 161 27045 11WI TAP	82.3	144	82.3	74	111.2		2 29191 203M	**	69.0 29514 20RENAKR 69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT	144	22	144	143	100.7		2 29191 203M	**	69.0 29514 20RENAKR 69.0 1
29359 20HODGEN 69.0 29419 20MAGNOL	22	25.1	22	19	115.9		2 29191 203M	**	69.0 29514 20RENAKR 69.0 1
29411 20LILY TJ69.0 29634 20WOODLN	25.1	144.6	25.1	23	109.3		2 29191 203M	**	69.0 29514 20RENAKR 69.0 1
27023 11DELVIN 161 27045 11WI TAP	144.5	82.3	144.6	142	101.8		3 29192 20ALBANY 69.0 29559 20SNOWJ 69.0 1	**	69.0 29284 20CYNTH 69.0 1
27044 11W IRVI 161 27045 11WI TAP	82.3	144	82.3	74	111.2		3 29192 20ALBANY 69.0 29559 20SNOWJ 69.0 1	**	69.0 29284 20CYNTH 69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT	144	22	144	143	100.7		3 29192 20ALBANY 69.0 29559 20SNOWJ 69.0 1	**	69.0 29284 20CYNTH 69.0 1
29359 20HODGEN 69.0 29419 20MAGNOL	22	25.1	22	19	115.5		3 29192 20ALBANY 69.0 29559 20SNOWJ 69.0 1	**	69.0 29514 20RENAKR 69.0 1
29411 20LILY TJ69.0 29634 20WOODLN	25.1	144.6	25.1	23	109.3		3 29192 20ALBANY 69.0 29559 20SNOWJ 69.0 1	**	69.0 29514 20RENAKR 69.0 1
27023 11DELVIN 161 27045 11WI TAP	144.4	82.3	144.6	142	101.7		4 29192 20ALBANY 69.0 29639 20ZULAJ 269.0 1	**	69.0 29284 20CYNTH 69.0 1
27044 11W IRVI 161 27045 11WI TAP	82.3	144	82.3	74	111.2		4 29192 20ALBANY 69.0 29639 20ZULAJ 269.0 1	**	69.0 29284 20CYNTH 69.0 1
27161 11AIKEN 69.0 27253 11MIDDLT	144	22	144	143	100.7		4 29192 20ALBANY 69.0 29639 20ZULAJ 269.0 1	**	69.0 29514 20RENAKR 69.0 1
29359 20HODGEN 69.0 29419 20MAGNOL	22.2	25.1	22	19	117.1		4 29192 20ALBANY 69.0 29639 20ZULAJ 269.0 1	**	69.0 29514 20RENAKR 69.0 1
29411 20LILY TJ69.0 29634 20WOODLN	25.2	144.6	25.1	23	109.5		4 29192 20ALBANY 69.0 29639 20ZULAJ 269.0 1	**	69.0 29514 20RENAKR 69.0 1
27023 11DELVIN 161 27045 11WI TAP	144.7	82.3	144.6	142	101.9		5 29194 20ALCAN 69.0 29506 20PPG J 69.0 1	**	69.0 29284 20CYNTH 69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.3	5	29194 20ALCAN	69.0	29506	20PPG J 69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	5	29194 20ALCAN	69.0	29506	20PPG J 69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	5	29194 20ALCAN	69.0	29506	20PPG J 69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	5	29194 20ALCAN	69.0	29506	20PPG J 69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.9	144.6	142	101.3	6	29194 20ALCAN	69.0	29614	20WBREA69.0 1
27044	11W IRVI 161 27045 11WI TAP	82	82.3	74	110.8	6	29194 20ALCAN	69.0	29614	20WBREA69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	6	29194 20ALCAN	69.0	29614	20WBREA69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	6	29194 20ALCAN	69.0	29614	20WBREA69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	6	29194 20ALCAN	69.0	29614	20WBREA69.0 1
27023	11DELVIN 161 27045 11WI TAP	143	144.6	142	100.7	7	29195 20ANNVLJ69.0	29307	20EBERLJ69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	7	29195 20ANNVLJ69.0	29307	20EBERLJ69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	7	29195 20ANNVLJ69.0	29307	20EBERLJ69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.7	7	29195 20ANNVLJ69.0	29307	20EBERLJ69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	7	29195 20ANNVLJ69.0	29307	20EBERLJ69.0 1	
27023	11DELVIN 161 27045 11WI TAP	142.7	144.6	142	100.5	8	29195 20ANNVLJ69.0	29603	20TYNER 69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.3	8	29195 20ANNVLJ69.0	29603	20TYNER 69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	8	29195 20ANNVLJ69.0	29603	20TYNER 69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.7	8	29195 20ANNVLJ69.0	29603	20TYNER 69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	8	29195 20ANNVLJ69.0	29603	20TYNER 69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	9	29196 20ARGTM	138	29198 20ARGTM 69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	9	29196 20ARGTM	138	29198 20ARGTM 69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	9	29196 20ARGTM	138	29198 20ARGTM 69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	9	29196 20ARGTM	138	29198 20ARGTM 69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	9	29196 20ARGTM	138	29198 20ARGTM 69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	10	29196 20ARGTM	138	29414 20LOVE 138 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	10	29196 20ARGTM	138	29414 20LOVE 138 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	10	29196 20ARGTM	138	29414 20LOVE 138 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	10	29196 20ARGTM	138	29414 20LOVE 138 1	
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	10	29196 20ARGTM	138	29414 20LOVE 138 1	
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	101.6	11	29198 20ARGTM	69.0	29624 20WARNCK69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	11	29198 20ARGTM	69.0	29624 20WARNCK69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	11	29198 20ARGTM	69.0	29624 20WARNCK69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	11	29198 20ARGTM	69.0	29624 20WARNCK69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.5	11	29198 20ARGTM	69.0	29624 20WARNCK69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	101.6	12	29199 20ASAHJ69.0	29544	20SHOPVL69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	12	29199 20ASAHJ69.0	29544	20SHOPVL69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	12	29199 20ASAHJ69.0	29544	20SHOPVL69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	12	29199 20ASAHJ69.0	29544	20SHOPVL69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	12	29199 20ASAHJ69.0	29544	20SHOPVL69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.7	144.6	142	101.9	13	29199 20ASAHJ69.0	29623	20WALNUT69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	13	29199 20ASAHJ69.0	29623	20WALNUT69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	13	29199 20ASAHJ69.0	29623	20WALNUT69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	13	29199 20ASAHJ69.0	29623	20WALNUT69.0 1	
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	13	29199 20ASAHJ69.0	29623	20WALNUT69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.7	82.3	74	111.8	14	29200 20AVON	345	29202 20AVON 138 1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051	11ADAMS	138	27148	11TYRONE	114.5	95.8	97	118	14	29200 20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	145.9	144	143	102	14	29200 20AVON
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	22	19	114.6	14	29200 20AVON
29411	20LILY	TJ69.0	29634	20WOODLN	27.1	25.1	23	118	14	29200 20AVON
27044	11W IRVI	161	27045	11WI TAP	82.6	82.3	74	111.7	15	29200 20AVON
27051	11ADAMS	138	27148	11TYRONE	114.6	95.8	97	118.1	15	29200 20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	145.9	144	143	102	15	29200 20AVON
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	22	19	114.6	15	29200 20AVON
29411	20LILY	TJ69.0	29634	20WOODLN	27.1	25.1	23	118	15	29200 20AVON
27044	11W IRVI	161	27045	11WI TAP	81.9	82.3	74	110.7	16	29202 20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	16	29202 20AVON
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.9	16	29202 20AVON
29411	20LILY	TJ69.0	29634	20WOODLN	25.9	25.1	23	112.7	16	29202 20AVON
27023	11DELVIN	161	27045	11WI TAP	145.6	144.6	142	102.5	17	29202 20AVON
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	17	29202 20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	17	29202 20AVON
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5	17	29202 20AVON
29411	20LILY	TJ69.0	29634	20WOODLN	25	25.1	23	108.8	17	29202 20AVON
27023	11DELVIN	161	27045	11WI TAP	145.3	144.6	142	102.3	18	29202 20AVON
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.3	18	29202 20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	18	29202 20AVON
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.3	18	29202 20AVON
29411	20LILY	TJ69.0	29634	20WOODLN	25	25.1	23	108.9	18	29202 20AVON
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	19	29203 20BKR LN69.0
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	19	29203 20BKR LN69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	19	29203 20BKR LN69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	19	29203 20BKR LN69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	19	29203 20BKR LN69.0
27023	11DELVIN	161	27045	11WI TAP	145.7	144.6	142	102.6	20	29204 20BALLRD69.0
27044	11W IRVI	161	27045	11WI TAP	82.4	82.3	74	111.4	20	29204 20BALLRD69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	20	29204 20BALLRD69.0
29326	20FRCKBJ	69.0	29634	20WOODLN	27.3	19.1	23	118.9	20	29204 20BALLRD69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.4	22	19	112.8	20	29204 20BALLRD69.0
29411	20LILY	TJ69.0	29634	20WOODLN	31	25.1	23	134.9	20	29204 20BALLRD69.0
27023	11DELVIN	161	27045	11WI TAP	145.3	144.6	142	102.3	21	29204 20BALLRD69.0
27044	11W IRVI	161	27045	11WI TAP	82.4	82.3	74	111.3	21	29204 20BALLRD69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	21	29204 20BALLRD69.0
29326	20FRCKBJ	69.0	29634	20WOODLN	24.1	19.1	23	104.8	21	29204 20BALLRD69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	22	19	113.6	21	29204 20BALLRD69.0
29411	20LILY	TJ69.0	29634	20WOODLN	29.5	25.1	23	128.3	21	29204 20BALLRD69.0
27023	11DELVIN	161	27045	11WI TAP	144.8	144.6	142	102	22	29206 20BANKLK69.0
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	22	29206 20BANKLK69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	22	29206 20BANKLK69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.8	22	29206 20BANKLK69.0
29411	20LILY	TJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	22	29206 20BANKLK69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	23	29207	20BARDSJ69.0	29303	20E BARD69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	23	29207	20BARDSJ69.0	29303	20E BARD69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	23	29207	20BARDSJ69.0	29303	20E BARD69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.8	23	29207	20BARDSJ69.0	29303	20E BARD69.0	1
29411	20LILYJ69.0	29634	20WOODLN	23.3	25.1	23	101.4	23	29207	20BARDSJ69.0	29303	20E BARD69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	24	29207	20BARDSJ69.0	29610	20WBARDJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	24	29207	20BARDSJ69.0	29610	20WBARDJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	24	29207	20BARDSJ69.0	29610	20WBARDJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.5	24	29207	20BARDSJ69.0	29610	20WBARDJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	25	29208	20BARREN 161	29210	20BARREN69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.3	25	29208	20BARREN 161	29210	20BARREN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	25	29208	20BARREN 161	29210	20BARREN69.0	1
29219	20FOX HO69.0	29482	20PATRJ	72.1	30.7	72	100.2	25	29208	20BARREN 161	29210	20BARREN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	22	19	112.9	25	29208	20BARREN 161	29210	20BARREN69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	25	29208	20BARREN 161	29210	20BARREN69.0	1
29452	20MUNFVL69.0	29454	20MUNFKU	54.2	29.8	54	100.3	25	29208	20BARREN 161	29210	20BARREN69.0	1
29571	20STEPHN69.0	29606	20UPTONJ	21.6	12.9	19	113.7	25	29208	20BARREN 161	29210	20BARREN69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	26	29208	20BARREN 161	29583	20SSHADE 161	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	26	29208	20BARREN 161	29583	20SSHADE 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	26	29208	20BARREN 161	29583	20SSHADE 161	1
29219	20FOX HO69.0	29482	20PATRJ	72.2	30.7	72	100.3	26	29208	20BARREN 161	29583	20SSHADE 161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	19	112.8	26	29208	20BARREN 161	29583	20SSHADE 161	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	26	29208	20BARREN 161	29583	20SSHADE 161	1
29452	20MUNFVL69.0	29454	20MUNFKU	54.2	29.8	54	100.4	26	29208	20BARREN 161	29583	20SSHADE 161	1
29571	20STEPHN69.0	29606	20UPTONJ	21.6	12.9	19	113.9	26	29208	20BARREN 161	29583	20SSHADE 161	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	27	29210	20BARREN69.0	29259	20CAVECJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	27	29210	20BARREN69.0	29259	20CAVECJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	27	29210	20BARREN69.0	29259	20CAVECJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.2	27	29210	20BARREN69.0	29259	20CAVECJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	27	29210	20BARREN69.0	29259	20CAVECJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	28	29210	20BARREN69.0	29335	20GOODNT69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	28	29210	20BARREN69.0	29335	20GOODNT69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	28	29210	20BARREN69.0	29335	20GOODNT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.3	22	19	117.4	28	29210	20BARREN69.0	29335	20GOODNT69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	28	29210	20BARREN69.0	29335	20GOODNT69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.2	144.6	142	101.6	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
29227	20BONNIE69.0	29452	20MUNFVL	77.2	43.7	72	107.2	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.3	22	19	112.1	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.6	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
29452	20MUNFVL69.0	29454	20MUNFKU	59.5	29.8	54	110.2	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
29571	20STEPHN69.0	29606	20UPTONJ	24.5	12.9	19	128.8	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	30	29211	20BASS 69.0	29258	20CASEYCY69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	30	29211	20BASS 69.0	29258	20CASEYCY69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	30	29211 20BASS
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.2	30	29211 20BASS
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.9	30	29211 20BASS
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	31	29211 20BASS
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	31	29211 20BASS
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	31	29211 20BASS
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.3	31	29211 20BASS
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109	31	29211 20BASS
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	144.6	142	101.6	32	29212 20BEAM
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	32	29212 20BEAM
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	144	143	101	32	29212 20BEAM
29359	20HODGEN69.0	29419	20MAGNOL	21.2	22	22	19	111.4	32	29212 20BEAM
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	144.6	142	101.6	33	29212 20BEAM
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	33	29212 20BEAM
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	144	143	100.9	33	29212 20BEAM
29359	20HODGEN69.0	29419	20MAGNOL	21.3	22	22	19	111.9	33	29212 20BEAM
29411	20LILYJ69.0	29634	20WOODLN	23.2	25.1	25.1	23	100.7	33	29212 20BEAM
27023	11DELVIN 161	27045	11WI TAP	143.6	144.6	144.6	142	101.1	34	29214 20BTYV
27044	11W IRVI 161	27045	11WI TAP	83	82.3	82.3	74	112.2	34	29214 20BTYV
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	34	29214 20BTYV
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	34	29214 20BTYV
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.1	34	29214 20BTYV
27044	11W IRVI 161	27045	11WI TAP	76	82.3	82.3	74	102.6	35	29215 20BTYV
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	35	29215 20BTYV
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	35	29215 20BTYV
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	35	29215 20BTYV
27023	11DELVIN 161	27045	11WI TAP	172.2	144.6	144.6	142	121.3	36	29215 20BTYV
27044	11W IRVI 161	27045	11WI TAP	86	82.3	82.3	74	116.2	36	29215 20BTYV
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	36	29215 20BTYV
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.1	36	29215 20BTYV
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.6	36	29215 20BTYV
27023	11DELVIN 161	27045	11WI TAP	146.3	144.6	144.6	142	103	37	29216 20BEATY69.0
27044	11W IRVI 161	27045	11WI TAP	84.7	82.3	82.3	74	114.4	37	29216 20BEATY69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	37	29216 20BEATY69.0
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	37	29216 20BEATY69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	37	29216 20BEATY69.0
27023	11DELVIN 161	27045	11WI TAP	144.2	144.6	144.6	142	101.6	38	29216 20BEATY69.0
27044	11W IRVI 161	27045	11WI TAP	82.6	82.3	82.3	74	111.6	38	29216 20BEATY69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	38	29216 20BEATY69.0
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	38	29216 20BEATY69.0
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	38	29216 20BEATY69.0
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	39	29219 20FOX H069.0
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	39	29219 20FOX H069.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	39	29219 20FOX H069.0
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.5	39	29219 20FOX H069.0

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency				
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	39	29219	20FOX	HO69.0	29336	20GORINJ69.0	1	
27023	11DELVIN	161	27045	144.4	144.6	142	101.7	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1	
27044	11W	IRVI	161	27045	144.4	142	101.7	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1	
27161	11AIKEN	69.0	27253	144	82.3	74	111.1	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	19	100.7	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25	25.1	23	108.5	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1	
27023	11DELVIN	161	27045	144.4	144.6	142	101.7	41	29219	20FOX	HO69.0	29482	20PATRJR69.0	1	
27044	11W	IRVI	161	27045	144.4	142	101.7	41	29219	20FOX	HO69.0	29482	20PATRJR69.0	1	
27161	11AIKEN	69.0	27253	144	82.3	74	111.2	41	29219	20FOX	HO69.0	29482	20PATRJR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.3	22	19	112.3	41	29219	20FOX	HO69.0	29482	20PATRJR69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109	41	29219	20FOX	HO69.0	29482	20PATRJR69.0	1	
27023	11DELVIN	161	27045	144.6	144.6	142	101.9	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1		
27044	11W	IRVI	161	27045	144.6	142	101.9	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1		
27161	11AIKEN	69.0	27253	144	82.3	74	111.2	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	100.7	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1		
27023	11DELVIN	161	27045	144.5	144.6	142	101.8	43	29222	20BIGB	J69.0	29230	20BOONE	69.0	1
27044	11W	IRVI	161	27045	144.5	142	101.8	43	29222	20BIGB	J69.0	29230	20BOONE	69.0	1
27161	11AIKEN	69.0	27253	144	82.3	74	111.2	43	29222	20BIGB	J69.0	29230	20BOONE	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	100.8	43	29222	20BIGB	J69.0	29230	20BOONE	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	43	29222	20BIGB	J69.0	29230	20BOONE	69.0	1
27023	11DELVIN	161	27045	144.5	144.6	142	101.8	44	29222	20BIGB	J69.0	29455	20MUNK	69.0	1
27044	11W	IRVI	161	27045	144.5	142	101.8	44	29222	20BIGB	J69.0	29455	20MUNK	69.0	1
27161	11AIKEN	69.0	27253	144	82.3	74	111.2	44	29222	20BIGB	J69.0	29455	20MUNK	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	100.7	44	29222	20BIGB	J69.0	29455	20MUNK	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	44	29222	20BIGB	J69.0	29455	20MUNK	69.0	1
27023	11DELVIN	161	27045	144.6	144.6	142	101.8	45	29223	20BOWELLS69.0	29224	20BOWELLS69.0	1		
27044	11W	IRVI	161	27045	144.6	142	101.8	45	29223	20BOWELLS69.0	29224	20BOWELLS69.0	1		
27161	11AIKEN	69.0	27253	144	82.3	74	111.3	45	29223	20BOWELLS69.0	29224	20BOWELLS69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	100.7	45	29223	20BOWELLS69.0	29224	20BOWELLS69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	45	29223	20BOWELLS69.0	29224	20BOWELLS69.0	1		
27023	11DELVIN	161	27045	144.8	144.6	142	102	46	29224	20BOWELLS69.0	29380	20JNYWLJ69.0	1		
27044	11W	IRVI	161	27045	144.8	142	102	46	29224	20BOWELLS69.0	29380	20JNYWLJ69.0	1		
27161	11AIKEN	69.0	27253	144	82.3	74	110.9	46	29224	20BOWELLS69.0	29380	20JNYWLJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	100.7	46	29224	20BOWELLS69.0	29380	20JNYWLJ69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	46	29224	20BOWELLS69.0	29380	20JNYWLJ69.0	1		
27023	11DELVIN	161	27045	144.6	144.6	142	101.8	47	29224	20BOWELLS69.0	29442	20MDLCKJ69.0	1		
27044	11W	IRVI	161	27045	144.6	142	101.8	47	29224	20BOWELLS69.0	29442	20MDLCKJ69.0	1		
27161	11AIKEN	69.0	27253	144	82.3	74	111.1	47	29224	20BOWELLS69.0	29442	20MDLCKJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	100.7	47	29224	20BOWELLS69.0	29442	20MDLCKJ69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	47	29224	20BOWELLS69.0	29442	20MDLCKJ69.0	1		
27023	11DELVIN	161	27045	144.6	144.6	142	101.8	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1		
27044	11W	IRVI	161	27045	144.6	142	101.8	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1		
27161	11AIKEN	69.0	27253	144	82.3	74	111.2	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	23.5	23.5	23	100.6	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	23.5	19.1	23	102.3	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1		

** From bus	** **	** **	To bus	ContWVA	BaseFlow	Rating	Loading %	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.6	22	19	113.7	48	29226 20BLMFLD69.0
29411	20LILYJTJ69.0	29634	20WOODLN	31	25.1	23	134.8	48	29226 20BLMFLD69.0
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.9	49	29226 20BLMFLD69.0
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	49	29226 20BLMFLD69.0
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	49	29226 20BLMFLD69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	115	49	29226 20BLMFLD69.0
29411	20LILYJTJ69.0	29634	20WOODLN	26.5	25.1	23	115.3	49	29226 20BLMFLD69.0
27023	11DELVIN 161	27045	11WI TAP	145.1	144.6	142	102.2	50	29227 20BONNIE69.0
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.3	50	29227 20BONNIE69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	50	29227 20BONNIE69.0
29359	20HODGEN69.0	29419	20MAGNOL	23.5	22	19	123.7	50	29227 20BONNIE69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	50	29227 20BONNIE69.0
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	51	29227 20BONNIE69.0
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	51	29227 20BONNIE69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	51	29227 20BONNIE69.0
29302	20DURO J69.0	29572	20SPRKL1	105.7	48.3	72	146.9	52	29228 20BOONE
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	52	29228 20BOONE
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	52	29228 20BOONE
29572	20SPRKL169.0	29576	20S PARK	121.8	63.6	72	169.2	52	29228 20BOONE
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	53	29228 20BOONE
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	53	29228 20BOONE
27051	11ADAMS 138	27148	11TYRONE	97	95.8	97	100	53	29228 20BOONE
27161	11AIKEN 69.0	27253	11MIDDLT	143.6	144	143	100.4	53	29228 20BOONE
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.1	53	29228 20BOONE
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	53	29228 20BOONE
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	54	29228 20BOONE
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	54	29228 20BOONE
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	54	29228 20BOONE
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	54	29228 20BOONE
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	54	29228 20BOONE
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	55	29228 20BOONE
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	55	29228 20BOONE
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	55	29228 20BOONE
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	55	29228 20BOONE
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	55	29228 20BOONE
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	56	29230 20BOONE
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	56	29230 20BOONE
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	56	29230 20BOONE
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	56	29230 20BOONE
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	56	29230 20BOONE

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
29572	20SPRKTJ69.0	29576	20S	PARK	73.5	63.6	72	102.1	56	29230 20BOONE 69.0 29299 20DEVON 69.0 1
27023	11DELVIN 161	27045	11WI	TAP	144.7	144.6	142	101.9	57	29231 20BOONST 138 29235 20BOONSB 138 1
27044	11W IRVI 161	27045	11WI	TAP	82.4	82.3	74	111.3	57	29231 20BOONST 138 29235 20BOONSB 138 1
27161	11AIKEN 69.0	27253	11MIDDLT		144.1	144	143	100.8	57	29231 20BOONST 138 29235 20BOONSB 138 1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.4	57	29231 20BOONST 138 29235 20BOONSB 138 1
29411	20LILYJT69.0	29634	20WOODLN		25	25.1	23	108.7	57	29231 20BOONST 138 29235 20BOONSB 138 1
27023	11DELVIN 161	27045	11WI	TAP	146.3	144.6	142	103.1	58	29231 20BOONST 138 29286 20DALE 138 1
27044	11W IRVI 161	27045	11WI	TAP	82.3	82.3	74	111.2	58	29231 20BOONST 138 29286 20DALE 138 1
27051	11ADAMS 138	27148	11TYRONE		98.2	95.8	97	101.2	58	29231 20BOONST 138 29286 20DALE 138 1
27161	11AIKEN 69.0	27253	11MIDDLT		144.2	144	143	100.8	58	29231 20BOONST 138 29286 20DALE 138 1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.4	58	29231 20BOONST 138 29286 20DALE 138 1
29411	20LILYJT69.0	29634	20WOODLN		25.1	25.1	23	109.1	58	29231 20BOONST 138 29286 20DALE 138 1
27023	11DELVIN 161	27045	11WI	TAP	143.8	144.6	142	101.3	58	29231 20BOONST 138 29286 20DALE 138 1
27044	11W IRVI 161	27045	11WI	TAP	82.6	82.3	74	111.6	59	29232 20BOONEV69.0 29234 20BOONVJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	59	29232 20BOONEV69.0 29234 20BOONVJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.6	59	29232 20BOONEV69.0 29234 20BOONVJ69.0 1
29411	20LILYJT69.0	29634	20WOODLN		25.1	25.1	23	109.2	59	29232 20BOONEV69.0 29234 20BOONVJ69.0 1
27023	11DELVIN 161	27045	11WI	TAP	145.7	144.6	142	102.6	60	29234 20BOONVJ69.0 29472 20AKD J69.0 1
27044	11W IRVI 161	27045	11WI	TAP	83.9	82.3	74	113.3	60	29234 20BOONVJ69.0 29472 20AKD J69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	60	29234 20BOONVJ69.0 29472 20AKD J69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.6	60	29234 20BOONVJ69.0 29472 20AKD J69.0 1
29411	20LILYJT69.0	29634	20WOODLN		25.1	25.1	23	109.3	60	29234 20BOONVJ69.0 29472 20AKD J69.0 1
27023	11DELVIN 161	27045	11WI	TAP	145.1	144.6	142	102.2	61	29234 20BOONVJ69.0 29530 20S FORK69.0 1
27044	11W IRVI 161	27045	11WI	TAP	83	82.3	74	112.2	61	29234 20BOONVJ69.0 29530 20S FORK69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	61	29234 20BOONVJ69.0 29530 20S FORK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.6	61	29234 20BOONVJ69.0 29530 20S FORK69.0 1
29411	20LILYJT69.0	29634	20WOODLN		25.1	25.1	23	109.3	61	29234 20BOONVJ69.0 29530 20S FORK69.0 1
27023	11DELVIN 161	27045	11WI	TAP	144.6	144.6	142	101.8	62	29236 20BOSTNJ69.0 29272 20COLESJ69.0 1
27044	11W IRVI 161	27045	11WI	TAP	82.3	82.3	74	111.2	62	29236 20BOSTNJ69.0 29272 20COLESJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	62	29236 20BOSTNJ69.0 29272 20COLESJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.1	62	29236 20BOSTNJ69.0 29272 20COLESJ69.0 1
29411	20LILYJT69.0	29634	20WOODLN		25.7	25.1	23	111.9	62	29236 20BOSTNJ69.0 29272 20COLESJ69.0 1
27023	11DELVIN 161	27045	11WI	TAP	144.6	144.6	142	101.8	63	29236 20BOSTNJ69.0 29462 20NELSON69.0 1
27044	11W IRVI 161	27045	11WI	TAP	82.3	82.3	74	111.2	63	29236 20BOSTNJ69.0 29462 20NELSON69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	63	29236 20BOSTNJ69.0 29462 20NELSON69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.1	63	29236 20BOSTNJ69.0 29462 20NELSON69.0 1
29411	20LILYJT69.0	29634	20WOODLN		25.7	25.1	23	111.9	63	29236 20BOSTNJ69.0 29462 20NELSON69.0 1
27023	11DELVIN 161	27045	11WI	TAP	145	144.6	142	102.1	64	29237 20BOUR T 138 29239 20BOURBN 138 1
27044	11W IRVI 161	27045	11WI	TAP	82.3	82.3	74	111.2	64	29237 20BOUR T 138 29239 20BOURBN 138 1
27051	11ADAMS 138	27148	11TYRONE		98.4	95.8	97	101.4	64	29237 20BOUR T 138 29239 20BOURBN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT		144.2	144	143	100.9	64	29237 20BOUR T 138 29239 20BOURBN 138 1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.3	64	29237 20BOUR T 138 29239 20BOURBN 138 1
29411	20LILYJT69.0	29634	20WOODLN		25.1	25.1	23	109.1	64	29237 20BOUR T 138 29239 20BOURBN 138 1
27023	11DELVIN 161	27045	11WI	TAP	143.7	144.6	142	101.2	65	29237 20BOUR T 138 29374 20JACKVJ 138 1
27044	11W IRVI 161	27045	11WI	TAP	82.2	82.3	74	111.1	65	29237 20BOUR T 138 29374 20JACKVJ 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	65	29237	20BOUR T 138 29374 20JACKVJ 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	65	29237	20BOUR T 138 29374 20JACKVJ 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	109.8	65	29237	20BOUR T 138 29374 20JACKVJ 138 1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	66	29238	20BOSTKU69.0 29403 20LEBANJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	66	29238	20BOSTKU69.0 29403 20LEBANJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	66	29238	20BOSTKU69.0 29403 20LEBANJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	22	19	113.4	66	29238	20BOSTKU69.0 29403 20LEBANJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24	25.1	23	104.2	66	29238	20BOSTKU69.0 29403 20LEBANJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	67	29238	20BOSTKU69.0 29635 20WOOSLY69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	67	29238	20BOSTKU69.0 29635 20WOOSLY69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	67	29238	20BOSTKU69.0 29635 20WOOSLY69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.9	67	29238	20BOSTKU69.0 29635 20WOOSLY69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25.1	23	107.5	67	29238	20BOSTKU69.0 29635 20WOOSLY69.0 1
27023	11DELVIN 161	27045	11WI TAP	145.7	144.6	142	102.6	68	29240	20BOURNE69.0 29464 20NEWBY269.0 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.4	68	29240	20BOURNE69.0 29464 20NEWBY269.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	68	29240	20BOURNE69.0 29464 20NEWBY269.0 1
29326	20FRCKBJ69.0	29634	20WOODLN	27.3	19.1	23	118.8	68	29240	20BOURNE69.0 29464 20NEWBY269.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	19	112.8	68	29240	20BOURNE69.0 29464 20NEWBY269.0 1
29411	20LILYJ69.0	29634	20WOODLN	31	25.1	23	135	68	29240	20BOURNE69.0 29464 20NEWBY269.0 1
27023	11DELVIN 161	27045	11WI TAP	146.8	144.6	142	103.4	69	29242	20BOWEN 69.0 29503 20POWELL69.0 1
27044	11W IRVI 161	27045	11WI TAP	80	82.3	74	108.2	69	29242	20BOWEN 69.0 29503 20POWELL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	69	29242	20BOWEN 69.0 29503 20POWELL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	69	29242	20BOWEN 69.0 29503 20POWELL69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.7	69	29242	20BOWEN 69.0 29503 20POWELL69.0 1
27023	11DELVIN 161	27045	11WI TAP	146.5	144.6	142	103.2	70	29242	20BOWEN 69.0 29536 20SANDLK69.0 1
27044	11W IRVI 161	27045	11WI TAP	80.3	82.3	74	108.5	70	29242	20BOWEN 69.0 29536 20SANDLK69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	70	29242	20BOWEN 69.0 29536 20SANDLK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	70	29242	20BOWEN 69.0 29536 20SANDLK69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.8	70	29242	20BOWEN 69.0 29536 20SANDLK69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	71	29243	20BRACKN69.0 29323 20F OAKJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	71	29243	20BRACKN69.0 29323 20F OAKJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	71	29243	20BRACKN69.0 29323 20F OAKJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	71	29243	20BRACKN69.0 29323 20F OAKJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	71	29243	20BRACKN69.0 29323 20F OAKJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	72	29243	20BRACKN69.0 29347 20GRIFFFJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	72	29243	20BRACKN69.0 29347 20GRIFFFJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	72	29243	20BRACKN69.0 29347 20GRIFFFJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	72	29243	20BRACKN69.0 29347 20GRIFFFJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	72	29243	20BRACKN69.0 29347 20GRIFFFJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	73	29244	20BRISTW69.0 29302 20DURO J69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	73	29244	20BRISTW69.0 29302 20DURO J69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	73	29244	20BRISTW69.0 29302 20DURO J69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	73	29244	20BRISTW69.0 29302 20DURO J69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	73	29244	20BRISTW69.0 29302 20DURO J69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	74	29244	20BRISTW69.0 29600 20TRKYFJ69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	74	29244 20BRISTW69.0	29600	20TRKYFJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	74	29244 20BRISTW69.0	29600	20TRKYFJ69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	74	29244 20BRISTW69.0	29600	20TRKYFJ69.0	1	
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25.1	23	109.3	74	29244 20BRISTW69.0	29600	20TRKYFJ69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	75	29244 20BRISTW69.0	29600	20TRKYFJ69.0	2	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	75	29244 20BRISTW69.0	29600	20TRKYFJ69.0	2	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	75	29244 20BRISTW69.0	29600	20TRKYFJ69.0	2	
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	75	29244 20BRISTW69.0	29600	20TRKYFJ69.0	2	
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25.1	23	109.3	75	29244 20BRISTW69.0	29600	20TRKYFJ69.0	2	
27023	11DELVIN	161	27045	11WI TAP	145.7	144.6	142	102.6	76	29246 20BRDHD69.0	29424	20MARETJ69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.5	82.3	74	111.5	76	29246 20BRDHD69.0	29424	20MARETJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	76	29246 20BRDHD69.0	29424	20MARETJ69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	19	116.1	76	29246 20BRDHD69.0	29424	20MARETJ69.0	1	
29411	20LILYJT	69.0	29634	20WOODLN	25.2	25.1	23	109.4	76	29246 20BRDHD69.0	29424	20MARETJ69.0	1	
27023	11DELVIN	161	27045	11WI TAP	146.6	144.6	142	103.2	77	29246 20BRDHD69.0	29595	20THLNKJ69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.7	82.3	74	111.8	77	29246 20BRDHD69.0	29595	20THLNKJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	77	29246 20BRDHD69.0	29595	20THLNKJ69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	19	116.4	77	29246 20BRDHD69.0	29595	20THLNKJ69.0	1	
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25.1	23	109.3	77	29246 20BRDHD69.0	29595	20THLNKJ69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	78	29247 20BRONSJ69.0	29276	20COOPER69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	78	29247 20BRONSJ69.0	29276	20COOPER69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	78	29247 20BRONSJ69.0	29276	20COOPER69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.7	78	29247 20BRONSJ69.0	29276	20COOPER69.0	1	
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25.1	23	109.3	78	29247 20BRONSJ69.0	29276	20COOPER69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	79	29247 20BRONSJ69.0	29298	20DENNY 69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	79	29247 20BRONSJ69.0	29298	20DENNY 69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	79	29247 20BRONSJ69.0	29298	20DENNY 69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	20.6	22	19	108.5	80	29248 20BLIT C	161	29250 20BLIT C69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.1	144.6	142	101.5	80	29248 20BLIT C	161	29250 20BLIT C69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	80	29248 20BLIT C	161	29250 20BLIT C69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.7	144	143	101.2	80	29248 20BLIT C	161	29250 20BLIT C69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	20.6	22	19	108.5	80	29248 20BLIT C	161	29250 20BLIT C69.0	1	
27044	11W IRVI	161	27045	11WI TAP	144.9	144.6	142	102.1	81	29248 20BLIT C	161	29294 20DARWJ	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	81	29248 20BLIT C	161	29294 20DARWJ	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	116	81	29248 20BLIT C	161	29294 20DARWJ	161	1
29411	20LILYJT	69.0	29634	20WOODLN	25.5	25.1	23	111.1	81	29248 20BLIT C	161	29294 20DARWJ	161	1
27023	11DELVIN	161	27045	11WI TAP	145.8	144.6	142	102.7	82	29248 20BLIT C	161	29586 20SSHADT	161	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.3	74	111.4	82	29248 20BLIT C	161	29586 20SSHADT	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.5	144	143	101.1	82	29248 20BLIT C	161	29586 20SSHADT	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	24.2	22	19	127.5	82	29248 20BLIT C	161	29586 20SSHADT	161	1
29411	20LILYJT	69.0	29634	20WOODLN	26.9	25.1	23	116.9	82	29248 20BLIT C	161	29586 20SSHADT	161	1
27023	11DELVIN	161	27045	11WI TAP	144.8	144.6	142	102	83	29250 20BLIT C69.0	29260	20CEDRGR69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	83	29250 20BLIT C69.0	29260	20CEDRGR69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	83	29250	20CEDRGR69.0
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.3	83	29250	20CEDRGR69.0
29411	20LILYJ69.0	29634	20WOODLN	25.6	25.1	23	111.5	83	29250	20CEDRGR69.0
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	84	29251	20SUNOWJ 69.0
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	84	29251	20SUNOWJ 69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	84	29251	20SUNOWJ 69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	115	84	29251	20SUNOWJ 69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	84	29251	20SUNOWJ 69.0
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	85	29251	20SSHADE69.0
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	85	29251	20SSHADE69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	85	29251	20SSHADE69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.9	85	29251	20SSHADE69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	85	29251	20SSHADE69.0
27023	11DELVIN 161	27045	11WI TAP	142.7	144.6	142	100.5	86	29252	20SUNOWJ 69.0
27044	11W IRVI 161	27045	11WI TAP	82	82.3	74	110.8	86	29252	20SUNOWJ 69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	86	29252	20SUNOWJ 69.0
29246	20BRODHD69.0	29595	20THLNKJ	58.2	23.5	54	107.8	86	29252	20SUNOWJ 69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.8	86	29252	20SUNOWJ 69.0
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	86	29252	20SUNOWJ 69.0
27023	11DELVIN 161	27045	11WI TAP	142.4	144.6	142	100.3	87	29252	20SOMERS69.0
27044	11W IRVI 161	27045	11WI TAP	82.6	82.3	74	111.6	87	29252	20SOMERS69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	87	29252	20SOMERS69.0
29246	20BRODHD69.0	29424	20MARETJ	70.2	14.6	69	101.8	87	29252	20SOMERS69.0
29246	20BRODHD69.0	29595	20THLNKJ	84.1	23.5	54	155.7	87	29252	20SOMERS69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.7	22	19	114.5	87	29252	20SOMERS69.0
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	87	29252	20SOMERS69.0
27023	11DELVIN 161	27045	11WI TAP	143.4	144.6	142	101	88	29254	20HELCHW69.0
27044	11W IRVI 161	27045	11WI TAP	83.1	82.3	74	112.3	88	29254	20HELCHW69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	88	29254	20HELCHW69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	88	29254	20HELCHW69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.9	88	29254	20HELCHW69.0
27023	11DELVIN 161	27045	11WI TAP	142.7	144.6	142	100.5	89	29254	20ZACHAR69.0
27044	11W IRVI 161	27045	11WI TAP	83.5	82.3	74	112.9	89	29254	20ZACHAR69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	89	29254	20ZACHAR69.0
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	89	29254	20ZACHAR69.0
29411	20LILYJ69.0	29419	20MAGNOL	21.9	22	19	115.5	89	29254	20ZACHAR69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.7	89	29254	20ZACHAR69.0
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	90	29255	20PCTLSJ69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	90	29255	20PCTLSJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	90	29255	20PCTLSJ69.0
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	90	29255	20PCTLSJ69.0
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	90	29255	20PCTLSJ69.0
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	91	29255	20PCTLSJ69.0
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	91	29255	20PCTLSJ69.0
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	91	29255	20PCTLSJ69.0
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	91	29255	20PCTLSJ69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	91	29255	20CARTJ69.0	29624	20WARNCK69.0	1			
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.9	92	29256	20CASEYC	161	29258	20CASEYC69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	92	29256	20CASEYC	161	29258	20CASEYC69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	92	29256	20CASEYC	161	29258	20CASEYC69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.6	92	29256	20CASEYC	161	29258	20CASEYC69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	24.9	25.1	23	108.3	92	29256	20CASEYC	161	29258	20CASEYC69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.9	144.6	142	101.4	93	29256	20CASEYC	161	29408	20LIBERT	161	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111	93	29256	20CASEYC	161	29408	20LIBERT	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	93	29256	20CASEYC	161	29408	20LIBERT	161	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.1	93	29256	20CASEYC	161	29408	20LIBERT	161	1	
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	109.8	93	29256	20CASEYC	161	29408	20LIBERT	161	1	
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	94	29256	20CASEYC	161	29428	20MARION	161	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111	94	29256	20CASEYC	161	29428	20MARION	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	94	29256	20CASEYC	161	29428	20MARION	161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.2	94	29256	20CASEYC	161	29428	20MARION	161	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1			
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.9	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	95	29258	20CASEYC69.0	29488	20PEYTON69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.6	22	19	113.6	96	29262	20CHAPLJ69.0	29547	20SINAI	69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	31.2	25.1	23	135.6	96	29262	20CHAPLJ69.0	29547	20SINAI	69.0	1		
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	97	29263	20CHARTR69.0	29332	20GODDRD69.0	1			
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.7	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	98	29263	20CHARTR69.0	29508	20RECTVL69.0	1			
27023	11DELVIN	161	27045	11WI TAP	145.9	144.6	142	102.7	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	24.8	25.1	23	107.9	99	29264	20CLAYCJ69.0	29350	20HARGTJ69.0	1			
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	100	29264	20CLAYCJ69.0	29570	20STANTN69.0	1		

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	100	29264 20CLAYCJ69.0	29570 20STANTN69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.9	100	29264 20CLAYCJ69.0	29570 20STANTN69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	101	29266 20CLAY V69.0	29466 20NCASLT69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	101	29266 20CLAY V69.0	29466 20NCASLT69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	144	143	101.2	101	29266 20CLAY V69.0	29466 20NCASLT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	101	29266 20CLAY V69.0	29466 20NCASLT69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	101	29266 20CLAY V69.0	29466 20NCASLT69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	144.6	142	101.9	102	29267 20CMPVPJ 161	29430 20MAR IJ 161	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	102	29267 20CMPVPJ 161	29430 20MAR IJ 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.7	102	29267 20CMPVPJ 161	29430 20MAR IJ 161	1
29359	20HODGEN69.0	29419	20MAGNOL	25.4	22	22	19	133.5	102	29267 20CMPVPJ 161	29430 20MAR IJ 161	1
29411	20LILYJ69.0	29634	20WOODLN	24.5	25.1	25.1	23	106.7	102	29267 20CMPVPJ 161	29430 20MAR IJ 161	1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	144.6	142	101.9	103	29267 20CMPVPJ 161	29587 20TAYCTP 161	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	103	29267 20CMPVPJ 161	29587 20TAYCTP 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	103	29267 20CMPVPJ 161	29587 20TAYCTP 161	1
29359	20HODGEN69.0	29419	20MAGNOL	23.8	22	22	19	125.3	103	29267 20CMPVPJ 161	29587 20TAYCTP 161	1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25.1	25.1	23	107.9	103	29267 20CMPVPJ 161	29587 20TAYCTP 161	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	104	29268 20COBURG69.0	29270 20COBURJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	104	29268 20COBURG69.0	29270 20COBURJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	104	29268 20COBURG69.0	29270 20COBURJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	22	19	114.8	104	29268 20COBURG69.0	29270 20COBURJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109	104	29268 20COBURG69.0	29270 20COBURJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	105	29270 20COBURJ69.0	29274 20COLUMB69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	105	29270 20COBURJ69.0	29274 20COLUMB69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	105	29270 20COBURJ69.0	29274 20COLUMB69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.5	105	29270 20COBURJ69.0	29274 20COLUMB69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	105	29270 20COBURJ69.0	29274 20COLUMB69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	106	29270 20COBURJ69.0	29538 20SEWLTJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	106	29270 20COBURJ69.0	29538 20SEWLTJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	106	29270 20COBURJ69.0	29538 20SEWLTJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	22	19	117.1	106	29270 20COBURJ69.0	29538 20SEWLTJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.1	106	29270 20COBURJ69.0	29538 20SEWLTJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.7	107	29271 20COLMSV69.0	29323 20F OAKJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	107	29271 20COLMSV69.0	29323 20F OAKJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	107	29271 20COLMSV69.0	29323 20F OAKJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	107	29271 20COLMSV69.0	29323 20F OAKJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	107	29271 20COLMSV69.0	29323 20F OAKJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	108	29271 20COLMSV69.0	29514 20RENAKR69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	108	29271 20COLMSV69.0	29514 20RENAKR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	108	29271 20COLMSV69.0	29514 20RENAKR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	108	29271 20COLMSV69.0	29514 20RENAKR69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	108	29271 20COLMSV69.0	29514 20RENAKR69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	109	29271 20COLMSV69.0	29415 20LYMANJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	109	29271 20COLMSV69.0	29415 20LYMANJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	109	29271 20COLMSV69.0	29415 20LYMANJ69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.3	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	110.7	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.9	144.6	142	102	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.5	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	110	29274	20COLUMB69.0	29618	20WCOLMJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144	144.6	142	101.4	111	29275	20COOPER 161	29276	20COOPER69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	111	29275	20COOPER 161	29276	20COOPER69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	111	29275	20COOPER 161	29276	20COOPER69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	112	29275	20COOPER 161	29276	20COOPER69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	112	29275	20COOPER 161	29296	20DENNY 161	1
27023	11DELVIN 161	27045	11WI TAP	163.4	144.6	142	115.1	112	29275	20COOPER 161	29296	20DENNY 161	1
27044	11W IRVI 161	27045	11WI TAP	86.7	82.3	74	117.1	113	29275	20COOPER 161	29400	20LAURLD 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	113	29275	20COOPER 161	29400	20LAURLD 161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.3	22	19	112.3	113	29275	20COOPER 161	29400	20LAURLD 161	1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.6	113	29275	20COOPER 161	29400	20LAURLD 161	1
27023	11DELVIN 161	27045	11WI TAP	142.1	144.6	142	100.1	114	29275	20COOPER 161	29408	20LIBERT 161	1
27044	11W IRVI 161	27045	11WI TAP	82	82.3	74	110.8	114	29275	20COOPER 161	29408	20LIBERT 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	114	29275	20COOPER 161	29408	20LIBERT 161	1
29359	20HODGEN69.0	29419	20MAGNOL	22.7	22	19	119.2	114	29275	20COOPER 161	29408	20LIBERT 161	1
29411	20LILYJ69.0	29634	20WOODLN	26.1	25.1	23	113.5	114	29275	20COOPER 161	29408	20LIBERT 161	1
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	142	102	115	29275	20COOPER 161	29531	20S OAKH 161	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	115	29275	20COOPER 161	29531	20S OAKH 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	115	29275	20COOPER 161	29531	20S OAKH 161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	115	29275	20COOPER 161	29531	20S OAKH 161	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	115	29275	20COOPER 161	29531	20S OAKH 161	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	116	29276	20COOPER69.0	29555	20SOMERS69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	116	29276	20COOPER69.0	29555	20SOMERS69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	116	29276	20COOPER69.0	29555	20SOMERS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	116	29276	20COOPER69.0	29555	20SOMERS69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	116	29276	20COOPER69.0	29555	20SOMERS69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	117	29276	20COOPER69.0	29555	20SOMERS69.0	2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	117	29276	20COOPER69.0	29555	20SOMERS69.0	2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	117	29276	20COOPER69.0	29555	20SOMERS69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	117	29276	20COOPER69.0	29555	20SOMERS69.0	2
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	117	29276	20COOPER69.0	29555	20SOMERS69.0	2
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	118	29280	20CRESTN69.0	29490	20PHIL 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	118	29280	20CRESTN69.0	29490	20PHIL 69.0	1

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	118	29280	20CRESTN69.0	29490	20PHIL 69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	118	29280	20CRESTN69.0	29490	20PHIL 69.0	1	
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	118	29280	20CRESTN69.0	29490	20PHIL 69.0	1	
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	119	29282	20CROCKJ69.0	29550	20SKAGGS69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	119	29282	20CROCKJ69.0	29550	20SKAGGS69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	119	29282	20CROCKJ69.0	29550	20SKAGGS69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	119	29282	20CROCKJ69.0	29550	20SKAGGS69.0	1	
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	119	29282	20CROCKJ69.0	29550	20SKAGGS69.0	1	
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	142	101.6	120	29282	20CROCKJ69.0	29619	20W LIB 69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	120	29282	20CROCKJ69.0	29619	20W LIB 69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	120	29282	20CROCKJ69.0	29619	20W LIB 69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	120	29282	20CROCKJ69.0	29619	20W LIB 69.0	1	
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	120	29282	20CROCKJ69.0	29619	20W LIB 69.0	1	
27023	11DELVIN 161	27045	11WI TAP	145.4	144.6	142	102.4	121	29283	20CROCKJ69.0	29354	20HICK P69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.7	82.3	74	111.7	121	29283	20CROCKJ69.0	29354	20HICK P69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	121	29283	20CROCKJ69.0	29354	20HICK P69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	121	29283	20CROCKJ69.0	29354	20HICK P69.0	1	
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	121	29283	20CROCKJ69.0	29354	20HICK P69.0	1	
27023	11DELVIN 161	27045	11WI TAP	148.7	144.6	142	104.7	121	29286	20DALE	138	29287	20DALE 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	122	29286	20DALE	138	29287	20DALE 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	122	29286	20DALE	138	29287	20DALE 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.3	122	29286	20DALE	138	29287	20DALE 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	29.2	25.1	23	126.9	122	29286	20DALE	138	29287	20DALE 69.0	1
27023	11DELVIN 161	27045	11WI TAP	146.1	144.6	142	102.9	123	29286	20DALE	138	29387	20JKSMIT 138	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	123	29286	20DALE	138	29387	20JKSMIT 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	123	29286	20DALE	138	29387	20JKSMIT 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.3	123	29286	20DALE	138	29387	20JKSMIT 138	1
29411	20LILYTJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	123	29286	20DALE	138	29387	20JKSMIT 138	1
27023	11DELVIN 161	27045	11WI TAP	81.8	82.3	74	110.5	124	29286	20DALE	138	29594	20TFJ 138	1
27044	11W IRVI 161	27045	11WI TAP	81.8	82.3	74	110.5	124	29286	20DALE	138	29594	20TFJ 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	124	29286	20DALE	138	29594	20TFJ 138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.8	124	29286	20DALE	138	29594	20TFJ 138	1
29411	20LILYTJ69.0	29634	20WOODLN	24.8	25.1	23	107.8	124	29286	20DALE	138	29594	20TFJ 138	1
27023	11DELVIN 161	27045	11WI TAP	145.9	144.6	142	102.8	125	29287	20DALE	69.0	29368	20HUNT1 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	125	29287	20DALE	69.0	29368	20HUNT1 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	125	29287	20DALE	69.0	29368	20HUNT1 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	125	29287	20DALE	69.0	29368	20HUNT1 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	24.6	25.1	23	106.9	125	29287	20DALE	69.0	29368	20HUNT1 69.0	1
27023	11DELVIN 161	27045	11WI TAP	146.5	144.6	142	103.2	126	29287	20DALE	69.0	29370	20HUNT2 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111	126	29287	20DALE	69.0	29370	20HUNT2 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	126	29287	20DALE	69.0	29370	20HUNT2 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	126	29287	20DALE	69.0	29370	20HUNT2 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	24.7	25.1	23	107.4	126	29287	20DALE	69.0	29370	20HUNT2 69.0	1
27023	11DELVIN 161	27045	11WI TAP	148.1	144.6	142	104.3	127	29287	20DALE	69.0	29463	20NEWBY169.0	1
27044	11W IRVI 161	27045	11WI TAP	82.9	82.3	74	112	127	29287	20DALE	69.0	29463	20NEWBY169.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	127	29287	20DALE	69.0	29463	20NEWBY169.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29355	20HIGHLD69.0	29450	20MT	OLJ	69.2	16.6	69	100.2	127	29287 20DALE
29355	20HIGHLD69.0	29604	20TGOOCH		53	7.3	53	100.1	127	29287 20DALE
29359	20HODGEN69.0	29419	20MAGNOL		22.5	22	19	118.6	127	29287 20DALE
29410	20LIBERT69.0	29450	20MT	OLJ	72	17.1	69	104.4	127	29287 20DALE
29411	20LILYJ69.0	29634	20WOODLN		24.5	25.1	23	106.7	127	29287 20DALE
27023	11DELVIN	161	27045	11WI	TAP	145.7	144.6	142	128	29287 20DALE
27044	11W	IRVI	161	27045	11WI	TAP	82.3	111.4	128	29287 20DALE
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	74	100.8	128	29287 20DALE
29326	20FRCRBJ69.0	29634	20WOODLN		27.3	19.1	23	118.8	128	29287 20DALE
29359	20HODGEN69.0	29419	20MAGNOL		21.4	22	19	112.8	128	29287 20DALE
29411	20LILYJ69.0	29634	20WOODLN		31.1	25.1	23	135.2	128	29287 20DALE
27023	11DELVIN	161	27045	11WI	TAP	144.9	144.6	142	129	29294 20DARWJ
27044	11W	IRVI	161	27045	11WI	TAP	82.3	111.2	129	29294 20DARWJ
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	74	100.8	129	29294 20DARWJ
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	116	129	29294 20DARWJ
29411	20LILYJ69.0	29634	20WOODLN		25.5	25.1	23	110.8	129	29294 20DARWJ
27023	11DELVIN	161	27045	11WI	TAP	145	144.6	142	130	29295 20DAVIS
27044	11W	IRVI	161	27045	11WI	TAP	82.3	102.1	130	29295 20DAVIS
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	74	111.2	130	29295 20DAVIS
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.4	130	29295 20DAVIS
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109	130	29295 20DAVIS
27023	11DELVIN	161	27045	11WI	TAP	144.9	144.6	142	131	29295 20DAVIS
27044	11W	IRVI	161	27045	11WI	TAP	82.3	111.2	131	29295 20DAVIS
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	74	100.8	131	29295 20DAVIS
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.5	131	29295 20DAVIS
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.1	131	29295 20DAVIS
27023	11DELVIN	161	27045	11WI	TAP	144.1	144.6	142	132	29296 20DENNY
27044	11W	IRVI	161	27045	11WI	TAP	82.2	101.4	132	29296 20DENNY
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	74	111.1	132	29296 20DENNY
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.9	132	29296 20DENNY
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.2	132	29296 20DENNY
27023	11DELVIN	161	27045	11WI	TAP	144.3	144.6	142	133	29298 20DENNY
27044	11W	IRVI	161	27045	11WI	TAP	82.2	111.1	133	29298 20DENNY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	74	100.7	133	29298 20DENNY
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	116	133	29298 20DENNY
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.3	133	29298 20DENNY
27023	11DELVIN	161	27045	11WI	TAP	144.3	144.6	142	134	29298 20DENNY
27044	11W	IRVI	161	27045	11WI	TAP	82.2	101.6	134	29298 20DENNY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	74	111.1	134	29298 20DENNY
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.5	134	29298 20DENNY
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.1	134	29298 20DENNY
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	135	29299 20DEVON
27044	11W	IRVI	161	27045	11WI	TAP	82.3	111.2	135	29299 20DEVON
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	74	100.7	135	29299 20DEVON
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.6	135	29299 20DEVON

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	135	29299	20DEVON 69.0 29600 20TRKYFJ69.0 1
29572	20SPRKJ169.0	29576	20S PARK	73.5	63.6	72	102.1	135	29299	20DEVON 69.0 29600 20TRKYFJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	136	29302	20DURO J69.0 29572 20SPRKJ169.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	136	29302	20DURO J69.0 29572 20SPRKJ169.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	136	29302	20DURO J69.0 29572 20SPRKJ169.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	136	29302	20DURO J69.0 29572 20SPRKJ169.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	136	29302	20DURO J69.0 29572 20SPRKJ169.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	137	29302	20DURO J69.0 29600 20TRKYFJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	137	29302	20DURO J69.0 29600 20TRKYFJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	137	29302	20DURO J69.0 29600 20TRKYFJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	137	29302	20DURO J69.0 29600 20TRKYFJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	142	101.7	138	29303	20E BARD69.0 29411 20LILYJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.2	138	29303	20E BARD69.0 29411 20LILYJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	138	29303	20E BARD69.0 29411 20LILYJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22.3	22	19	117.5	138	29303	20E BARD69.0 29411 20LILYJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	142	101.6	139	29304	20BERNST69.0 29402 20LAURIJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	139	29304	20BERNST69.0 29402 20LAURIJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	139	29304	20BERNST69.0 29402 20LAURIJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	139	29304	20BERNST69.0 29402 20LAURIJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	139	29304	20BERNST69.0 29402 20LAURIJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.9	144.6	142	101.4	140	29304	20BERNST69.0 29423 20MAPLSJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	140	29304	20BERNST69.0 29423 20MAPLSJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	140	29304	20BERNST69.0 29423 20MAPLSJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	140	29304	20BERNST69.0 29423 20MAPLSJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	140	29304	20BERNST69.0 29423 20MAPLSJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.9	144.6	142	101.3	141	29306	20EBERLE69.0 29307 20EBERLJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	141	29306	20EBERLE69.0 29307 20EBERLJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	141	29306	20EBERLE69.0 29307 20EBERLJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	141	29306	20EBERLE69.0 29307 20EBERLJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	141	29306	20EBERLE69.0 29307 20EBERLJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	144.6	142	101	142	29307	20EBERLJ69.0 29423 20MAPLSJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.1	142	29307	20EBERLJ69.0 29423 20MAPLSJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	142	29307	20EBERLJ69.0 29423 20MAPLSJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	142	29307	20EBERLJ69.0 29423 20MAPLSJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	142	29307	20EBERLJ69.0 29423 20MAPLSJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	143	29308	20ELLTVL69.0 29519 20ROWAN 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	143	29308	20ELLTVL69.0 29519 20ROWAN 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	143	29308	20ELLTVL69.0 29519 20ROWAN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	143	29308	20ELLTVL69.0 29519 20ROWAN 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	143	29308	20ELLTVL69.0 29519 20ROWAN 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	144	29310	20ETOWN 69.0 29552 20SMTHVJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	144	29310	20ETOWN 69.0 29552 20SMTHVJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	144	29310	20ETOWN 69.0 29552 20SMTHVJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	144	29310	20ETOWN 69.0 29552 20SMTHVJ69.0 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	153	29315	20FALMKU69.0	29324	20F	OAKS69.0	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	20FAWKES	138	29387	20JKSMIT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	154	29316	20FAWKES	138	29387	20JKSMIT	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	154	29316	20FAWKES	138	29387	20JKSMIT	138	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.8	154	29316	20FAWKES	138	29387	20JKSMIT	138	1
27044	11W	IRVI	161	27045	11WI	TAP	81.8	82.3	74	110.5	20FAWKES	138	29594	20TFJ	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	155	29316	20FAWKES	138	29594	20TFJ	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	155	29316	20FAWKES	138	29594	20TFJ	138	1
29411	20LILYJTJ69.0	29634	20WOODLN	24.8	25.1	25.1	23	107.9	155	29316	20FAWKES	138	29594	20TFJ	138	1
27023	11DELVIN	161	27045	11WI	TAP	149.4	144.6	105.2	156	29316	20FAWKES	138	29612	20WBAREA	138	1
27044	11W	IRVI	161	27045	11WI	TAP	81.9	82.3	74	110.7	20FAWKES	138	29612	20WBAREA	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	156	29316	20FAWKES	138	29612	20WBAREA	138	1
27209	11FAWKES69.0	29283	20CROOKJ	62.3	21.8	21.8	54	115.3	156	29316	20FAWKES	138	29612	20WBAREA	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.1	156	29316	20FAWKES	138	29612	20WBAREA	138	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	156	29316	20FAWKES	138	29612	20WBAREA	138	1
27023	11DELVIN	161	27045	11WI	TAP	145.3	144.6	102.3	157	29318	20FAYETT	138	29319	20FAYETT69.0	1	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.3	20FAYETT	138	29319	20FAYETT69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	157	29318	20FAYETT	138	29319	20FAYETT69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	157	29318	20FAYETT	138	29319	20FAYETT69.0	1	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.9	157	29320	20FRTKNX69.0	29322	20FRTKNJ69.0	1	1	
27023	11DELVIN	161	27045	11WI	TAP	144.7	144.6	101.9	158	29320	20FRTKNX69.0	29322	20FRTKNJ69.0	1	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	20FRTKNX69.0	29322	20FRTKNJ69.0	1	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	158	29320	20FRTKNX69.0	29322	20FRTKNJ69.0	1	1	
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	22	19	117.1	158	29320	20FRTKNX69.0	29322	20FRTKNJ69.0	1	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.4	25.1	25.1	23	110.2	158	29320	20FRTKNX69.0	29322	20FRTKNJ69.0	1	1	
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	101.8	159	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	159	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	22	19	114.9	159	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.9	159	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	101.8	160	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	160	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.3	160	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	160	29322	20FRTKNJ69.0	29516	20ROGV	J69.0	1	1
27023	11DELVIN	161	27045	11WI	TAP	144.8	144.6	102	161	29323	20F	29324	20F	OAKS69.0	1	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	20F	29324	20F	OAKS69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	161	29323	20F	29324	20F	OAKS69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	161	29323	20F	29324	20F	OAKS69.0	1	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	161	29323	20F	29324	20F	OAKS69.0	1	1
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	101.8	162	29326	20FRCKBJ69.0	29459	20N	SPR	69.0	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	20FRCKBJ69.0	29459	20N	SPR	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	162	29326	20FRCKBJ69.0	29459	20N	SPR	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.5	162	29326	20FRCKBJ69.0	29459	20N	SPR	69.0	1
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	101.8	163	29326	20FRCKBJ69.0	29634	20WOODLN	69.0	1	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	163	29326 20FRCKBJ69.0	29634	20WOODLN69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.7	163	29326 20FRCKBJ69.0	29634	20WOODLN69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	22	19	117	163	29326 20FRCKBJ69.0	29634	20WOODLN69.0	1		
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	164	29327 20FRNCHB69.0	29362	20HOPE	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	164	29327 20FRNCHB69.0	29362	20HOPE	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	164	29327 20FRNCHB69.0	29362	20HOPE	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	164	29327 20FRNCHB69.0	29362	20HOPE	69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	164	29327 20FRNCHB69.0	29362	20HOPE	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	165	29327 20FRNCHB69.0	29427	20MARIBJ69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	165	29327 20FRNCHB69.0	29427	20MARIBJ69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	165	29327 20FRNCHB69.0	29427	20MARIBJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	165	29327 20FRNCHB69.0	29427	20MARIBJ69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	165	29327 20FRNCHB69.0	29427	20MARIBJ69.0	1		
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	166	29330 20GLENL69.0	29359	20HODGEN69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	166	29330 20GLENL69.0	29359	20HODGEN69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	166	29330 20GLENL69.0	29359	20HODGEN69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21	22	22	19	110.6	166	29330 20GLENL69.0	29359	20HODGEN69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.7	166	29330 20GLENL69.0	29359	20HODGEN69.0	1		
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	167	29330 20GLENL69.0	29571	20STEPHN69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	167	29330 20GLENL69.0	29571	20STEPHN69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	167	29330 20GLENL69.0	29571	20STEPHN69.0	1		
27229	11HODGEN69.0	29359	20HODGEN	42.6	36.1	36.1	40	106.5	167	29330 20GLENL69.0	29571	20STEPHN69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	20.2	22	22	19	106.1	167	29330 20GLENL69.0	29571	20STEPHN69.0	1		
29411	20LILYJTJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.9	167	29330 20GLENL69.0	29571	20STEPHN69.0	1		
27023	11DELVIN	161	27045	11WI TAP	145.1	144.6	142	102.2	168	29331 20GODDRD	138	29332	20GODDRD69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	168	29331 20GODDRD	138	29332	20GODDRD69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	168	29331 20GODDRD	138	29332	20GODDRD69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	168	29331 20GODDRD	138	29332	20GODDRD69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.8	168	29331 20GODDRD	138	29332	20GODDRD69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.3	144.6	142	100.9	169	29331 20GODDRD	138	29498	20PLUMV	138	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.3	74	111	169	29331 20GODDRD	138	29498	20PLUMV	138	1
27090	11FLEMEN	138	27093	11GODDRD	185.8	129.6	158	117.6	169	29331 20GODDRD	138	29498	20PLUMV	138	1
27090	11FLEMEN	138	27157	11WEDONI	191.6	135.2	179	107	169	29331 20GODDRD	138	29498	20PLUMV	138	1
27105	11KENTON	138	27157	11WEDONI	197.3	140.8	179	110.2	169	29331 20GODDRD	138	29498	20PLUMV	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	169	29331 20GODDRD	138	29498	20PLUMV	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	169	29331 20GODDRD	138	29498	20PLUMV	138	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.4	25.1	25.1	23	110.2	169	29331 20GODDRD	138	29498	20PLUMV	138	1
27023	11DELVIN	161	27045	11WI TAP	143.6	144.6	142	101.2	170	29331 20GODDRD	138	29640	20CRANST	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	170	29331 20GODDRD	138	29640	20CRANST	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	170	29331 20GODDRD	138	29640	20CRANST	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	170	29331 20GODDRD	138	29640	20CRANST	138	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.8	170	29331 20GODDRD	138	29640	20CRANST	138	1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	171	29332 20GODDRD69.0	29356	20HILDA	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	171	29332 20GODDRD69.0	29356	20HILDA	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	171	29332 20GODDRD69.0	29356	20HILDA	69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	171	29332 20GODDRD69.0	29356 20HILDA 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	171	29332 20GODDRD69.0	29356 20HILDA 69.0	1
27023	11DELVIN 161	27045	11WI TAP	146	144.6	142	142	102.8	172	29332 20GODDRD69.0	29358 20HILLSB69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	74	111.1	172	29332 20GODDRD69.0	29358 20HILLSB69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	172	29332 20GODDRD69.0	29358 20HILLSB69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	172	29332 20GODDRD69.0	29358 20HILLSB69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	23	110.2	172	29332 20GODDRD69.0	29358 20HILLSB69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	142	142	101.6	173	29334 20GOLDBG69.0	29379 20JELLCJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	74	111.1	173	29334 20GOLDBG69.0	29379 20JELLCJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	173	29334 20GOLDBG69.0	29379 20JELLCJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	19	115.3	173	29334 20GOLDBG69.0	29379 20JELLCJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.2	173	29334 20GOLDBG69.0	29379 20JELLCJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	142	101.8	174	29335 20GODDNT69.0	29336 20GORINJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	74	111.2	174	29335 20GODDNT69.0	29336 20GORINJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	174	29335 20GODDNT69.0	29336 20GORINJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	19	116.5	174	29335 20GODDNT69.0	29336 20GORINJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.4	174	29335 20GODDNT69.0	29336 20GORINJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	142	101.8	175	29338 20GRNTLK69.0	29347 20GRIFFFJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	74	111.2	175	29338 20GRNTLK69.0	29347 20GRIFFFJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	175	29338 20GRNTLK69.0	29347 20GRIFFFJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.5	175	29338 20GRNTLK69.0	29347 20GRIFFFJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.3	175	29338 20GRNTLK69.0	29347 20GRIFFFJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	142	101.8	176	29338 20GRNTLK69.0	29574 20SPRKJ269.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	74	111.2	176	29338 20GRNTLK69.0	29574 20SPRKJ269.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	176	29338 20GRNTLK69.0	29574 20SPRKJ269.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.6	176	29338 20GRNTLK69.0	29574 20SPRKJ269.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.4	176	29338 20GRNTLK69.0	29574 20SPRKJ269.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	142	101.8	177	29339 20GRAYSN69.0	29406 20LEON 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	74	111.2	177	29339 20GRAYSN69.0	29406 20LEON 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	177	29339 20GRAYSN69.0	29406 20LEON 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.6	177	29339 20GRAYSN69.0	29406 20LEON 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.3	177	29339 20GRAYSN69.0	29406 20LEON 69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	142	101.8	178	29339 20GRAYSN69.0	29479 20PCTLSJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	74	111.2	178	29339 20GRAYSN69.0	29479 20PCTLSJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	178	29339 20GRAYSN69.0	29479 20PCTLSJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.6	178	29339 20GRAYSN69.0	29479 20PCTLSJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.4	178	29339 20GRAYSN69.0	29479 20PCTLSJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	142.8	144.6	142	142	100.5	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82	82.3	74	74	110.8	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.6	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.2	179	29340 20GRNBR 69.0	29342 20GRNBRJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	82	82.3	74	74	110.8	180	29342 20GRNBRJ69.0	29422 20MNCHST69.0	1
27044	11W IRVI 161	27045	11WI TAP	144	144	143	143	100.7	180	29342 20GRNBRJ69.0	29422 20MNCHST69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	143	100.7	180	29342 20GRNBRJ69.0	29422 20MNCHST69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.6	180	29342 20GRNBRJ69.0	29422 20MNCHST69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	180	29342	20GRNBRJ69.0	29422	20MCHST69.0	1
27044	11W IRVI	161 27045	11WI TAP	81.8	82.3	74	110.5	181	29342	20GRNBRJ69.0	29475	20ONEIDJ69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	181	29342	20GRNBRJ69.0	29475	20ONEIDJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	181	29342	20GRNBRJ69.0	29475	20ONEIDJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.9	181	29342	20GRNBRJ69.0	29475	20ONEIDJ69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.7	182	29343	20GREENC	161 29344	20GREENC69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	182	29343	20GREENC	161 29344	20GREENC69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	182	29343	20GREENC	161 29344	20GREENC69.0	1
27229	11HODGEN69.0	29359	20HODGEN	40	36.1	40	100.1	182	29343	20GREENC	161 29344	20GREENC69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	29.7	22	19	156.4	182	29343	20GREENC	161 29344	20GREENC69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	182	29343	20GREENC	161 29344	20GREENC69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.1	144.6	142	101.5	183	29343	20GREENC	161 29583	20SSHADE	161 1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	183	29343	20GREENC	161 29583	20SSHADE	161 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.3	144	143	100.9	183	29343	20GREENC	161 29583	20SSHADE	161 1
29359	20HODGEN69.0	29419	20MAGNOL	26.7	22	19	140.4	183	29343	20GREENC	161 29583	20SSHADE	161 1
29411	20LILYJ69.0	29634	20WOODLN	26.8	25.1	23	116.4	183	29343	20GREENC	161 29583	20SSHADE	161 1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.8	184	29343	20GREENC	161 29587	20TAYCTP	161 1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.3	184	29343	20GREENC	161 29587	20TAYCTP	161 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.8	184	29343	20GREENC	161 29587	20TAYCTP	161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.6	184	29343	20GREENC	161 29587	20TAYCTP	161 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	110.1	184	29343	20GREENC	161 29587	20TAYCTP	161 1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.9	185	29344	20GREENC69.0	29346	20GRSBRG69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	185	29344	20GREENC69.0	29346	20GRSBRG69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	185	29344	20GREENC69.0	29346	20GRSBRG69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	20.4	22	19	107.3	185	29344	20GREENC69.0	29346	20GRSBRG69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25.1	23	108.4	185	29344	20GREENC69.0	29346	20GRSBRG69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.8	185	29344	20GREENC69.0	29346	20GRSBRG69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.3	74	111.1	186	29344	20GREENC69.0	29582	20SUMMRV69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	186	29344	20GREENC69.0	29582	20SUMMRV69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	186	29344	20GREENC69.0	29582	20SUMMRV69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21	22	19	110.7	187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.8	187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1
27044	11W IRVI	161 27045	11WI TAP	75.3	82.3	74	101.8	188	29348	20GRNHLJ	161 29602	20TYNER	161 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.8	188	29348	20GRNHLJ	161 29602	20TYNER	161 1
27235	11KU PK	69.0 27265	11PINEVI	85	69.6	82	103.7	188	29348	20GRNHLJ	161 29602	20TYNER	161 1
29359	20HODGEN69.0	29419	20MAGNOL	22.4	22	19	117.7	188	29348	20GRNHLJ	161 29602	20TYNER	161 1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.7	188	29348	20GRNHLJ	161 29602	20TYNER	161 1
27023	11DELVIN	161 27045	11WI TAP	146.3	144.6	142	103	189	29350	20HARGTJ69.0	29598	20TRAPP	69.0 1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.3	74	111	189	29350	20HARGTJ69.0	29598	20TRAPP	69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	189	29350	20HARGTJ69.0	29598	20TRAPP	69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	189	29350	20HARGTJ69.0	29598	20TRAPP	69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25.1	23	107.6	189	29350	20HARGTJ69.0	29598	20TRAPP	69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency			
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.9	191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.8	144.6	142	101.3	192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.7	82.3	74	111.8	192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	145	144.6	142	102.1	193	29354	20HICK P69.0	29504	20PPG 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.5	82.3	74	111.5	193	29354	20HICK P69.0	29504	20PPG 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	193	29354	20HICK P69.0	29504	20PPG 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	193	29354	20HICK P69.0	29504	20PPG 69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	193	29354	20HICK P69.0	29504	20PPG 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	144.6	142	101.1	194	29355	20HIGHLD69.0	29450	20MT OLJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.3	74	111	194	29355	20HIGHLD69.0	29450	20MT OLJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	194	29355	20HIGHLD69.0	29450	20MT OLJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.1	194	29355	20HIGHLD69.0	29450	20MT OLJ69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.3	25.1	23	110	194	29355	20HIGHLD69.0	29450	20MT OLJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	195	29355	20HIGHLD69.0	29604	20TGOOCH69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	195	29355	20HIGHLD69.0	29604	20TGOOCH69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	195	29355	20HIGHLD69.0	29604	20TGOOCH69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	195	29355	20HIGHLD69.0	29604	20TGOOCH69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	195	29355	20HIGHLD69.0	29604	20TGOOCH69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	196	29356	20HILDA 69.0	29519	20ROWAN 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	196	29356	20HILDA 69.0	29519	20ROWAN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	196	29356	20HILDA 69.0	29519	20ROWAN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	196	29356	20HILDA 69.0	29519	20ROWAN 69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	196	29356	20HILDA 69.0	29519	20ROWAN 69.0	1
27023	11DELVIN 161	27045	11WI TAP	145.5	144.6	142	102.4	197	29358	20HILLSB69.0	29636	20WYOMNG69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.3	74	111	197	29358	20HILLSB69.0	29636	20WYOMNG69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	197	29358	20HILLSB69.0	29636	20WYOMNG69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	197	29358	20HILLSB69.0	29636	20WYOMNG69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.3	25.1	23	109.9	197	29358	20HILLSB69.0	29636	20WYOMNG69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	198	29359	20HODGEN69.0	29419	20MAGNOL69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	198	29359	20HODGEN69.0	29419	20MAGNOL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	198	29359	20HODGEN69.0	29419	20MAGNOL69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.5	25.1	23	110.9	198	29359	20HODGEN69.0	29419	20MAGNOL69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	199	29359	20HODGEN69.0	29580	20SULPHR69.0	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	199	29359 2OHODGEN69.0	29580 20SULPHR69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144.1	144	143	100.8	199	29359 2OHODGEN69.0	29580 20SULPHR69.0	1	
29326	20FERCKBJ69.0	29634	20WOODLN			23.9	19.1	23	103.8	199	29359 2OHODGEN69.0	29580 20SULPHR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			24.2	22	19	127.2	199	29359 2OHODGEN69.0	29580 20SULPHR69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			30	25.1	23	130.3	199	29359 2OHODGEN69.0	29580 20SULPHR69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.7	144.6	142	101.9	200	29360 2OHOLLWJ69.0	29470 2ONCHLSV69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	200	29360 2OHOLLWJ69.0	29470 2ONCHLSV69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	200	29360 2OHOLLWJ69.0	29470 2ONCHLSV69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			21.9	22	19	115.5	200	29360 2OHOLLWJ69.0	29470 2ONCHLSV69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			25.1	25.1	23	109.2	200	29360 2OHOLLWJ69.0	29470 2ONCHLSV69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.4	144.6	142	101.7	201	29362 2OHOPE	29376 20JEFFVL69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	201	29362 2OHOPE	29376 20JEFFVL69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	201	29362 2OHOPE	29376 20JEFFVL69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			22	22	19	115.6	201	29362 2OHOPE	29376 20JEFFVL69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			25.1	25.1	23	109.2	201	29362 2OHOPE	29376 20JEFFVL69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.7	144.6	142	101.9	202	29362 2OHOPE	29376 20JEFFVL69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.2	82.3	74	111.1	202	29362 2OHOPE	29376 20JEFFVL69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	202	29362 2OHOPE	29376 20JEFFVL69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			22	22	19	115.6	202	29362 2OHOPE	29376 20JEFFVL69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			25.2	25.1	23	109.5	202	29362 2OHOPE	29376 20JEFFVL69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.8	144.6	142	101.9	203	29363 2OHCVKU69.0	29454 20MUNFKU69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	203	29363 2OHCVKU69.0	29454 20MUNFKU69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	203	29363 2OHCVKU69.0	29454 20MUNFKU69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			22.7	22	19	119.2	203	29363 2OHCVKU69.0	29454 20MUNFKU69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			25.1	25.1	23	109.1	203	29363 2OHCVKU69.0	29454 20MUNFKU69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.8	144.6	142	102	204	29364 2OHTADMS69.0	29366 2OHTADMJ69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	204	29364 2OHTADMS69.0	29366 2OHTADMJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	204	29364 2OHTADMS69.0	29366 2OHTADMJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			22.1	22	19	116.2	204	29364 2OHTADMS69.0	29366 2OHTADMJ69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			23.5	25.1	23	102.1	204	29364 2OHTADMS69.0	29366 2OHTADMJ69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.9	144.6	142	102	205	29366 2OHTADMS69.0	29367 2OHTADMJ69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	205	29366 2OHTADMS69.0	29367 2OHTADMJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	205	29366 2OHTADMS69.0	29367 2OHTADMJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			22.1	22	19	116.2	205	29366 2OHTADMS69.0	29367 2OHTADMJ69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			23.1	25.1	23	100.6	205	29366 2OHTADMS69.0	29367 2OHTADMJ69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.8	144.6	142	102	206	29367 2OHTADMS69.0	29487 20PERRVL69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	206	29367 2OHTADMS69.0	29487 20PERRVL69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144.1	144	143	100.7	206	29367 2OHTADMS69.0	29487 20PERRVL69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL			21.9	22	19	115	206	29367 2OHTADMS69.0	29487 20PERRVL69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN			26.2	25.1	23	113.7	206	29367 2OHTADMS69.0	29487 20PERRVL69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	145.5	144.6	142	102.5	207	29368 2OHUNT1	29546 20SIDEV	69.0	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.3	207	29368 2OHUNT1	29546 20SIDEV	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	207	29368 2OHUNT1	29546 20SIDEV	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL			22	22	19	115.8	207	29368 2OHUNT1	29546 20SIDEV	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN			24.8	25.1	23	107.6	207	29368 2OHUNT1	29546 20SIDEV	69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	146.5	144.6	142	103.2	208	29370 20HUNT2	69.0	29388	20JKSMIT69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111	208	29370 20HUNT2	69.0	29388	20JKSMIT69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	208	29370 20HUNT2	69.0	29388	20JKSMIT69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.7	208	29370 20HUNT2	69.0	29388	20JKSMIT69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	24.7	25.1	23	107.4	208	29370 20HUNT2	69.0	29388	20JKSMIT69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	209	29371 20INDEX	69.0	29372	20INDEXJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	209	29371 20INDEX	69.0	29372	20INDEXJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	209	29371 20INDEX	69.0	29372	20INDEXJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.7	209	29371 20INDEX	69.0	29372	20INDEXJ69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	209	29371 20INDEX	69.0	29372	20INDEXJ69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.8	144.6	142	101.3	210	29372 20INDEXJ69.0	29435	20MAYTNJ69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	210	29372 20INDEXJ69.0	29435	20MAYTNJ69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	210	29372 20INDEXJ69.0	29435	20MAYTNJ69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	210	29372 20INDEXJ69.0	29435	20MAYTNJ69.0 1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25.1	23	108.9	210	29372 20INDEXJ69.0	29435	20MAYTNJ69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.1	144.6	142	101.5	211	29372 20INDEXJ69.0	29619	20W LIB 69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	211	29372 20INDEXJ69.0	29619	20W LIB 69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	211	29372 20INDEXJ69.0	29619	20W LIB 69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	211	29372 20INDEXJ69.0	29619	20W LIB 69.0 1	
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	211	29372 20INDEXJ69.0	29619	20W LIB 69.0 1	
27023	11DELVIN 161 27045 11WI TAP	143.6	144.6	142	101.1	212	29374 20JACKVJ	138	29512	20RENAKR 138 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	212	29374 20JACKVJ	138	29512	20RENAKR 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	212	29374 20JACKVJ	138	29512	20RENAKR 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	212	29374 20JACKVJ	138	29512	20RENAKR 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25.1	23	109.9	212	29374 20JACKVJ	138	29512	20RENAKR 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	213	29375 20JBGALJ69.0	29394	20KNOBLK69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	213	29375 20JBGALJ69.0	29394	20KNOBLK69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	213	29375 20JBGALJ69.0	29394	20KNOBLK69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	23.1	22	19	121.7	213	29375 20JBGALJ69.0	29394	20KNOBLK69.0 1	
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25.1	23	110	213	29375 20JBGALJ69.0	29394	20KNOBLK69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.7	214	29375 20JBGALJ69.0	29584	20SSHADE69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	214	29375 20JBGALJ69.0	29584	20SSHADE69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.7	214	29375 20JBGALJ69.0	29584	20SSHADE69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	24	22	19	126.5	214	29375 20JBGALJ69.0	29584	20SSHADE69.0 1	
29411	20LILYJTJ69.0 29634 20WOODLN	25.4	25.1	23	110.5	214	29375 20JBGALJ69.0	29584	20SSHADE69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	101.6	215	29376 20JEFFVL69.0	29503	20POWELL69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.3	215	29376 20JEFFVL69.0	29503	20POWELL69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	215	29376 20JEFFVL69.0	29503	20POWELL69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	215	29376 20JEFFVL69.0	29503	20POWELL69.0 1	
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	215	29376 20JEFFVL69.0	29503	20POWELL69.0 1	
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	216	29378 20JELLCR69.0	29379	20JELLCJ69.0 1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	216	29378 20JELLCR69.0	29379	20JELLCJ69.0 1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	216	29378 20JELLCR69.0	29379	20JELLCJ69.0 1	
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.3	216	29378 20JELLCR69.0	29379	20JELLCJ69.0 1	
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	216	29378 20JELLCR69.0	29379	20JELLCJ69.0 1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.4	82.3	144.6	142	101.7	217	29379	20JELLCJ69.0	29438
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	82.3	74	111.2	217	29379	20JELLCJ69.0	29438
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	217	29379	20JELLCJ69.0	29438
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	22	19	115	217	29379	20JELLCJ69.0	29438
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	25.1	23	109.1	217	29379	20JELLCJ69.0	29438
27023	11DELVIN 161 27045 11WI TAP	145.1	144.6	144.6	142	102.2	218	29380	20JNYWLJ69.0	29592
27044	11W IRVI 161 27045 11WI TAP	82	82.3	82.3	74	110.8	218	29380	20JNYWLJ69.0	29592
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	218	29380	20JNYWLJ69.0	29592
29359	20HODGEN69.0 29419 20MAGNOL	22	22	22	19	115.5	218	29380	20JNYWLJ69.0	29592
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	25.1	23	109.6	218	29380	20JNYWLJ69.0	29592
27023	11DELVIN 161 27045 11WI TAP	192.7	144.6	144.6	142	135.7	219	29387	20JKSMIT 138	29501
27044	11W IRVI 161 27045 11WI TAP	88.7	82.3	82.3	74	119.8	219	29387	20JKSMIT 138	29501
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	219	29387	20JKSMIT 138	29501
29359	20HODGEN69.0 29419 20MAGNOL	22.1	22	22	19	116.3	219	29387	20JKSMIT 138	29501
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25.1	25.1	23	109.9	219	29387	20JKSMIT 138	29501
27023	11DELVIN 161 27045 11WI TAP	146.5	144.6	144.6	142	103.2	220	29388	20JKSMIT69.0	29598
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	82.3	74	111	220	29388	20JKSMIT69.0	29598
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	220	29388	20JKSMIT69.0	29598
29359	20HODGEN69.0 29419 20MAGNOL	22	22	22	19	115.7	220	29388	20JKSMIT69.0	29598
29411	20LILYJTJ69.0 29634 20WOODLN	24.7	25.1	25.1	23	107.5	220	29388	20JKSMIT69.0	29598
27023	11DELVIN 161 27045 11WI TAP	144.7	144.6	144.6	142	101.9	221	29390	20KARGLE69.0	29571
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	82.3	74	111.2	221	29390	20KARGLE69.0	29571
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	144	143	100.8	221	29390	20KARGLE69.0	29571
27229	11HODGEN69.0 29359 20HODGEN	44.5	36.1	36.1	40	111.2	221	29390	20KARGLE69.0	29571
29359	20HODGEN69.0 29419 20MAGNOL	21.1	22	22	19	110.9	221	29390	20KARGLE69.0	29571
29411	20LILYJTJ69.0 29634 20WOODLN	26	25.1	25.1	23	113.1	221	29390	20KARGLE69.0	29571
27023	11DELVIN 161 27045 11WI TAP	146	144.6	144.6	142	102.8	222	29391	20KEAVY 69.0	29399
27044	11W IRVI 161 27045 11WI TAP	82.6	82.3	82.3	74	111.6	222	29391	20KEAVY 69.0	29399
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	222	29391	20KEAVY 69.0	29399
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	22	19	115.4	222	29391	20KEAVY 69.0	29399
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	25.1	23	109.4	222	29391	20KEAVY 69.0	29399
27023	11DELVIN 161 27045 11WI TAP	145.5	144.6	144.6	142	102.5	223	29391	20KEAVY 69.0	29491
27044	11W IRVI 161 27045 11WI TAP	82.5	82.3	82.3	74	111.5	223	29391	20KEAVY 69.0	29491
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	223	29391	20KEAVY 69.0	29491
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	22	19	115.4	223	29391	20KEAVY 69.0	29491
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	25.1	23	109.4	223	29391	20KEAVY 69.0	29491
27023	11DELVIN 161 27045 11WI TAP	144.8	144.6	144.6	142	101.9	224	29392	20KEITH 69.0	29486
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	82.3	74	111.2	224	29392	20KEITH 69.0	29486
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	224	29392	20KEITH 69.0	29486
29359	20HODGEN69.0 29419 20MAGNOL	22	22	22	19	115.7	224	29392	20KEITH 69.0	29486
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	25.1	23	109.3	224	29392	20KEITH 69.0	29486
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	144.6	142	101.8	225	29394	20KNOBLK69.0	29440
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	82.3	74	111.2	225	29394	20KNOBLK69.0	29440
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	144	143	100.7	225	29394	20KNOBLK69.0	29440
29359	20HODGEN69.0 29419 20MAGNOL	21.5	22	22	19	113.1	225	29394	20KNOBLK69.0	29440

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109		225	29394 20KNBLK69.0	29440 20MCKNYJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	147.2	144.6	142	103.6		226	29395 20LNCSTR69.0	29463 20NEWBY169.0	1
27044	11W IRVI 161	27045	11WI TAP	82.6	82.3	74	111.7		226	29395 20LNCSTR69.0	29463 20NEWBY169.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		226	29395 20LNCSTR69.0	29463 20NEWBY169.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.5	22	19	118.2		226	29395 20LNCSTR69.0	29463 20NEWBY169.0	1
29411	20LILYJT69.0	29634	20WOODLN	24.7	25.1	23	107.5		226	29395 20LNCSTR69.0	29463 20NEWBY169.0	1
27023	11DELVIN 161	27045	11WI TAP	146.3	144.6	142	103		227	29395 20LNCSTR69.0	29604 20TGOOCH69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.5	82.3	74	111.5		227	29395 20LNCSTR69.0	29604 20TGOOCH69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		227	29395 20LNCSTR69.0	29604 20TGOOCH69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.3	22	19	117.2		227	29395 20LNCSTR69.0	29604 20TGOOCH69.0	1
29411	20LILYJT69.0	29634	20WOODLN	24.9	25.1	23	108.2		227	29395 20LNCSTR69.0	29604 20TGOOCH69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.3	74	111		228	29398 20LAURLC 161	29399 20LAURLC69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		228	29398 20LAURLC 161	29399 20LAURLC69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.8		228	29398 20LAURLC 161	29399 20LAURLC69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25	25.1	23	108.7		228	29398 20LAURLC 161	29399 20LAURLC69.0	1
27023	11DELVIN 161	27045	11WI TAP	163.4	144.6	142	115.1		229	29398 20LAURLC 161	29400 20LAURLD 161	1
27044	11W IRVI 161	27045	11WI TAP	86.7	82.3	74	117.2		229	29398 20LAURLC 161	29400 20LAURLD 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8		229	29398 20LAURLC 161	29400 20LAURLD 161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	19	112.4		229	29398 20LAURLC 161	29400 20LAURLD 161	1
29411	20LILYJT69.0	29634	20WOODLN	25	25.1	23	108.7		229	29398 20LAURLC 161	29400 20LAURLD 161	1
27023	11DELVIN 161	27045	11WI TAP	147.5	144.6	142	103.9		230	29398 20LAURLC 161	29496 20PITTSB 161	1
27044	11W IRVI 161	27045	11WI TAP	83	82.3	74	112.1		230	29398 20LAURLC 161	29496 20PITTSB 161	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		230	29398 20LAURLC 161	29496 20PITTSB 161	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4		230	29398 20LAURLC 161	29496 20PITTSB 161	1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	23	109.4		230	29398 20LAURLC 161	29496 20PITTSB 161	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7		231	29399 20LAURLC69.0	29528 20SCORBN69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1		231	29399 20LAURLC69.0	29528 20SCORBN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		231	29399 20LAURLC69.0	29528 20SCORBN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6		231	29399 20LAURLC69.0	29528 20SCORBN69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3		231	29399 20LAURLC69.0	29528 20SCORBN69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.9		232	29402 20LAURIJ69.0	29620 20W LOND69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2		232	29402 20LAURIJ69.0	29620 20W LOND69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		232	29402 20LAURIJ69.0	29620 20W LOND69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	19	112.7		232	29402 20LAURIJ69.0	29620 20W LOND69.0	1
29411	20LILYJT69.0	29634	20WOODLN	23.6	25.1	23	102.6		232	29402 20LAURIJ69.0	29620 20W LOND69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8		234	29404 20LEESLK69.0	29486 20PENN 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2		234	29404 20LEESLK69.0	29486 20PENN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7		234	29404 20LEESLK69.0	29486 20PENN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5		234	29404 20LEESLK69.0	29486 20PENN 69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3		234	29404 20LEESLK69.0	29486 20PENN 69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Noon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	144.6	101.8	235	29404	20LEESLK69.0	29514 20RENAKR69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	82.3	111.2	235	29404	20LEESLK69.0	29514 20RENAKR69.0 1
27051	11ADAMS 138 27148 11TYRONE	99.1	95.8	97	95.8	102.2	235	29404	20LEESLK69.0	29514 20RENAKR69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	144	100.8	235	29404	20LEESLK69.0	29514 20RENAKR69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	22	115.5	235	29404	20LEESLK69.0	29514 20RENAKR69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	25.1	109.3	235	29404	20LEESLK69.0	29514 20RENAKR69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	144.6	101.8	236	29406	20LEON 69.0	29467 20NEWFND69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	82.3	111.1	236	29406	20LEON 69.0	29467 20NEWFND69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	236	29406	20LEON 69.0	29467 20NEWFND69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	22	115.6	236	29406	20LEON 69.0	29467 20NEWFND69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	25.1	109.4	236	29406	20LEON 69.0	29467 20NEWFND69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	144.6	101.8	237	29407	20LIBTKU69.0	29410 20LIBERT69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	82.3	111.2	237	29407	20LIBTKU69.0	29410 20LIBERT69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	237	29407	20LIBTKU69.0	29410 20LIBERT69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	22	115.5	238	29407	20LIBTKU69.0	29488 20PEYTON69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	25.1	109.3	238	29407	20LIBTKU69.0	29488 20PEYTON69.0 1
27023	11DELVIN 161 27045 11WI TAP	144	144.6	142	144.6	101.4	239	29408	20LIBERT 161	29410 20LIBERT69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	82.3	111.2	239	29408	20LIBERT 161	29410 20LIBERT69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	239	29408	20LIBERT 161	29410 20LIBERT69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	22	115.5	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	25.1	109.3	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.2	144.6	142	144.6	100.9	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.3	74	82.3	111	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	144	100.7	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	22	19	22	114.4	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25.1	23	25.1	110.1	240	29410	20LIBERT69.0	29450 20MT OLJ69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	144.6	101.8	241	29410	20LIBERT69.0	29490 20PHIL 69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	82.3	111.2	241	29410	20LIBERT69.0	29490 20PHIL 69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	241	29410	20LIBERT69.0	29490 20PHIL 69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22.2	22	19	22	115.6	241	29410	20LIBERT69.0	29490 20PHIL 69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	25.1	109	241	29410	20LIBERT69.0	29490 20PHIL 69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	144.6	101.7	242	29411	20LILYJTJ69.0	29634 20WOODLN69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	82.3	111.1	242	29411	20LILYJTJ69.0	29634 20WOODLN69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	242	29411	20LILYJTJ69.0	29634 20WOODLN69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22.2	22	19	22	117	242	29411	20LILYJTJ69.0	29634 20WOODLN69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	144.6	101.8	243	29412	20LORETT69.0	29532 20S SPRF69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	82.3	111.2	243	29412	20LORETT69.0	29532 20S SPRF69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	100.7	243	29412	20LORETT69.0	29532 20S SPRF69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22.1	22	19	22	116.2	243	29412	20LORETT69.0	29532 20S SPRF69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	25.1	109.6	243	29412	20LORETT69.0	29532 20S SPRF69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	244	29412	20LORETT69.0	29580	20SULPHR69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	244	29412	20LORETT69.0	29580	20SULPHR69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	244	29412	20LORETT69.0	29580	20SULPHR69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	23.5	22	19	244	29412	20LORETT69.0	29580	20SULPHR69.0	1
29411	20LILYJ69.0 29634 20WOODLN	28.9	25.1	23	244	29412	20LORETT69.0	29580	20SULPHR69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1
29411	20LILYJ69.0 29634 20WOODLN	24.9	25.1	23	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.4	144.6	142	246	29416	20MCKVKU69.0	29459	20N SPR 69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	246	29416	20MCKVKU69.0	29459	20N SPR 69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	246	29416	20MCKVKU69.0	29459	20N SPR 69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	246	29416	20MCKVKU69.0	29459	20N SPR 69.0	1
29411	20LILYJ69.0 29634 20WOODLN	24.9	25.1	23	246	29416	20MCKVKU69.0	29459	20N SPR 69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.4	144.6	142	247	29416	20MCKVKU69.0	29487	20PERRVL69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	247	29416	20MCKVKU69.0	29487	20PERRVL69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	247	29416	20MCKVKU69.0	29487	20PERRVL69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	247	29416	20MCKVKU69.0	29487	20PERRVL69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25	25.1	23	247	29416	20MCKVKU69.0	29487	20PERRVL69.0	1
27023	11DELVIN 161 27045 11WI TAP	145.7	144.6	142	248	29418	20MAGGRD69.0	29550	20SKAGGS69.0	1
27044	11W IRVI 161 27045 11WI TAP	81.8	82.3	74	248	29418	20MAGGRD69.0	29550	20SKAGGS69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	248	29418	20MAGGRD69.0	29550	20SKAGGS69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	248	29418	20MAGGRD69.0	29550	20SKAGGS69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	248	29418	20MAGGRD69.0	29550	20SKAGGS69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	248	29418	20MAGGRD69.0	29582	20SKAGGS69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	249	29419	20MAGNOL69.0	29582	20SUMMRV69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	249	29419	20MAGNOL69.0	29582	20SUMMRV69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	249	29419	20MAGNOL69.0	29582	20SUMMRV69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25.3	25.1	23	249	29419	20MAGNOL69.0	29582	20SUMMRV69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	250	29420	20MAGOFN69.0	29442	20MDLCKJ69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	250	29420	20MAGOFN69.0	29442	20MDLCKJ69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	250	29420	20MAGOFN69.0	29442	20MDLCKJ69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	250	29420	20MAGOFN69.0	29442	20MDLCKJ69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	250	29420	20MAGOFN69.0	29442	20MDLCKJ69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	251	29420	20MAGOFN69.0	29578	20SUBLET69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	251	29420	20MAGOFN69.0	29578	20SUBLET69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	251	29420	20MAGOFN69.0	29578	20SUBLET69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	251	29420	20MAGOFN69.0	29578	20SUBLET69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	251	29420	20MAGOFN69.0	29578	20SUBLET69.0	1
27023	11DELVIN 161 27045 11WI TAP	143.8	144.6	142	252	29420	20MAGOFN69.0	29579	20SUBLTJ69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.7	82.3	74	252	29420	20MAGOFN69.0	29579	20SUBLTJ69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	252	29420	20MAGOFN69.0	29579	20SUBLTJ69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	252	29420	20MAGOFN69.0	29579	20SUBLTJ69.0	1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	252	29420	20MAGOFN69.0	29579	20SUBLTJ69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	253	29424	20MARETB69.0	29426	20MARETB69.0	1

** From bus	** ** *	To bus	ContMVA	BaseFlow	Rating	Loading %	Ncon	Contingency
27044	11W IRVI 161 27045	11WI TAP	82.4	82.3	74	111.3	253	29424 20MARETJ69.0 29426 20MARETB69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	253	29424 20MARETJ69.0 29426 20MARETB69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.5	253	29424 20MARETJ69.0 29426 20MARETB69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	109.1	253	29424 20MARETJ69.0 29426 20MARETB69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.7	144.6	142	101.9	254	29424 20MARETJ69.0 29623 20WALNUT69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	254	29424 20MARETJ69.0 29623 20WALNUT69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	254	29424 20MARETJ69.0 29623 20WALNUT69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	254	29424 20MARETJ69.0 29623 20WALNUT69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	109.3	254	29424 20MARETJ69.0 29623 20WALNUT69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.7	255	29427 20MARIBJ69.0 29435 20MAYTNJ69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.3	74	111.1	255	29427 20MARIBJ69.0 29435 20MAYTNJ69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	255	29427 20MARIBJ69.0 29435 20MAYTNJ69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.5	255	29427 20MARIBJ69.0 29435 20MAYTNJ69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.2	25.1	23	109.4	255	29427 20MARIBJ69.0 29435 20MAYTNJ69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.8	144.6	142	101.9	256	29428 20MARION 161 29430 20MAR IJ 161 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	256	29428 20MARION 161 29430 20MAR IJ 161 1
27161	11AIKEN 69.0 27253	11MIDDLT	143.9	144	143	100.6	256	29428 20MARION 161 29430 20MAR IJ 161 1
29359	20HODGEN69.0 29419	20MAGNOL	25.8	22	19	135.7	256	29428 20MARION 161 29430 20MAR IJ 161 1
29411	20LILYJ69.0 29634	20WOODLN	24.5	25.1	23	106.5	256	29428 20MARION 161 29430 20MAR IJ 161 1
27023	11DELVIN 161 27045	11WI TAP	144.8	144.6	142	102	257	29431 20MRTNCJ69.0 29592 20THELMA69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	257	29431 20MRTNCJ69.0 29592 20THELMA69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	257	29431 20MRTNCJ69.0 29592 20THELMA69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	257	29431 20MRTNCJ69.0 29592 20THELMA69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	109.2	257	29431 20MRTNCJ69.0 29592 20THELMA69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.9	144.6	142	102	258	29431 20MRTNCJ69.0 29608 20VOLGA 69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	258	29431 20MRTNCJ69.0 29608 20VOLGA 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	258	29431 20MRTNCJ69.0 29608 20VOLGA 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	258	29431 20MRTNCJ69.0 29608 20VOLGA 69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	109.1	258	29431 20MRTNCJ69.0 29608 20VOLGA 69.0 1
27023	11DELVIN 161 27045	11WI TAP	142.9	144.6	142	100.6	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.3	74	110.9	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
27090	11FLEMEN 138 27093	11GODDRD	200	129.6	158	126.6	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
27090	11FLEMEN 138 27157	11WEDONI	205.8	135.2	179	115	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
27105	11KENTON 138 27157	11WEDONI	211.6	140.8	179	118.2	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.8	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
29411	20LILYJ69.0 29634	20WOODLN	25.4	25.1	23	110.6	259	29432 20MAYSJV 138 29498 20PLUMV 138 1
27023	11DELVIN 161 27045	11WI TAP	142.8	144.6	142	100.6	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
27044	11W IRVI 161 27045	11WI TAP	82	82.3	74	110.9	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
27090	11FLEMEN 138 27093	11GODDRD	202.6	129.6	158	128.2	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
27090	11FLEMEN 138 27157	11WEDONI	208.4	135.2	179	116.4	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
27105	11KENTON 138 27157	11WEDONI	214.1	140.8	179	119.6	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.8	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	260	29432 20MAYSJV 138 29566 20SPURLK 138 1
29411	20LILYJ69.0 29634	20WOODLN	25.5	25.1	23	110.7	260	29432 20MAYSJV 138 29566 20SPURLK 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN	161	27045	11WI TAP	143.5	144.6	142	101	261	29433 20MAYTNJ
27044	11W IRVI	161	27045	11WI TAP	82	82.3	74	110.9	261	29433 20MAYTNJ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	261	29433 20MAYTNJ
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5	261	29433 20MAYTNJ
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109	261	29433 20MAYTNJ
27023	11DELVIN	161	27045	11WI TAP	143.5	144.6	142	101.1	262	29433 20MAYTNJ
27044	11W IRVI	161	27045	11WI TAP	82.1	82.3	74	110.9	262	29433 20MAYTNJ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	262	29433 20MAYTNJ
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5	262	29433 20MAYTNJ
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109	262	29433 20MAYTNJ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.7	263	29434 20MAYTNJ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	263	29434 20MAYTNJ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	263	29434 20MAYTNJ
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	263	29434 20MAYTNJ
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.2	263	29434 20MAYTNJ
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	264	29436 20MAZIE
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	264	29436 20MAZIE
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	264	29436 20MAZIE
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	264	29436 20MAZIE
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	264	29436 20MAZIE
27023	11DELVIN	161	27045	11WI TAP	144.3	144.6	142	101.6	265	29436 20MAZIE
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	265	29436 20MAZIE
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	265	29436 20MAZIE
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	265	29436 20MAZIE
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	265	29436 20MAZIE
27023	11DELVIN	161	27045	11WI TAP	144.9	144.6	142	102	266	29438 20MCCRE
27044	11W IRVI	161	27045	11WI TAP	82.4	82.3	74	111.3	266	29438 20MCCRE
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	266	29438 20MCCRE
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5	266	29438 20MCCRE
29411	20LILY	J69.0	29634	20WOODLN	25.2	25.1	23	109.4	266	29438 20MCCRE
27023	11DELVIN	161	27045	11WI TAP	147.6	144.6	142	103.9	267	29439 20MCKEE
27044	11W IRVI	161	27045	11WI TAP	82.5	82.3	74	111.5	267	29439 20MCKEE
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	267	29439 20MCKEE
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	267	29439 20MCKEE
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	267	29439 20MCKEE
27023	11DELVIN	161	27045	11WI TAP	144.8	144.6	142	102	268	29439 20MCKEE
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	268	29439 20MCKEE
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	268	29439 20MCKEE
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	268	29439 20MCKEE
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	268	29439 20MCKEE
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	269	29443 20MIL-CJ69
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	269	29443 20MIL-CJ69
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	269	29443 20MIL-CJ69
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	269	29443 20MIL-CJ69
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	269	29443 20MIL-CJ69

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.1	144.6	142	101.5	270	29446	20MONTVA69.0	29447	20MONTIC69.0
27044	11W IRVI 161 27045 11WI TAP	82.1	82.3	74	111	270	29446	20MONTVA69.0	29447	20MONTIC69.0
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	270	29446	20MONTVA69.0	29447	20MONTIC69.0
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	114.9	270	29446	20MONTVA69.0	29447	20MONTIC69.0
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109	270	29446	20MONTVA69.0	29447	20MONTIC69.0
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	102	271	29447	20MONTIC69.0	29551	20SLAT 69.0
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.3	271	29447	20MONTIC69.0	29551	20SLAT 69.0
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	271	29447	20MONTIC69.0	29551	20SLAT 69.0
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.1	271	29447	20MONTIC69.0	29551	20SLAT 69.0
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	271	29447	20MONTIC69.0	29551	20SLAT 69.0
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	272	29448	20MT OLV69.0	29450	20MT OLV69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	272	29448	20MT OLV69.0	29450	20MT OLV69.0
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	272	29448	20MT OLV69.0	29450	20MT OLV69.0
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.1	272	29448	20MT OLV69.0	29450	20MT OLV69.0
29411	20LILYJT69.0 29634 20WOODLN	25	25.1	23	108.8	272	29448	20MT OLV69.0	29450	20MT OLV69.0
27023	11DELVIN 161 27045 11WI TAP	145	144.6	142	102.1	273	29451	20MTSTER69.0	29511	20REID V69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	273	29451	20MTSTER69.0	29511	20REID V69.0
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	273	29451	20MTSTER69.0	29511	20REID V69.0
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.7	273	29451	20MTSTER69.0	29511	20REID V69.0
29411	20LILYJT69.0 29634 20WOODLN	25	25.1	23	108.6	273	29451	20MTSTER69.0	29511	20REID V69.0
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	102	274	29452	20MONFVL69.0	29454	20MUNFKU69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	274	29452	20MONFVL69.0	29454	20MUNFKU69.0
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	274	29452	20MONFVL69.0	29454	20MUNFKU69.0
29359	20HODGEN69.0 29419 20MAGNOL	23	22	19	121.1	274	29452	20MONFVL69.0	29454	20MUNFKU69.0
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.1	274	29452	20MONFVL69.0	29454	20MUNFKU69.0
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	275	29455	20MUNK 69.0	29456	20MUNK J69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	275	29455	20MUNK 69.0	29456	20MUNK J69.0
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.6	275	29455	20MUNK 69.0	29456	20MUNK J69.0
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	275	29455	20MUNK 69.0	29456	20MUNK J69.0
29411	20LILYJT69.0 29634 20WOODLN	25.2	25.1	23	109.4	275	29455	20MUNK 69.0	29456	20MUNK J69.0
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	276	29456	20MUNK J69.0	29476	20OWEN C69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	276	29456	20MUNK J69.0	29476	20OWEN C69.0
27161	11AIKEN 69.0 27253 11MIDDLT	143.7	144	143	100.5	276	29456	20MUNK J69.0	29476	20OWEN C69.0
29222	20BIGB J69.0 29455 20MUNK	43.1	6.2	42	102.6	276	29456	20MUNK J69.0	29476	20OWEN C69.0
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	276	29456	20MUNK J69.0	29476	20OWEN C69.0
29411	20LILYJT69.0 29634 20WOODLN	25.2	25.1	23	109.4	276	29456	20MUNK J69.0	29476	20OWEN C69.0
29572	20SPRJKJ69.0 29576 20S PARK	75.3	63.6	72	104.6	276	29456	20MUNK J69.0	29476	20OWEN C69.0
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	102	277	29456	20MUNK J69.0	29630	20WLMSTN69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	277	29456	20MUNK J69.0	29630	20WLMSTN69.0
27161	11AIKEN 69.0 27253 11MIDDLT	143.8	144	143	100.6	277	29456	20MUNK J69.0	29630	20WLMSTN69.0
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	116	277	29456	20MUNK J69.0	29630	20WLMSTN69.0
29411	20LILYJT69.0 29634 20WOODLN	25.2	25.1	23	109.4	277	29456	20MUNK J69.0	29630	20WLMSTN69.0
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	278	29458	20MURPHY69.0	29499	20PLUMV 69.0
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	278	29458	20MURPHY69.0	29499	20PLUMV 69.0
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	278	29458	20MURPHY69.0	29499	20PLUMV 69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	278	29458 20MURPHY69.0	29499 20PLUMV 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	278	29458 20MURPHY69.0	29499 20PLUMV 69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	22	22	19	114.5	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	24.5	25.1	25.1	23	106.6	279	29459 20N SPR 69.0	29532 20S SPRF69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.3	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.8	280	29460 20NANCY 69.0	29622 20W SOM 69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	281	29460 20NANCY 69.0	29631 20WINDSR69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	281	29460 20NANCY 69.0	29631 20WINDSR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.5	144	144	143	101	282	29462 20NELSON69.0	29610 20WBARDJ69.0	1
27168	11BARD 169.0	27169	11BARDST	89.7	48.8	48.8	73	122.8	282	29462 20NELSON69.0	29610 20WBARDJ69.0	1
27168	11BARD 169.0	29303	20E BARD	66.3	27.4	27.4	54	122.8	282	29462 20NELSON69.0	29610 20WBARDJ69.0	1
27229	11HODGEN69.0	29359	20HODGEN	40.3	36.1	36.1	40	100.7	282	29462 20NELSON69.0	29610 20WBARDJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.3	22	22	19	112.2	282	29462 20NELSON69.0	29610 20WBARDJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	22	19	115	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	24.8	25.1	25.1	23	107.8	283	29462 20NELSON69.0	29635 20WOOSLY69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	284	29466 20NCASTL69.0	29476 20OWEN 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	284	29466 20NCASTL69.0	29476 20OWEN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.9	144	144	143	101.3	284	29466 20NCASTL69.0	29476 20OWEN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	284	29466 20NCASTL69.0	29476 20OWEN 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109	284	29466 20NCASTL69.0	29476 20OWEN 69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	144.6	142	101.9	285	29468 20NEWLIB69.0	29476 20OWEN 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	285	29468 20NEWLIB69.0	29476 20OWEN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.6	285	29468 20NEWLIB69.0	29476 20OWEN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	285	29468 20NEWLIB69.0	29476 20OWEN 69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	285	29468 20NEWLIB69.0	29476 20OWEN 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.8	144.6	144.6	142	101.3	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.3	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
29411	20LILYTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	286	29471 20NORWDJ69.0	29544 20SHOPVL69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.2	144.6	144.6	142	101.6	287	29474 20OAKH J69.0	29554 20SOMKJ69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	287	29474 200AKH J69.0 29554 20SOMKUJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	287	29474 200AKH J69.0 29554 20SOMKUJ69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22.2	22	19	116.6	287	29474 200AKH J69.0 29554 20SOMKUJ69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.3	25.1	23	110.1	287	29474 200AKH J69.0 29554 20SOMKUJ69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.3	144.6	142	101.6	288	29474 200AKH J69.0 29622 20W SOM 69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	288	29474 200AKH J69.0 29622 20W SOM 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	288	29474 200AKH J69.0 29622 20W SOM 69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	19	116.5	288	29474 200AKH J69.0 29622 20W SOM 69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.3	25.1	23	110	288	29474 200AKH J69.0 29622 20W SOM 69.0 1
27023	11DELVIN	161	27045	11WI TAP	145.3	144.6	142	102.3	289	29478 200WVLUK69.0 29483 20PEASTK69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	289	29478 200WVLUK69.0 29483 20PEASTK69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	289	29478 200WVLUK69.0 29483 20PEASTK69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	289	29478 200WVLUK69.0 29483 20PEASTK69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.2	25.1	23	109.7	289	29478 200WVLUK69.0 29483 20PEASTK69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.8	144.6	142	102	290	29478 200WVLUK69.0 29507 20PRSTNJ69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	290	29478 200WVLUK69.0 29507 20PRSTNJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	290	29478 200WVLUK69.0 29507 20PRSTNJ69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	290	29478 200WVLUK69.0 29507 20PRSTNJ69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.2	25.1	23	109.5	290	29478 200WVLUK69.0 29507 20PRSTNJ69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	291	29482 20PATTRJ69.0 29568 20SSPJTH69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	291	29482 20PATTRJ69.0 29568 20SSPJTH69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	291	29482 20PATTRJ69.0 29568 20SSPJTH69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	22	19	114.8	291	29482 20PATTRJ69.0 29568 20SSPJTH69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25.1	23	109.2	291	29482 20PATTRJ69.0 29568 20SSPJTH69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	292	29482 20PATTRJ69.0 29590 20TMPLHL69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	292	29482 20PATTRJ69.0 29590 20TMPLHL69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	292	29482 20PATTRJ69.0 29590 20TMPLHL69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.4	292	29482 20PATTRJ69.0 29590 20TMPLHL69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.1	25.1	23	109.3	292	29482 20PATTRJ69.0 29590 20TMPLHL69.0 1
27023	11DELVIN	161	27045	11WI TAP	145.5	144.6	142	102.4	293	29483 20PEASTK69.0 29636 20WYOMNG69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111	293	29483 20PEASTK69.0 29636 20WYOMNG69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	293	29483 20PEASTK69.0 29636 20WYOMNG69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.7	293	29483 20PEASTK69.0 29636 20WYOMNG69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.3	25.1	23	109.9	293	29483 20PEASTK69.0 29636 20WYOMNG69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	294	29490 20PHIL 69.0 29631 20WINDSR69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.1	294	29490 20PHIL 69.0 29631 20WINDSR69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	294	29490 20PHIL 69.0 29631 20WINDSR69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.2	294	29490 20PHIL 69.0 29631 20WINDSR69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	24.9	25.1	23	108.4	294	29490 20PHIL 69.0 29631 20WINDSR69.0 1
27023	11DELVIN	161	27045	11WI TAP	145.3	144.6	142	102.3	295	29491 20PINEGJ69.0 29620 20W LOND69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.5	82.3	74	111.4	295	29491 20PINEGJ69.0 29620 20W LOND69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	295	29491 20PINEGJ69.0 29620 20W LOND69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5	295	29491 20PINEGJ69.0 29620 20W LOND69.0 1
29411	20LILYJT	69.0	29634	20WOODLN	25.2	25.1	23	109.4	295	29491 20PINEGJ69.0 29620 20W LOND69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.8	144.6	142	102	296	29492 20PKNKNOT69.0 29515 20REVLKU69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.4	82.3	74	111.3	296	29492 20FNKNOT69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	296	29492 20FNKNOT69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	296	29492 20FNKNOT69.0
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.4	296	29492 20FNKNOT69.0
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	297	29492 20FNKNOT69.0
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	297	29492 20FNKNOT69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	297	29492 20FNKNOT69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	297	29492 20FNKNOT69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.3	297	29492 20FNKNOT69.0
27044	11W IRVI	161	27045	11WI TAP	80.5	82.3	74	108.8	298	29496 20PITTSB 161
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	298	29496 20PITTSB 161
29195	20ANNVJ69.0	29307	20EBERLJ	35.1	19.9	32	32	109.5	298	29496 20PITTSB 161
29359	20HODGEN	69.0	29419	20MAGNOL	22.2	22	19	116.8	298	29496 20PITTSB 161
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109	298	29496 20PITTSB 161
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	299	29498 20PLUMV 138
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	299	29498 20PLUMV 138
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	299	29498 20PLUMV 138
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	299	29498 20PLUMV 138
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.4	299	29498 20PLUMV 138
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.7	300	29499 20PLUMV 69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	300	29499 20PLUMV 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	300	29499 20PLUMV 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	300	29499 20PLUMV 69.0
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.5	300	29499 20PLUMV 69.0
27023	11DELVIN	161	27045	11WI TAP	172.1	144.6	142	121.2	301	29500 20POWELL 161
27044	11W IRVI	161	27045	11WI TAP	85.7	82.3	74	115.8	301	29500 20POWELL 161
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	301	29500 20POWELL 161
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	19	116.1	301	29500 20POWELL 161
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	23	108.6	301	29500 20POWELL 161
27023	11DELVIN	161	27045	11WI TAP	143.5	144.6	142	101.1	302	29501 20POWELL 138
27044	11W IRVI	161	27045	11WI TAP	80.8	82.3	74	109.2	302	29501 20POWELL 138
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	302	29501 20POWELL 138
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.4	302	29501 20POWELL 138
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	23	23	110.5	302	29501 20POWELL 138
27023	11DELVIN	161	27045	11WI TAP	143	144.6	142	100.7	303	29503 20POWELL69.0
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.3	303	29503 20POWELL69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	303	29503 20POWELL69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5	303	29503 20POWELL69.0
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	23	110	303	29503 20POWELL69.0
27023	11DELVIN	161	27045	11WI TAP	144.7	144.6	142	101.9	304	29504 20PPG 69.0
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.3	304	29504 20PPG 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	304	29504 20PPG 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	304	29504 20PPG 69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.3	304	29504 20PPG 69.0
27023	11DELVIN	161	27045	11WI TAP	145	144.6	142	102.1	305	29510 20REDBSH69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	305	29510 20REDBSH69.0	29550 20SKAGGS69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	305	29510 20REDBSH69.0	29550 20SKAGGS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	305	29510 20REDBSH69.0	29550 20SKAGGS69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109	305	29510 20REDBSH69.0	29550 20SKAGGS69.0	1
27023	11DELVIN	161	27045	11WI TAP	145	144.6	142	102.1	306	29510 20REDBSH69.0	29608 20VOLGA 69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	306	29510 20REDBSH69.0	29608 20VOLGA 69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	306	29510 20REDBSH69.0	29608 20VOLGA 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	306	29510 20REDBSH69.0	29608 20VOLGA 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.1	306	29510 20REDBSH69.0	29608 20VOLGA 69.0	1
27023	11DELVIN	161	27045	11WI TAP	145.2	144.6	142	102.3	307	29511 20REID V69.0	29546 20SIDEV 69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	307	29511 20REID V69.0	29546 20SIDEV 69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	307	29511 20REID V69.0	29546 20SIDEV 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	307	29511 20REID V69.0	29546 20SIDEV 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25.1	25.1	23	108.3	307	29511 20REID V69.0	29546 20SIDEV 69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	308	29512 20RENAKR 138	29514 20RENAKR69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	308	29512 20RENAKR 138	29514 20RENAKR69.0	1
27051	11ADAMS	138	27148	11TYRONE	100.1	95.8	97	103.2	308	29512 20RENAKR 138	29514 20RENAKR69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	308	29512 20RENAKR 138	29514 20RENAKR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	308	29512 20RENAKR 138	29514 20RENAKR69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	308	29512 20RENAKR 138	29514 20RENAKR69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.3	144.6	142	100.9	309	29512 20RENAKR 138	29566 20SPURLK 138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	309	29512 20RENAKR 138	29566 20SPURLK 138	1
27051	11ADAMS	138	27148	11TYRONE	98.5	95.8	97	101.6	309	29512 20RENAKR 138	29566 20SPURLK 138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.9	309	29512 20RENAKR 138	29566 20SPURLK 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.3	309	29512 20RENAKR 138	29566 20SPURLK 138	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.8	309	29512 20RENAKR 138	29566 20SPURLK 138	1
27023	11DELVIN	161	27045	11WI TAP	144.8	144.6	142	102	310	29518 20ROWAN 138	29519 20ROWAN 69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	310	29518 20ROWAN 138	29519 20ROWAN 69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	310	29518 20ROWAN 138	29519 20ROWAN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	310	29518 20ROWAN 138	29519 20ROWAN 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	310	29518 20ROWAN 138	29519 20ROWAN 69.0	1
27023	11DELVIN	161	27045	11WI TAP	148.3	144.6	142	104.5	311	29518 20ROWAN 138	29548 20SKAGGS 138	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.3	74	110.9	311	29518 20ROWAN 138	29548 20SKAGGS 138	1
27137	11RODBRN	138	27273	11RODBRN	43.2	35.2	40	108.1	311	29518 20ROWAN 138	29548 20SKAGGS 138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	311	29518 20ROWAN 138	29548 20SKAGGS 138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	311	29518 20ROWAN 138	29548 20SKAGGS 138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	311	29518 20ROWAN 138	29548 20SKAGGS 138	1
27023	11DELVIN	161	27045	11WI TAP	143.9	144.6	142	101.3	312	29518 20ROWAN 138	29640 20CRANST 138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	312	29518 20ROWAN 138	29640 20CRANST 138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	312	29518 20ROWAN 138	29640 20CRANST 138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	312	29518 20ROWAN 138	29640 20CRANST 138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.6	312	29518 20ROWAN 138	29640 20CRANST 138	1
27023	11DELVIN	161	27045	11WI TAP	144.9	144.6	142	102	313	29520 20RUSSEL 161	29522 20RUSSEL 161	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	313	29520 20RUSSEL 161	29522 20RUSSEL 161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	313	29520 20RUSSEL 161	29522 20RUSSEL 161	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	313	29520 20RUSSEL	161 29522 20RUSSCO	161 1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	25.4	25.1	23	110.3	313	29520 20RUSSEL	161 29522 20RUSSCO	161 1
27023	11DELVIN	161 27045	11WI TAP	145	144.6	145	144.6	142	102.1	314	29520 20RUSSEL	161 29531 20S OAKH	161 1
27044	11W IRVI	161 27045	11WI TAP	82.4	82.3	82.4	82.3	74	111.4	314	29520 20RUSSEL	161 29531 20S OAKH	161 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	144	143	100.7	314	29520 20RUSSEL	161 29531 20S OAKH	161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	314	29520 20RUSSEL	161 29531 20S OAKH	161 1
27023	11DELVIN	161 27045	11WI TAP	144.9	144.6	144.9	144.6	142	102	315	29522 20RUSSCO	161 29523 20RUSSCO69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	315	29522 20RUSSCO	161 29523 20RUSSCO69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	144.1	144	143	100.8	315	29522 20RUSSCO	161 29523 20RUSSCO69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	315	29522 20RUSSCO	161 29523 20RUSSCO69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	25.4	25.1	23	110.3	315	29522 20RUSSCO	161 29523 20RUSSCO69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.7	316	29523 20RUSSCO69.0	29527 20RSPRKU69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.4	82.3	82.4	82.3	74	111.3	316	29523 20RUSSCO69.0	29527 20RSPRKU69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	144.1	144	143	100.8	316	29523 20RUSSCO69.0	29527 20RSPRKU69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22.1	22	19	116.4	316	29523 20RUSSCO69.0	29527 20RSPRKU69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.3	25.1	23	110.1	316	29523 20RUSSCO69.0	29527 20RSPRKU69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.3	144.6	144.3	144.6	142	101.6	317	29524 20RSPREJ69.0	29526 20RSPREK69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.3	82.2	82.3	74	111	317	29524 20RSPREJ69.0	29526 20RSPREK69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	144	143	100.7	317	29524 20RSPREJ69.0	29526 20RSPREK69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115	317	29524 20RSPREJ69.0	29526 20RSPREK69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.1	317	29524 20RSPREJ69.0	29526 20RSPREK69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.4	144.6	144.4	144.6	142	101.7	318	29524 20RSPREJ69.0	29527 20RSPRKU69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.3	318	29524 20RSPREJ69.0	29527 20RSPRKU69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	144.1	144	143	100.7	318	29524 20RSPREJ69.0	29527 20RSPRKU69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22.1	22	19	116.3	318	29524 20RSPREJ69.0	29527 20RSPRKU69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.3	25.1	23	110	318	29524 20RSPREJ69.0	29527 20RSPRKU69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.7	319	29524 20RSPREJ69.0	29538 20SEWLTJ69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	319	29524 20RSPREJ69.0	29538 20SEWLTJ69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	144	143	100.7	319	29524 20RSPREJ69.0	29538 20SEWLTJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22.1	22	19	116.2	319	29524 20RSPREJ69.0	29538 20SEWLTJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.3	25.1	23	109.9	319	29524 20RSPREJ69.0	29538 20SEWLTJ69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.9	144.6	144.9	144.6	142	102	320	29530 20S FORK69.0	29603 20TYNER	69.0 1
27044	11W IRVI	161 27045	11WI TAP	82.7	82.3	82.7	82.3	74	111.8	320	29530 20S FORK69.0	29603 20TYNER	69.0 1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	144	143	100.7	320	29530 20S FORK69.0	29603 20TYNER	69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.6	320	29530 20S FORK69.0	29603 20TYNER	69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	320	29530 20S FORK69.0	29603 20TYNER	69.0 1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	321	29534 20SALEMJ69.0	29538 20SEWLTJ69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	321	29534 20SALEMJ69.0	29538 20SEWLTJ69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	144	143	100.7	321	29534 20SALEMJ69.0	29538 20SEWLTJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	321	29534 20SALEMJ69.0	29538 20SEWLTJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.5	321	29534 20SALEMJ69.0	29538 20SEWLTJ69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	322	29534 20SALEMJ69.0	29631 20WINDSR69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.2	82.3	82.2	82.3	74	111.1	322	29534 20SALEMJ69.0	29631 20WINDSR69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	144	143	100.7	322	29534 20SALEMJ69.0	29631 20WINDSR69.0	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.7	322	29534 20SALEMJ69.0	29631 20WINDSR69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	25.1	23	109.4	322	29534 20SALEMJ69.0	29631 20WINDSR69.0	1
27023	11DELVIN 161	27045	11WI TAP	146.5	144.6	144.6	142	142	103.2	323	29536 20SANDLK69.0	29638 20ZACHAR69.0	1
27044	11W IRVI 161	27045	11WI TAP	80.3	82.3	82.3	74	74	108.5	323	29536 20SANDLK69.0	29638 20ZACHAR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	143	100.7	323	29536 20SANDLK69.0	29638 20ZACHAR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.7	323	29536 20SANDLK69.0	29638 20ZACHAR69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	25.1	23	23	108.8	323	29536 20SANDLK69.0	29638 20ZACHAR69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.9	144.6	144.6	142	142	102	324	29539 20SHLBYC 161	29540 20SHLBYC69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	74	111.2	324	29539 20SHLBYC 161	29540 20SHLBYC69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	143	100.8	324	29539 20SHLBYC 161	29540 20SHLBYC69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	116	324	29539 20SHLBYC 161	29540 20SHLBYC69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	25.1	23	23	110.8	324	29539 20SHLBYC 161	29540 20SHLBYC69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	142	101.8	325	29542 20SHEPVJ69.0	29543 20SHEPVL69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	74	111.2	325	29542 20SHEPVJ69.0	29543 20SHEPVL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	143	100.7	325	29542 20SHEPVJ69.0	29543 20SHEPVL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.9	325	29542 20SHEPVJ69.0	29543 20SHEPVL69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	25.1	23	23	110.3	325	29542 20SHEPVJ69.0	29543 20SHEPVL69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	144.6	142	142	101.9	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	74	111.2	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
27051	11ADAMS 138	27148	11TYRONE	97.5	95.8	95.8	97	97	100.5	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.7	144	144	143	143	100.5	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
29326	20FRCKBJ69.0	29634	20WOODLN	28.1	19.1	19.1	23	23	122.3	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	22	19	19	112.9	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	33	25.1	25.1	23	23	143.5	326	29547 20SINAI 69.0	29607 20VANARJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	148.3	144.6	144.6	142	142	104.5	327	29548 20SKAGGS 138	29550 20SKAGGS69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.3	82.3	74	74	110.9	327	29548 20SKAGGS 138	29550 20SKAGGS69.0	1
27137	11RODRN 138	27273	11RODRN	43.3	35.2	35.2	40	40	108.3	327	29548 20SKAGGS 138	29550 20SKAGGS69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	143	100.7	327	29548 20SKAGGS 138	29550 20SKAGGS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.8	327	29548 20SKAGGS 138	29550 20SKAGGS69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	23	109.4	327	29548 20SKAGGS 138	29550 20SKAGGS69.0	1
27023	11DELVIN 161	27045	11WI TAP	145.1	144.6	144.6	142	142	102.2	328	29551 20SLAT 69.0	29627 20WAYNEJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	82.3	74	74	111.4	328	29551 20SLAT 69.0	29627 20WAYNEJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	143	100.7	328	29551 20SLAT 69.0	29627 20WAYNEJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	22	19	19	114.8	328	29551 20SLAT 69.0	29627 20WAYNEJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	23	109.3	328	29551 20SLAT 69.0	29627 20WAYNEJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.2	144.6	144.6	142	142	101.6	329	29554 20SOMKJ69.0	29555 20SOMERS69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	74	111.2	329	29554 20SOMKJ69.0	29555 20SOMERS69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	143	100.7	329	29554 20SOMKJ69.0	29555 20SOMERS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	22	19	19	116.6	329	29554 20SOMKJ69.0	29555 20SOMERS69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	23	110.1	329	29554 20SOMKJ69.0	29555 20SOMERS69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	142	101.7	330	29555 20SOMERS69.0	29556 20SOMR69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	74	111.2	330	29555 20SOMERS69.0	29556 20SOMR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	143	100.7	330	29555 20SOMERS69.0	29556 20SOMR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.7	330	29555 20SOMERS69.0	29556 20SOMR69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	23	109.4	330	29555 20SOMERS69.0	29556 20SOMR69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	331	29558 20SNOW	69.0 29559 20SNOWJ 69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	331	29558 20SNOW	69.0 29559 20SNOWJ 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	331	29558 20SNOW	69.0 29559 20SNOWJ 69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.1	331	29558 20SNOW	69.0 29559 20SNOWJ 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.2	331	29558 20SNOW	69.0 29559 20SNOWJ 69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.3	144.6	142	101.6	332	29564 20SPURLK	345 29566 20SPURLK 138 2
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	332	29564 20SPURLK	345 29566 20SPURLK 138 2
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	332	29564 20SPURLK	345 29566 20SPURLK 138 2
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	332	29564 20SPURLK	345 29566 20SPURLK 138 2
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.5	332	29564 20SPURLK	345 29566 20SPURLK 138 2
27023	11DELVIN	161	27045	11WI TAP	144.2	144.6	142	101.6	333	29564 20SPURLK	345 29566 20SPURLK 138 3
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1	333	29564 20SPURLK	345 29566 20SPURLK 138 3
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	333	29564 20SPURLK	345 29566 20SPURLK 138 3
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.4	333	29564 20SPURLK	345 29566 20SPURLK 138 3
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.1	334	29566 20SPURLK	138 29575 20S PARK 138 1
27023	11DELVIN	161	27045	11WI TAP	144.7	144.6	142	101.9	334	29566 20SPURLK	138 29575 20S PARK 138 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	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	20HODGEN	69.0	29419	20MAGNOL	25.2	25.1	23	109.6	334	29566 20SPURLK	138 29575 20S PARK 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	115.4	334	29566 20SPURLK	138 29575 20S PARK 138 1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	335	29566 20SPURLK	138 29641 20INLAND 138 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	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	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	335	29566 20SPURLK	138 29641 20INLAND 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.4	335	29566 20SPURLK	138 29641 20INLAND 138 1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	336	29568 20SSPJTTH69.0	29584 20SSHADE69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	336	29568 20SSPJTTH69.0	29584 20SSHADE69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	336	29568 20SSPJTTH69.0	29584 20SSHADE69.0 1
29210	20BARREN	69.0	29335	20GOODNT	75	20.2	72	104.1	336	29568 20SSPJTTH69.0	29584 20SSHADE69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21	22	19	110.5	336	29568 20SSPJTTH69.0	29584 20SSHADE69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	23	108.7	336	29568 20SSPJTTH69.0	29584 20SSHADE69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	337	29568 20SSPJTTH69.0	29590 20TMPLHL69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	337	29568 20SSPJTTH69.0	29590 20TMPLHL69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	337	29568 20SSPJTTH69.0	29590 20TMPLHL69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	22	19	115	337	29568 20SSPJTTH69.0	29590 20TMPLHL69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	23	109.3	337	29568 20SSPJTTH69.0	29590 20TMPLHL69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.9	338	29571 20STEPH69.0	29606 20UPTONJ69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	338	29571 20STEPH69.0	29606 20UPTONJ69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	338	29571 20STEPH69.0	29606 20UPTONJ69.0 1
29359	20HODGEN	69.0	29419	20MAGNOL	22.6	22	19	119.1	338	29571 20STEPH69.0	29606 20UPTONJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	23	23	110.3	338	29571 20STEPH69.0	29606 20UPTONJ69.0 1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	339	29572 20SPRKJ169.0	29576 20S PARK69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	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	10.1	72	106.9	339	29572 20SPRKJ169.0	29576 20S PARK69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
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	21.9	22	19	115.5	339	29572	20SPRKJ169.0	29576	20S	PARK69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	339	29572	20SPRKJ169.0	29576	20S	PARK69.0	1	
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	340	29574	20SPRKJ269.0	29576	20S	PARK69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.6	340	29574	20SPRKJ269.0	29576	20S	PARK69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	340	29574	20SPRKJ269.0	29576	20S	PARK69.0	1	
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	341	29575	20S	PARK 138	29576	20S	PARK69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	24	22	19	126.6	342	29583	20SSHADE 161	29584	20SSHADE69.0	1		
29394	20RNOBLK69.0	29440	20MCKNYJ	26.2	6	23	113.8	342	29583	20SSHADE 161	29584	20SSHADE69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	110.9	342	29583	20SSHADE 161	29584	20SSHADE69.0	1		
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	343	29583	20SSHADE 161	29586	20SSHADT 161	1		
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.7	343	29583	20SSHADE 161	29586	20SSHADT 161	1		
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	343	29583	20SSHADE 161	29586	20SSHADT 161	1		
27023	11DELVIN 161	27045	11WI TAP	144.9	144.6	142	102	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1		
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	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	21.6	22	19	113.7	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	344	29584	20SSHADE69.0	29618	20WCOLMJ69.0	1		
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	345	29587	20TAYCTP 161	29588	20TAYLOR 161	1		
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	345	29587	20TAYCTP 161	29588	20TAYLOR 161	1		
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	345	29587	20TAYCTP 161	29588	20TAYLOR 161	1		
27219	11GRBURG69.0	29344	20GREENC	62.7	31.7	54	116	345	29587	20TAYCTP 161	29588	20TAYLOR 161	1		
29359	20HODGEN69.0	29419	20MAGNOL	23.3	22	19	122.7	345	29587	20TAYCTP 161	29588	20TAYLOR 161	1		
29411	20LILYJ69.0	29634	20WOODLN	25.9	25.1	23	112.8	345	29587	20TAYCTP 161	29588	20TAYLOR 161	1		
27023	11DELVIN 161	27045	11WI TAP	149.6	144.6	142	105.3	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1		
27044	11W IRVI 161	27045	11WI TAP	82.8	82.3	74	111.9	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	22	22	19	115.6	346	29595	20THLNKJ69.0	29596	20THLNKS69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	347	29595	20THLNKJ69.0	29596	20THLNKS69.0	1		
27023	11DELVIN 161	27045	11WI TAP	154.1	144.6	142	108.5	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1		
27044	11W IRVI 161	27045	11WI TAP	83.4	82.3	74	112.8	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1		
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	19	116.6	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	347	29595	20THLNKJ69.0	29615	20WBBER J69.0	1		

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27044	11W IRVI	161	27045	11WI TAP	81.5	82.3	74	110.2	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	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	348	29602 20TYNER	161	29603	20TYNER	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	348	29602 20TYNER	161	29603	20TYNER	69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.9	144.6	142	102	349	29610 20WBARDJ69.0	29611	20W	BARD69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	349	29610 20WBARDJ69.0	29611	20W	BARD69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	349	29610 20WBARDJ69.0	29611	20W	BARD69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	22.5	22	19	118.4	349	29610 20WBARDJ69.0	29611	20W	BARD69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	27.9	25.1	25.1	23	121.3	349	29610 20WBARDJ69.0	29611	20W	BARD69.0	1	
27023	11DELVIN	161	27045	11WI TAP	149.4	144.6	142	105.2	350	29612 20WBAREA	138	29614	20WBAREA	69.0	1
27044	11W IRVI	161	27045	11WI TAP	81.9	82.3	74	110.7	350	29612 20WBAREA	138	29614	20WBAREA	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	350	29612 20WBAREA	138	29614	20WBAREA	69.0	1
27209	11FAWKES	69.0	29283	20CROOKJ	62.3	21.8	54	115.3	350	29612 20WBAREA	138	29614	20WBAREA	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	19	116.1	350	29612 20WBAREA	138	29614	20WBAREA	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	350	29612 20WBAREA	138	29614	20WBAREA	69.0	1
27023	11DELVIN	161	27045	11WI TAP	154.1	144.6	142	108.5	351	29614 20WBAREA	138	29615	20WB	J69.0	1
27044	11W IRVI	161	27045	11WI TAP	83.4	82.3	74	112.7	351	29614 20WBAREA	138	29615	20WB	J69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	351	29614 20WBAREA	138	29615	20WB	J69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22.2	22	19	116.7	351	29614 20WBAREA	138	29615	20WB	J69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	351	29614 20WBAREA	138	29615	20WB	J69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	352	29616 20WCOLMB69.0	29618	20WCOLM	J69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	352	29616 20WCOLMB69.0	29618	20WCOLM	J69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	352	29616 20WCOLMB69.0	29618	20WCOLM	J69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	22	19	114.7	352	29616 20WCOLMB69.0	29618	20WCOLM	J69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109	352	29616 20WCOLMB69.0	29618	20WCOLM	J69.0	1	
27023	11DELVIN	161	27045	11WI TAP	145.2	144.6	142	102.3	353	29626 20WAYNE	69.0	29627	20WAYNE	J69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.5	82.3	74	111.5	353	29626 20WAYNE	69.0	29627	20WAYNE	J69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	353	29626 20WAYNE	69.0	29627	20WAYNE	J69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	22	19	114.6	353	29626 20WAYNE	69.0	29627	20WAYNE	J69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	353	29626 20WAYNE	69.0	29627	20WAYNE	J69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	354	29626 20WAYNE	69.0	29639	20ZULAJ	269.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	354	29626 20WAYNE	69.0	29639	20ZULAJ	269.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	354	29626 20WAYNE	69.0	29639	20ZULAJ	269.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22.3	22	19	117.1	354	29626 20WAYNE	69.0	29639	20ZULAJ	269.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	354	29626 20WAYNE	69.0	29639	20ZULAJ	269.0	1
27023	11DELVIN	161	27045	11WI TAP	146.2	144.6	142	102.9	355	27000 11PINEVL	500	27001	11POCKET	500	1
27044	11W IRVI	161	27045	11WI TAP	82.9	82.3	74	112	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	21.9	22	19	115.5	355	27000 11PINEVL	500	27001	11POCKET	500	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	355	27000 11PINEVL	500	27001	11POCKET	500	1
27023	11DELVIN	161	27045	11WI TAP	145.7	144.6	142	102.6	356	27000 11PINEVL	500	27011	11PINEVI	345	1
27044	11W IRVI	161	27045	11WI TAP	82.6	82.3	74	111.6	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	22	22	19	115.5	356	27000 11PINEVL	500	27011	11PINEVI	345	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	356	27000 11PINEVL	500	27011	11PINEVI	345	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	160.3	144.6	142	112.9	357	27001	11POCKET	500	27040 11POCK N 161 1
27044	11W IRVI 161 27045 11WI TAP	84.1	82.3	74	113.7	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	20HODGEN69.0 29419 20MAGNOL	22	22	19	116	357	27001	11POCKET	500	27040 11POCK N 161 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.6	25.1	23	111.2	357	27001	11POCKET	500	27040 11POCK N 161 1
27023	11DELVIN 161 27045 11WI TAP	173.9	144.6	142	122.4	358	27002	11AICALD	345	27004 11BRWN N 345 1
27044	11W IRVI 161 27045 11WI TAP	86.8	82.3	74	117.3	358	27002	11AICALD	345	27004 11BRWN N 345 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.2	144	143	100.1	358	27002	11AICALD	345	27004 11BRWN N 345 1
27229	11HODGEN69.0 29359 20HODGEN	40.5	36.1	40	101.2	358	27002	11AICALD	345	27004 11BRWN N 345 1
27285	11SPRNGF69.0 29459 20N SPR	19.7	12.9	19	103.5	358	27002	11AICALD	345	27004 11BRWN N 345 1
29326	20ERCKBJ69.0 29634 20WOODLN	23.3	19.1	23	101.5	358	27002	11AICALD	345	27004 11BRWN N 345 1
29359	20HODGEN69.0 29419 20MAGNOL	26.7	22	19	140.7	358	27002	11AICALD	345	27004 11BRWN N 345 1
29411	20LILYJTJ69.0 29634 20WOODLN	28.6	25.1	23	124.4	358	27002	11AICALD	345	27004 11BRWN N 345 1
27023	11DELVIN 161 27045 11WI TAP	152.3	144.6	142	107.2	359	27002	11AICALD	345	27011 11PINEVI 345 1
27044	11W IRVI 161 27045 11WI TAP	83.4	82.3	74	112.7	359	27002	11AICALD	345	27011 11PINEVI 345 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.6	144	143	100.4	359	27002	11AICALD	345	27011 11PINEVI 345 1
29359	20HODGEN69.0 29419 20MAGNOL	22.1	22	19	116.6	359	27002	11AICALD	345	27011 11PINEVI 345 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	359	27002	11AICALD	345	27011 11PINEVI 345 1
27023	11DELVIN 161 27045 11WI TAP	151.7	144.6	142	106.8	360	27002	11AICALD	345	27016 11AICALD 161 1
27044	11W IRVI 161 27045 11WI TAP	83.4	82.3	74	112.7	360	27002	11AICALD	345	27016 11AICALD 161 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	360	27002	11AICALD	345	27016 11AICALD 161 1
29359	20HODGEN69.0 29419 20MAGNOL	23.6	22	19	124.4	360	27002	11AICALD	345	27016 11AICALD 161 1
29411	20LILYJTJ69.0 29634 20WOODLN	26.5	25.1	23	115.2	360	27002	11AICALD	345	27016 11AICALD 161 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	361	27003	11BLOELI	345	27007 11MIDDLT 345 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	361	27003	11BLOELI	345	27007 11MIDDLT 345 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.9	144	143	101.3	361	27003	11BLOELI	345	27007 11MIDDLT 345 1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	114.7	361	27003	11BLOELI	345	27007 11MIDDLT 345 1
29411	20LILYJTJ69.0 29634 20WOODLN	24.8	25.1	23	108	361	27003	11BLOELI	345	27007 11MIDDLT 345 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.9	362	27003	11BLOELI	345	27008 11MIL CK 345 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	362	27003	11BLOELI	345	27008 11MIL CK 345 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.1	144	143	100	362	27003	11BLOELI	345	27008 11MIL CK 345 1
29359	20HODGEN69.0 29419 20MAGNOL	22.4	22	19	118	362	27003	11BLOELI	345	27008 11MIL CK 345 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25.1	23	109.9	362	27003	11BLOELI	345	27008 11MIL CK 345 1
27023	11DELVIN 161 27045 11WI TAP	146.2	144.6	142	103	363	27003	11BLOELI	345	27019 11BLUE L 161 1
27044	11W IRVI 161 27045 11WI TAP	82.6	82.3	74	111.6	363	27003	11BLOELI	345	27019 11BLUE L 161 1
27161	11AIKEN 69.0 27253 11MIDDLT	145.7	144	143	101.9	363	27003	11BLOELI	345	27019 11BLUE L 161 1
29359	20HODGEN69.0 29419 20MAGNOL	23.9	22	19	125.9	363	27003	11BLOELI	345	27019 11BLUE L 161 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	364	27003	11BLOELI	345	27060 11BLUE L 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	364	27003	11BLOELI	345	27060 11BLUE L 138 1
27055	11ASHBOT 138 27318 11GRADE	287.9	150.3	286	100.7	364	27003	11BLOELI	345	27060 11BLUE L 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.6	144	143	101.1	364	27003	11BLOELI	345	27060 11BLUE L 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22.1	22	19	116.1	364	27003	11BLOELI	345	27060 11BLUE L 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25.1	23	109.9	364	27003	11BLOELI	345	27060 11BLUE L 138 1
27023	11DELVIN 161 27045 11WI TAP	144	144.6	142	101.4	365	27004	11BRWN N	345	27006 11HARDN 345 1
27044	11W IRVI 161 27045 11WI TAP	82.5	82.3	74	111.4	365	27004	11BRWN N	345	27006 11HARDN 345 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27051	11ADAMS	138	27148	11TYRONE	98.3	95.8	97	101.4	365	27004 11BRWN N	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	145.7	144	143	101.9	365	27004 11BRWN N	345 1
27229	11HODGEN69.0	29359	20HODGEN	42.9	36.1	40	40	107.3	365	27004 11BRWN N	345 1
29359	20HODGEN69.0	29419	20MAGNOL	25.1	22	19	19	131.8	365	27004 11BRWN N	345 1
29411	20LILYJ69.0	29634	20WOODLN	28.5	25.1	23	23	123.8	365	27004 11BRWN N	345 1
27023	11DELVIN	161	27045	11WI TAP	148.4	144.6	142	104.5	366	27004 11BRWN N	345 1
27044	11W IRVI	161	27045	11WI TAP	82.6	82.3	74	111.6	366	27004 11BRWN N	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	143.3	144	143	100.2	366	27004 11BRWN N	345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	22	19	19	114	366	27004 11BRWN N	345 1
29411	20LILYJ69.0	29634	20WOODLN	24.5	25.1	23	23	106.5	366	27004 11BRWN N	345 1
27044	11W IRVI	161	27045	11WI TAP	82	82.3	74	110.8	367	27004 11BRWN N	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.4	144	143	101	367	27004 11BRWN N	345 1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	19	19	116.8	367	27004 11BRWN N	345 1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	23	111.1	367	27004 11BRWN N	345 1
27023	11DELVIN	161	27045	11WI TAP	142.3	144.6	142	100.2	368	27005 11GHENT	345 1
27044	11W IRVI	161	27045	11WI TAP	82	82.3	74	110.8	368	27005 11GHENT	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	147.4	144	143	103.1	368	27005 11GHENT	345 1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	19	116.2	368	27005 11GHENT	345 1
29411	20LILYJ69.0	29634	20WOODLN	26.1	25.1	23	23	113.3	368	27005 11GHENT	345 1
27044	11W IRVI	161	27045	11WI TAP	82.6	82.3	74	111.6	369	27005 11GHENT	345 1
27075	11CARROL	138	27112	11LOCKPO	159	83.1	135	117.8	369	27005 11GHENT	345 1
27091	11FFRT E	138	27140	11SHADRA	148.2	73.1	135	109.8	369	27005 11GHENT	345 1
27112	11LOCKPO	138	27140	11SHADRA	154.2	78.6	135	114.2	369	27005 11GHENT	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	152.3	144	143	106.5	369	27005 11GHENT	345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	22	19	19	114.4	369	27005 11GHENT	345 1
29411	20LILYJ69.0	29634	20WOODLN	26.3	25.1	23	23	114.5	369	27005 11GHENT	345 1
27023	11DELVIN	161	27045	11WI TAP	142.9	144.6	142	100.6	370	27005 11GHENT	345 1
27044	11W IRVI	161	27045	11WI TAP	83.7	82.3	74	113.1	370	27005 11GHENT	345 1
27051	11ADAMS	138	27148	11TYRONE	122.8	95.8	97	126.6	370	27005 11GHENT	345 1
27113	11LOUDON	138	29202	20AVON	297.9	242.5	287	103.8	370	27005 11GHENT	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.6	144	143	101.1	370	27005 11GHENT	345 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	22	19	19	113.9	370	27005 11GHENT	345 1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	23	111	370	27005 11GHENT	345 1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	371	27005 11GHENT	345 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	371	27005 11GHENT	345 1
27051	11ADAMS	138	27148	11TYRONE	97.6	95.8	97	100.6	371	27005 11GHENT	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	143	100.9	371	27005 11GHENT	345 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.7	371	27005 11GHENT	345 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.5	371	27005 11GHENT	345 1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	372	27005 11GHENT	345 1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	372	27005 11GHENT	345 1
27051	11ADAMS	138	27148	11TYRONE	98.1	95.8	97	101.1	372	27005 11GHENT	345 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	143	100.9	372	27005 11GHENT	345 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	19	115.7	372	27005 11GHENT	345 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	23	109.6	372	27005 11GHENT	345 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27023	11DELVIN 161 27045 11WI TAP	143.6	144.6	142	101.1	373	27006	11HARDN	345	27008	11MIL CK 345 04
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.3	373	27006	11HARDN	345	27008	11MIL CK 345 04
27051	11ADAMS 138 27148 11TYRONE	99.2	95.8	97	102.3	373	27006	11HARDN	345	27008	11MIL CK 345 04
27161	11AIKEN 69.0 27253 11MIDDLT	149.9	144	143	104.8	373	27006	11HARDN	345	27008	11MIL CK 345 04
27023	11DELVIN 161 27045 11WI TAP	144.1	144.6	142	101.5	374	27006	11HARDN	345	27012	11SMITH 345 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.3	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	21.3	22	19	112.1	374	27006	11HARDN	345	27012	11SMITH 345 1
29411	20LILYJTJ69.0 29634 20WOODLN	24.4	25.1	23	106.1	374	27006	11HARDN	345	27012	11SMITH 345 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	375	27006	11HARDN	345	27012	11SMITH 345 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	101.8	375	27006	11HARDN	345	27100	11HARDN 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.4	144	143	111.2	375	27006	11HARDN	345	27100	11HARDN 138 1
29359	20HODGEN69.0 29419 20MAGNOL	20	22	19	105	375	27006	11HARDN	345	27100	11HARDN 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	23.3	25.1	23	101.5	375	27006	11HARDN	345	27100	11HARDN 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	376	27006	11HARDN	345	27100	11HARDN 138 2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	376	27006	11HARDN	345	27100	11HARDN 138 2
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.7	377	27007	11MIDDLT	345	27008	11MIL CK 345 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	377	27007	11MIDDLT	345	27008	11MIL CK 345 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	377	27007	11MIDDLT	345	27008	11MIL CK 345 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.9	378	27007	11MIDDLT	345	27013	11TRIMBL 345 2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	378	27007	11MIDDLT	345	27013	11TRIMBL 345 2
29359	20HODGEN69.0 29419 20MAGNOL	21.2	22	19	111.7	378	27007	11MIDDLT	345	27013	11TRIMBL 345 2
29411	20LILYJTJ69.0 29634 20WOODLN	23.9	25.1	23	104.1	378	27007	11MIDDLT	345	27013	11TRIMBL 345 2
27007	11MIDDLT 345 27119 11MIDDLT	491.5	365.8	478	102.8	379	27007	11MIDDLT	345	27119	11MIDDLT 138 1
27007	11MIDDLT 345 27119 11MIDDLT	500.9	372.9	478	104.8	379	27007	11MIDDLT	345	27119	11MIDDLT 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	379	27007	11MIDDLT	345	27119	11MIDDLT 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	379	27007	11MIDDLT	345	27119	11MIDDLT 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	379	27007	11MIDDLT	345	27119	11MIDDLT 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25	25.1	23	108.6	379	27007	11MIDDLT	345	27119	11MIDDLT 138 1
27007	11MIDDLT 345 27119 11MIDDLT	514.1	391.1	478	107.5	380	27007	11MIDDLT	345	27119	11MIDDLT 138 2
27007	11MIDDLT 345 27119 11MIDDLT	490.1	372.9	478	102.5	380	27007	11MIDDLT	345	27119	11MIDDLT 138 2
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	380	27007	11MIDDLT	345	27119	11MIDDLT 138 2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	380	27007	11MIDDLT	345	27119	11MIDDLT 138 2
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	380	27007	11MIDDLT	345	27119	11MIDDLT 138 2
29411	20LILYJTJ69.0 29634 20WOODLN	25	25.1	23	108.7	380	27007	11MIDDLT	345	27119	11MIDDLT 138 2
27007	11MIDDLT 345 27119 11MIDDLT	517	391.1	478	108.2	381	27007	11MIDDLT	345	27119	11MIDDLT 138 3
27007	11MIDDLT 345 27119 11MIDDLT	483.6	365.8	478	101.2	381	27007	11MIDDLT	345	27119	11MIDDLT 138 3
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	381	27007	11MIDDLT	345	27119	11MIDDLT 138 3
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	381	27007	11MIDDLT	345	27119	11MIDDLT 138 3
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	381	27007	11MIDDLT	345	27119	11MIDDLT 138 3

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.7		381	27007 11MIDDLT	345	27119	11MIDDLT	138	3
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	142	101.8		382	27007 11MIDDLT	345	27338	11BUCKNR	345	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		382	27007 11MIDDLT	345	27338	11BUCKNR	345	1
29359	20HODGEN69.0	29419	20MAGNOL	21.1	22	19	111.1		382	27007 11MIDDLT	345	27338	11BUCKNR	345	1
29411	20LILYJ69.0	29634	20WOODLN	23.8	25.1	23	103.4		382	27007 11MIDDLT	345	27338	11BUCKNR	345	1
27023	11DELVIN	161	27045 11WI TAP	144.7	144.6	142	101.9		383	27008 11MIL CK	345	27010	11PADDDY	345	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		383	27008 11MIL CK	345	27010	11PADDDY	345	1
27161	11AIKEN	69.0	27253 11MIDDLT	147.1	144	143	102.9		383	27008 11MIL CK	345	27010	11PADDDY	345	1
29359	20HODGEN69.0	29419	20MAGNOL	22.6	22	19	119.2		383	27008 11MIL CK	345	27010	11PADDDY	345	1
29411	20LILYJ69.0	29634	20WOODLN	25.7	25.1	23	111.9		383	27008 11MIL CK	345	27010	11PADDDY	345	1
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	142	101.8		384	27008 11MIL CK	345	27121	11MILL C	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		384	27008 11MIL CK	345	27121	11MILL C	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.3	144	143	100.9		384	27008 11MIL CK	345	27121	11MILL C	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.2		384	27008 11MIL CK	345	27121	11MILL C	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.7		384	27008 11MIL CK	345	27121	11MILL C	138	1
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	142	101.8		385	27008 11MIL CK	345	27121	11MILL C	138	2
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		385	27008 11MIL CK	345	27121	11MILL C	138	2
27161	11AIKEN	69.0	27253 11MIDDLT	144.4	144	143	101		385	27008 11MIL CK	345	27121	11MILL C	138	2
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.3		385	27008 11MIL CK	345	27121	11MILL C	138	2
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	109.8		385	27008 11MIL CK	345	27121	11MILL C	138	2
27023	11DELVIN	161	27045 11WI TAP	144.5	144.6	142	101.8		386	27009 11NORTHS	345	27010	11PADDDY	345	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		386	27009 11NORTHS	345	27010	11PADDDY	345	1
27161	11AIKEN	69.0	27253 11MIDDLT	145.7	144	143	101.9		386	27009 11NORTHS	345	27010	11PADDDY	345	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.4		386	27009 11NORTHS	345	27010	11PADDDY	345	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	110.1		386	27009 11NORTHS	345	27010	11PADDDY	345	1
27023	11DELVIN	161	27045 11WI TAP	144.5	144.6	142	101.8		387	27009 11NORTHS	345	27125	11NORTHS	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		387	27009 11NORTHS	345	27125	11NORTHS	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	145.7	144	143	101.9		387	27009 11NORTHS	345	27125	11NORTHS	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.5		387	27009 11NORTHS	345	27125	11NORTHS	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	110.1		387	27009 11NORTHS	345	27125	11NORTHS	138	1
27023	11DELVIN	161	27045 11WI TAP	144.7	144.6	142	101.9		388	27010 11PADDDY	345	27131	11P WEST	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	74	111.2		388	27010 11PADDDY	345	27131	11P WEST	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.8	144	143	101.2		388	27010 11PADDDY	345	27131	11P WEST	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	19	117.1		388	27010 11PADDDY	345	27131	11P WEST	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	23	110.3		388	27010 11PADDDY	345	27131	11P WEST	138	1
27023	11DELVIN	161	27045 11WI TAP	157.3	144.6	142	110.8		389	27011 11PINEVI	345	27038	11PINEVI	161	1
27044	11W IRVI	161	27045 11WI TAP	84.1	82.3	74	113.7		389	27011 11PINEVI	345	27038	11PINEVI	161	1
27161	11AIKEN	69.0	27253 11MIDDLT	143.9	144	143	100.7		389	27011 11PINEVI	345	27038	11PINEVI	161	1
29359	20HODGEN69.0	29419	20MAGNOL	22.3	22	19	117.2		389	27011 11PINEVI	345	27038	11PINEVI	161	1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	111		389	27011 11PINEVI	345	27038	11PINEVI	161	1
27023	11DELVIN	161	27045 11WI TAP	144	144.6	142	101.4		390	27012 11SMITH	345	27142	11SMITH	138	1
27044	11W IRVI	161	27045 11WI TAP	82.2	82.3	74	111.1		390	27012 11SMITH	345	27142	11SMITH	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144	144	143	100.7		390	27012 11SMITH	345	27142	11SMITH	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.2	22	19	111.8		390	27012 11SMITH	345	27142	11SMITH	138	1
29411	20LILYJ69.0	29634	20WOODLN	24.4	25.1	23	106		390	27012 11SMITH	345	27142	11SMITH	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	391 27013 11TRIMBL	345 27147 11TRIMBL	138 1		
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	391 27013 11TRIMBL	345 27147 11TRIMBL	138 1		
27161	11AIKEN 69.0 27253 11MIDDLT	152.8	144	143	106.9	391 27013 11TRIMBL	345 27147 11TRIMBL	138 1		
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	114.8	391 27013 11TRIMBL	345 27147 11TRIMBL	138 1		
29411	20LILYJ69.0 29634 20WOODLN	24.8	25.1	23	108	391 27013 11TRIMBL	345 27147 11TRIMBL	138 1		
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.9	392 27013 11TRIMBL	345 27338 11BUCKNR	345 1		
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	392 27013 11TRIMBL	345 27338 11BUCKNR	345 1		
29359	20HODGEN69.0 29419 20MAGNOL	21.3	22	19	112.2	392 27013 11TRIMBL	345 27338 11BUCKNR	345 1		
29411	20LILYJ69.0 29634 20WOODLN	24.1	25.1	23	104.7	392 27013 11TRIMBL	345 27338 11BUCKNR	345 1		
27044	11W IRVI 161 27045 11WI TAP	82.6	82.3	74	111.6	393 27014 11W FRNK	345 27151 11W FRNK	138 1		
27075	11CARROL 138 27112 11LOCKPO	159	83.1	135	117.8	393 27014 11W FRNK	345 27151 11W FRNK	138 1		
27091	11FFRT E 138 27140 11SHADRA	148.2	73.1	135	109.8	393 27014 11W FRNK	345 27151 11W FRNK	138 1		
27112	11LOCKPO 138 27140 11SHADRA	154.1	78.6	135	114.2	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	21.7	22	19	114.4	393 27014 11W FRNK	345 27151 11W FRNK	138 1		
29411	20LILYJ69.0 29634 20WOODLN	26.3	25.1	23	114.5	393 27014 11W FRNK	345 27151 11W FRNK	138 1		
27044	11W IRVI 161 27045 11WI TAP	82.1	82.3	74	110.9	394 27015 11W LEKN	345 27153 11W LEKN	138 1		
27051	11ADAMS 138 27148 11TYRONE	122.1	95.8	97	125.8	394 27015 11W LEKN	345 27153 11W LEKN	138 1		
27113	11LOUDON 138 29202 20AVON	300.9	242.5	287	104.8	394 27015 11W LEKN	345 27153 11W LEKN	138 1		
27161	11AIKEN 69.0 27253 11MIDDLT	145.5	144	143	101.7	394 27015 11W LEKN	345 27153 11W LEKN	138 1		
29359	20HODGEN69.0 29419 20MAGNOL	22.2	22	19	116.6	394 27015 11W LEKN	345 27153 11W LEKN	138 1		
29411	20LILYJ69.0 29634 20WOODLN	26.2	25.1	23	113.8	394 27015 11W LEKN	345 27153 11W LEKN	138 1		
27023	11DELVIN 161 27045 11WI TAP	146.2	144.6	142	103	395 27016 11ALCALD	161 27026 11ELIHU	161 1		
27044	11W IRVI 161 27045 11WI TAP	82.5	82.3	74	111.5	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	20HODGEN69.0 29419 20MAGNOL	22.8	22	19	119.7	395 27016 11ALCALD	161 27026 11ELIHU	161 1		
29411	20LILYJ69.0 29634 20WOODLN	25.8	25.1	23	112	395 27016 11ALCALD	161 27026 11ELIHU	161 1		
27023	11DELVIN 161 27045 11WI TAP	148.1	144.6	142	104.3	396 27016 11ALCALD	161 27027 11FARLEY	161 1		
27044	11W IRVI 161 27045 11WI TAP	83	82.3	74	112.1	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	20HODGEN69.0 29419 20MAGNOL	21.7	22	19	114.2	396 27016 11ALCALD	161 27027 11FARLEY	161 1		
29411	20LILYJ69.0 29634 20WOODLN	25	25.1	23	108.6	396 27016 11ALCALD	161 27027 11FARLEY	161 1		
27044	11W IRVI 161 27045 11WI TAP	80.2	82.3	74	108.4	397 27017 11ARNOLD	161 27024 11DORCHE	161 1		
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.6	397 27017 11ARNOLD	161 27024 11DORCHE	161 1		
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.8	397 27017 11ARNOLD	161 27024 11DORCHE	161 1		
29411	20LILYJ69.0 29634 20WOODLN	24.9	25.1	23	108.1	397 27017 11ARNOLD	161 27024 11DORCHE	161 1		
27024	11DORCHE 161 27032 11IMBODE	99	55.4	94	105.3	398 27017 11ARNOLD	161 27024 11DORCHE	161 1		
27044	11W IRVI 161 27045 11WI TAP	82	82.3	74	110.8	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	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	398 27017 11ARNOLD	161 27024 11DORCHE	161 1		
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	398 27017 11ARNOLD	161 27024 11DORCHE	161 1		
27023	11DELVIN 161 27045 11WI TAP	147.5	144.6	142	103.9	399 27017 11ARNOLD	161 27030 11HARLAN	161 1		
27044	11W IRVI 161 27045 11WI TAP	82.9	82.3	74	112.1	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	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	399 27017 11ARNOLD	161 27030 11HARLAN	161 1		

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	399	27017	11ARNOLD	161 27030
27023	11DELVIN	161 27045	11WI TAP	142.7	144.6	142	100.5	400	27017	11ARNOLD	161 27165
27044	11W IRVI	161 27045	11WI TAP	81.9	82.3	74	110.7	400	27017	11ARNOLD	161 27165
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	400	27017	11ARNOLD	161 27165
29359	20HODGEN	69.0 29419	20MAGNOL	22	22	19	115.6	400	27017	11ARNOLD	161 27165
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	400	27017	11ARNOLD	161 27165
27023	11DELVIN	161 27045	11WI TAP	145.5	144.6	142	102.5	401	27018	11ARTEMU	161 27166
27044	11W IRVI	161 27045	11WI TAP	82.5	82.3	74	111.5	401	27018	11ARTEMU	161 27166
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	401	27018	11ARTEMU	161 27166
27235	11KU PK	69.0 27265	11PINEVI	96.3	69.6	82	117.5	401	27018	11ARTEMU	161 27166
29359	20HODGEN	69.0 29419	20MAGNOL	21.9	22	19	115.5	401	27018	11ARTEMU	161 27166
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	401	27018	11ARTEMU	161 27166
27023	11DELVIN	161 27045	11WI TAP	145.5	144.6	142	102.5	402	27018	11ARTEMU	161 27166
27044	11W IRVI	161 27045	11WI TAP	82.5	82.3	74	111.5	402	27018	11ARTEMU	161 27166
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	402	27018	11ARTEMU	161 27166
27235	11KU PK	69.0 27265	11PINEVI	96.3	69.6	82	117.5	402	27018	11ARTEMU	161 27166
29359	20HODGEN	69.0 29419	20MAGNOL	21.9	22	19	115.5	402	27018	11ARTEMU	161 27166
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	402	27018	11ARTEMU	161 27166
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.8	403	27020	11CORYO	161 27021
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	403	27020	11CORYO	161 27021
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	403	27020	11CORYO	161 27021
29359	20HODGEN	69.0 29419	20MAGNOL	21.9	22	19	115.4	403	27020	11CORYO	161 27021
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	403	27020	11CORYO	161 27021
27023	11DELVIN	161 27045	11WI TAP	144.7	144.6	142	101.9	404	27020	11CORYO	161 27028
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	404	27020	11CORYO	161 27028
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	404	27020	11CORYO	161 27028
29359	20HODGEN	69.0 29419	20MAGNOL	22.1	22	19	116.3	404	27020	11CORYO	161 27028
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	404	27020	11CORYO	161 27028
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	405	27020	11MORGNF	161 27035
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	405	27020	11MORGNF	161 27035
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	405	27020	11MORGNF	161 27035
29359	20HODGEN	69.0 29419	20MAGNOL	22.1	22	19	116.3	405	27020	11MORGNF	161 27035
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	405	27020	11MORGNF	161 27035
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.8	406	27021	11CORYDO	161 27190
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	406	27021	11CORYDO	161 27190
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	406	27021	11CORYDO	161 27190
29359	20HODGEN	69.0 29419	20MAGNOL	21.9	22	19	115.4	406	27021	11CORYDO	161 27190
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	406	27021	11CORYDO	161 27190
27023	11DELVIN	161 27045	11WI TAP	144.4	144.6	142	101.7	407	27022	11CRITTE	161 27033
27044	11W IRVI	161 27045	11WI TAP	82.2	82.3	74	111.1	407	27022	11CRITTE	161 27033
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	143	100.7	407	27022	11CRITTE	161 27033
29359	20HODGEN	69.0 29419	20MAGNOL	21.8	22	19	114.7	407	27022	11CRITTE	161 27033
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	407	27022	11CRITTE	161 27033
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.8	408	27022	11CRITTE	161 27035
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	408	27022	11CRITTE	161 27035

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	408	27022	11CRITTE 161 27035 11MORGNF 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.2	408	27022	11CRITTE 161 27035 11MORGNF 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	408	27022	11CRITTE 161 27035 11MORGNF 161 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	409	27022	11CRITTE 161 27191 11CRITTE69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	409	27022	11CRITTE 161 27191 11CRITTE69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	409	27022	11CRITTE 161 27191 11CRITTE69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	409	27022	11CRITTE 161 27191 11CRITTE69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	409	27022	11CRITTE 161 27191 11CRITTE69.0 1
27044	11W IRVI 161	27292	11W IRVI	70.3	40.1	40.1	56	125.6	410	27023	11DELVIN 161 27045 11WI TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.6	410	27023	11DELVIN 161 27045 11WI TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22.3	22	22	19	117.1	410	27023	11DELVIN 161 27045 11WI TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.6	410	27023	11DELVIN 161 27045 11WI TAP 161 1
27023	11DELVIN 161	27045	11WI TAP	146.9	144.6	144.6	142	103.5	411	27024	11DORCHE 161 27032 11MBODE 161 1
27044	11W IRVI 161	27045	11WI TAP	82.8	82.3	82.3	74	111.9	411	27024	11DORCHE 161 27032 11MBODE 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	411	27024	11DORCHE 161 27032 11MBODE 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	411	27024	11DORCHE 161 27032 11MBODE 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	411	27024	11DORCHE 161 27032 11MBODE 161 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	412	27024	11DORCHE 161 27196 11DORCHE69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	82.3	74	111.3	412	27024	11DORCHE 161 27196 11DORCHE69.0 1
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	22	22	22	19	115.5	412	27024	11DORCHE 161 27196 11DORCHE69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	412	27024	11DORCHE 161 27196 11DORCHE69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	413	27024	11DORCHE 161 27196 11DORCHE69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	82.3	74	111.3	413	27024	11DORCHE 161 27196 11DORCHE69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	413	27024	11DORCHE 161 27196 11DORCHE69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	413	27024	11DORCHE 161 27196 11DORCHE69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	413	27024	11DORCHE 161 27196 11DORCHE69.0 2
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.7	414	27025	11EARL N 161 27033 11LIV C 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	414	27025	11EARL N 161 27033 11LIV C 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	414	27025	11EARL N 161 27033 11LIV C 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.1	414	27025	11EARL N 161 27033 11LIV C 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	414	27025	11EARL N 161 27033 11LIV C 161 1
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	144.6	142	102	415	27025	11EARL N 161 27042 11RQ TAP 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	415	27025	11EARL N 161 27042 11RQ TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	415	27025	11EARL N 161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	22	19	116.9	415	27025	11EARL N 161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.6	415	27025	11EARL N 161 27042 11RQ TAP 161 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	416	27025	11EARL N 161 27046 11WALKER 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	416	27025	11EARL N 161 27046 11WALKER 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	416	27025	11EARL N 161 27046 11WALKER 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	416	27025	11EARL N 161 27046 11WALKER 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	416	27025	11EARL N 161 27046 11WALKER 161 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	417	27025	11EARL N 161 27198 11EARL N69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	417	27025	11EARL N 161 27198 11EARL N69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	417	27025	11EARL N 161 27198 11EARL N69.0 1

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

LF: Th_South.sav
 Sys: estill.sub

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	417	27025 11EARL N	161 27198 11EARL N69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	417	27025 11EARL N	161 27198 11EARL N69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	418	27026 11ELIHU	161 27200 11ELIHU 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	418	27026 11ELIHU	161 27200 11ELIHU 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	418	27026 11ELIHU	161 27200 11ELIHU 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.7	418	27026 11ELIHU	161 27200 11ELIHU 69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.4	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.7	419	27026 11ELIHU	161 27200 11ELIHU 69.0 2
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.4	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	22	19	115.7	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.4	420	27026 11ELIHU	161 27200 11ELIHU 69.0 3
27023	11DELVIN 161	27045	11WI TAP	153.7	144.6	153.7	144.6	142	108.3	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27044	11W IRVI 161	27045	11WI TAP	85.1	82.3	85.1	82.3	74	115	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144.1	144	143	100.8	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27230	11HOPEWL69.0	29399	20LAURLC	74.4	48.2	74.4	48.2	72	103.3	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27235	11KU PK 69.0	27265	11PINEVI	91.6	69.6	91.6	69.6	82	111.7	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.4	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.3	25.1	25.3	25.1	23	109.9	421	27027 11FARLEY	161 27206 11FARLEY69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	422	27027 11FARLEY	161 27328 11ARTM T 161 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	82.4	82.3	74	111.3	422	27027 11FARLEY	161 27328 11ARTM T 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	422	27027 11FARLEY	161 27328 11ARTM T 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.3	422	27027 11FARLEY	161 27328 11ARTM T 161 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.2	422	27027 11FARLEY	161 27328 11ARTM T 161 1
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	144.8	144.6	142	102	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	423	27028 11GR RV	161 27042 11RQ TAP 161 1
27216	11GR_RVR69.0	27271	11RQ TAP	59.5	28.3	59.5	28.3	55	108.2	423	27028 11GR RV	161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	22.2	22	19	116.8	423	27028 11GR RV	161 27095 11GR RVR 138 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.6	423	27028 11GR RV	161 27095 11GR RVR 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	424	27028 11GR RV	161 27095 11GR RVR 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	424	27028 11GR RV	161 27095 11GR RVR 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	424	27028 11GR RV	161 27095 11GR RVR 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	424	27028 11GR RV	161 27095 11GR RVR 138 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.4	424	27028 11GR RV	161 27095 11GR RVR 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.5	144.6	142	101.8	425	27028 11GR RV	161 27095 11GR RVR 138 2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	425	27028 11GR RV	161 27095 11GR RVR 138 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	144	143	100.7	425	27028 11GR RV	161 27095 11GR RVR 138 2
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	21.9	22	19	115.5	425	27028 11GR RV	161 27095 11GR RVR 138 2
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.2	25.1	23	109.4	425	27028 11GR RV	161 27095 11GR RVR 138 2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	426	27028 11GR RV	161	27095	11GR RVR 138 3
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	21.9	22	19	115.5	426	27028 11GR RV	161	27095	11GR RVR 138 3
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	426	27028 11GR RV	161	27095	11GR RVR 138 3
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	427	27029 11GRAHVL	161	27043	11S PADU 161 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	21.9	22	19	115.3	427	27029 11GRAHVL	161	27043	11S PADU 161 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	427	27029 11GRAHVL	161	27043	11S PADU 161 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	428	27029 11GRAHVL	161	27047	11WICKLI 161 1
27029	11GRAHVL 161 27218 11GRAHVL	84	37.5	72	116.7	428	27029 11GRAHVL	161	27047	11WICKLI 161 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.5	428	27029 11GRAHVL	161	27047	11WICKLI 161 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	428	27029 11GRAHVL	161	27047	11WICKLI 161 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	429	27029 11GRAHVL	161	27218	11GRAHVV69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	429	27029 11GRAHVL	161	27218	11GRAHVV69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	429	27029 11GRAHVL	161	27218	11GRAHVV69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	429	27029 11GRAHVL	161	27218	11GRAHVV69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	429	27029 11GRAHVL	161	27218	11GRAHVV69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	430	27030 11HARLAN	161	27031	11HOWRD 161 1
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.4	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	21.9	22	19	115.5	430	27030 11HARLAN	161	27031	11HOWRD 161 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	430	27030 11HARLAN	161	27031	11HOWRD 161 1
27023	11DELVIN 161 27045 11WI TAP	145.6	144.6	142	102.5	430	27030 11HARLAN	161	27038	11PINEVI 161 1
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.4	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	21.9	22	19	115.5	431	27030 11HARLAN	161	27038	11PINEVI 161 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	431	27030 11HARLAN	161	27038	11PINEVI 161 1
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	111.3	432	27030 11HARLAN	161	27040	11POCK N 161 1
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	102	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	22	22	19	115.6	432	27030 11HARLAN	161	27040	11POCK N 161 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	432	27030 11HARLAN	161	27040	11POCK N 161 1
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	102.1	433	27030 11HARLAN	161	27224	11HARLAN69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.5	82.3	74	111.4	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	22	22	19	115.5	433	27030 11HARLAN	161	27224	11HARLAN69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	433	27030 11HARLAN	161	27224	11HARLAN69.0 1
27023	11DELVIN 161 27045 11WI TAP	145.7	144.6	142	102.6	434	27031 11HOWRD	161	27038	11PINEVI 161 1
27044	11W IRVI 161 27045 11WI TAP	82.5	82.3	74	111.4	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	21.9	22	19	115.5	434	27031 11HOWRD	161	27038	11PINEVI 161 1

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency										
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	434	27031	11HOWRD	161	27038	11PINEVI	161	1					
27023	11DELVIN	161	27045	11WI	TAP	150.3	144.6	142	105.9	435	27032	11IMBODE	161	27040	11POCK	N	161	1		
27044	11W	IRVI	161	27045	11WI	TAP	83.6	82.3	74	112.9	435	27032	11IMBODE	161	27040	11POCK	N	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	100.8	435	27032	11IMBODE	161	27040	11POCK	N	161	1				
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	115.5	435	27032	11IMBODE	161	27040	11POCK	N	161	1				
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	436	27032	11IMBODE	161	27040	11POCK	N	161	1				
27023	11DELVIN	161	27045	11WI	TAP	144.9	144.6	142	102.1	436	27032	11IMBODE	161	27231	11IMBODE	69.0	1			
27044	11W	IRVI	161	27045	11WI	TAP	82.4	82.3	74	111.3	436	27032	11IMBODE	161	27231	11IMBODE	69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	436	27032	11IMBODE	161	27231	11IMBODE	69.0	1					
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	115.6	436	27032	11IMBODE	161	27231	11IMBODE	69.0	1					
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	436	27032	11IMBODE	161	27231	11IMBODE	69.0	1					
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	437	27033	11LIV	C	161	27043	11S	PADU	161	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	437	27033	11LIV	C	161	27043	11S	PADU	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	437	27033	11LIV	C	161	27043	11S	PADU	161	1			
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	115.4	437	27033	11LIV	C	161	27043	11S	PADU	161	1			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	437	27033	11LIV	C	161	27043	11S	PADU	161	1			
27044	11W	IRVI	161	27045	11WI	TAP	98.6	82.3	74	133.3	438	27034	11LR	TAP	161	27045	11WI	TAP	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	438	27034	11LR	TAP	161	27045	11WI	TAP	161	1			
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	116.2	438	27034	11LR	TAP	161	27045	11WI	TAP	161	1			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	438	27034	11LR	TAP	161	27045	11WI	TAP	161	1			
27044	11W	IRVI	161	27045	11WI	TAP	98.4	82.3	74	133	439	27034	11LR	TAP	161	27110	11LR	TAP	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	439	27034	11LR	TAP	161	27110	11LR	TAP	138	1			
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	116.2	439	27034	11LR	TAP	161	27110	11LR	TAP	138	1			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	439	27034	11LR	TAP	161	27110	11LR	TAP	138	1			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	440	27035	11MORGNF	161	27255	11MORGNF	69.0	1			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	440	27035	11MORGNF	161	27255	11MORGNF	69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	440	27035	11MORGNF	161	27255	11MORGNF	69.0	1					
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	115.4	440	27035	11MORGNF	161	27255	11MORGNF	69.0	1					
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	440	27035	11MORGNF	161	27255	11MORGNF	69.0	1					
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	441	27036	11PADDYS	161	27130	11PADDYR	138	1			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	441	27036	11PADDYS	161	27130	11PADDYR	138	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	441	27036	11PADDYS	161	27130	11PADDYR	138	1					
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	115.8	441	27036	11PADDYS	161	27130	11PADDYR	138	1					
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	441	27036	11PADDYS	161	27130	11PADDYR	138	1					
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	442	27036	11PADDYS	161	27130	11PADDYR	138	2			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	442	27036	11PADDYS	161	27130	11PADDYR	138	2		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	442	27036	11PADDYS	161	27130	11PADDYR	138	2					
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	115.8	442	27036	11PADDYS	161	27130	11PADDYR	138	2					
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	442	27036	11PADDYS	161	27130	11PADDYR	138	2					
27023	11DELVIN	161	27045	11WI	TAP	144.2	144.6	142	101.6	443	27037	11PINEVL	161	27038	11PINEVI	161	1			
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.3	74	111.1	443	27037	11PINEVL	161	27038	11PINEVI	161	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	443	27037	11PINEVL	161	27038	11PINEVI	161	1					
27235	11KU	PK	69.0	27265	11PINEVI	85.3	69.6	82	104	443	27037	11PINEVL	161	27038	11PINEVI	161	1			
29359	20HODGEN	69.0	29419	20MAGNOL	22.1	22	116.1	443	27037	11PINEVL	161	27038	11PINEVI	161	1					
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	443	27037	11PINEVL	161	27038	11PINEVI	161	1					

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161	27045	11WI TAP	145.6	144.6	142	102.5	444	27037	11PINEVL 161 27328 11ARTM T 161 1
27044	11W IRVI 161	27045	11WI TAP	82.6	82.3	74	111.7	444	27037	11PINEVL 161 27328 11ARTM T 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	444	27037	11PINEVL 161 27328 11ARTM T 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	444	27037	11PINEVL 161 27328 11ARTM T 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	444	27037	11PINEVL 161 27328 11ARTM T 161 1
27023	11DELVIN 161	27045	11WI TAP	146	144.6	142	102.8	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.6	82.3	74	111.7	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	445	27038	11PINEVI 161 27265 11PINEVI69.0 1
27023	11DELVIN 161	27045	11WI TAP	145.2	144.6	142	102.3	446	27038	11PINEVI 161 27265 11PINEVI69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.4	446	27038	11PINEVI 161 27265 11PINEVI69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	446	27038	11PINEVI 161 27265 11PINEVI69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	446	27038	11PINEVI 161 27265 11PINEVI69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	446	27038	11PINEVI 161 27265 11PINEVI69.0 2
27023	11DELVIN 161	27045	11WI TAP	145.8	144.6	142	102.6	447	27039	11POCKET 161 27040 11POCK N 161 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	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	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	447	27039	11POCKET 161 27040 11POCK N 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	447	27039	11POCKET 161 27040 11POCK N 161 1
27023	11DELVIN 161	27045	11WI TAP	145.8	144.6	142	102.6	448	27039	11POCKET 161 27268 11POCKET69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	448	27039	11POCKET 161 27268 11POCKET69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	448	27039	11POCKET 161 27268 11POCKET69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	448	27039	11POCKET 161 27268 11POCKET69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	448	27039	11POCKET 161 27268 11POCKET69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	449	27041	11RIVR Q 161 27042 11RQ TAP 161 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	449	27041	11RQ TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	449	27041	11RIVR Q 161 27042 11RQ TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	449	27041	11RIVR Q 161 27042 11RQ TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	449	27041	11RIVR Q 161 27042 11RQ TAP 161 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	450	27041	11RIVR Q 161 27270 11RIVR Q69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	450	27041	11RIVR Q 161 27270 11RIVR Q69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	450	27041	11RIVR Q 161 27270 11RIVR Q69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	450	27041	11RIVR Q 161 27270 11RIVR Q69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	450	27041	11RIVR Q 161 27270 11RIVR Q69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	451	27043	11S PADU 161 27276 11S PADU69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	451	27043	11S PADU 161 27276 11S PADU69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	451	27043	11S PADU 161 27276 11S PADU69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	451	27043	11S PADU 161 27276 11S PADU69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	451	27043	11S PADU 161 27276 11S PADU69.0 1
27044	11W IRVI 161	27292	11W IRVI	120.5	40.1	56	215.2	452	27044	11W IRVI 161 27045 11WI TAP 161 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	452	27044	11W IRVI 161 27045 11WI TAP 161 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	452	27044	11W IRVI 161 27045 11WI TAP 161 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	452	27044	11W IRVI 161 27045 11WI TAP 161 1
27023	11DELVIN 161	27045	11WI TAP	161.8	144.6	142	113.9	453	27044	11W IRVI 161 27292 11W IRVI69.0 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency						
27044	11W IRVI	161	27045	11WI	TAP	120.3	82.3	74	162.6	453	27044 11W IRVI	161	27292	11W IRVI	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	453	27044 11W IRVI	161	27292	11W IRVI	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL		21.9	22	19	115.4	453	27044 11W IRVI	161	27292	11W IRVI	69.0	1	
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.3	453	27044 11W IRVI	161	27292	11W IRVI	69.0	1	
27051	11ADAMS	138	27148	11TYRONE		97.3	95.8	97	100.3	454	27044 11W IRVI	161	27301	ESTILLO	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144.4	144	143	100.9	454	27044 11W IRVI	161	27301	ESTILLO	161	1	
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	22	19	114.5	454	27044 11W IRVI	161	27301	ESTILLO	161	1	
29411	20LILY	J69.0	29634	20WOODLN		25.7	25.1	23	111.8	454	27044 11W IRVI	161	27301	ESTILLO	161	1	
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	455	27046 11WALKER	161	27293	11WALKER	69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	455	27046 11WALKER	161	27293	11WALKER	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	455	27046 11WALKER	161	27293	11WALKER	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL		22	22	19	115.5	455	27046 11WALKER	161	27293	11WALKER	69.0	1	
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.3	455	27046 11WALKER	161	27293	11WALKER	69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	84	37.5	72	116.6	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
27029	11GRAHVL	161	27218	11GRAHVL		82.3	82.3	74	111.2	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
27044	11W IRVI	161	27045	11WI	TAP	144	144	143	100.7	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL		22	22	19	115.5	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.3	456	27047 11WICKLI	161	27298	11WICKLI	69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	457	27048 113832	T	138	27055	11ASHBOT	138	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	457	27048 113832	T	138	27055	11ASHBOT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT		143.8	144	143	100.5	457	27048 113832	T	138	27055	11ASHBOT	138	1
29359	20HODGEN	69.0	29419	20MAGNOL		21.9	22	19	115.2	457	27048 113832	T	138	27055	11ASHBOT	138	1
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.2	457	27048 113832	T	138	27055	11ASHBOT	138	1
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	458	27048 113832	T	138	27071	11CNE RN	138	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	458	27048 113832	T	138	27071	11CNE RN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT		143.8	144	143	100.5	458	27048 113832	T	138	27071	11CNE RN	138	1
29359	20HODGEN	69.0	29419	20MAGNOL		21.9	22	19	115.2	458	27048 113832	T	138	27071	11CNE RN	138	1
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.1	458	27048 113832	T	138	27071	11CNE RN	138	1
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	459	27048 113832	T	138	27134	11PLSRDG	138	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	459	27048 113832	T	138	27134	11PLSRDG	138	1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	459	27048 113832	T	138	27134	11PLSRDG	138	1
29359	20HODGEN	69.0	29419	20MAGNOL		22	22	19	115.6	459	27048 113832	T	138	27134	11PLSRDG	138	1
29411	20LILY	J69.0	29634	20WOODLN		25.2	25.1	23	109.4	459	27048 113832	T	138	27134	11PLSRDG	138	1
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	460	27049 113842	T	138	27119	11MIDDLT	138	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	460	27049 113842	T	138	27119	11MIDDLT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT		147.5	144	143	103.2	460	27049 113842	T	138	27119	11MIDDLT	138	1
29359	20HODGEN	69.0	29419	20MAGNOL		22	22	19	115.5	460	27049 113842	T	138	27119	11MIDDLT	138	1
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.3	460	27049 113842	T	138	27119	11MIDDLT	138	1
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	461	27049 113842	T	138	27155	11WATRS	138	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	111.2	461	27049 113842	T	138	27155	11WATRS	138	1
27161	11AIKEN	69.0	27253	11MIDDLT		147	144	143	102.8	461	27049 113842	T	138	27155	11WATRS	138	1
29359	20HODGEN	69.0	29419	20MAGNOL		22	22	19	115.6	461	27049 113842	T	138	27155	11WATRS	138	1
29411	20LILY	J69.0	29634	20WOODLN		25.1	25.1	23	109.3	461	27049 113842	T	138	27155	11WATRS	138	1
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	461	27049 113842	T	138	27155	11WATRS	138	1
27044	11W IRVI	161	27045	11WI	TAP	82.3	82.3	74	109.3	461	27049 113842	T	138	27155	11WATRS	138	1
27161	11AIKEN	69.0	27253	11MIDDLT		144.6	144.6	142	101.8	462	27050 113870	T	138	27059	11BEARGR	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency						
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	462	27050 113870	T	138	27059	11BEARGR	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.8	144	143	101.2	462	27050 113870	T	138	27059	11BEARGR	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	462	27050 113870	T	138	27059	11BEARGR	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25.1	23	109.4	462	27050 113870	T	138	27059	11BEARGR	138	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	463	27050 113870	T	138	27119	11MIDDLT	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	463	27050 113870	T	138	27119	11MIDDLT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	146.2	144	143	102.2	463	27050 113870	T	138	27119	11MIDDLT	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	463	27050 113870	T	138	27119	11MIDDLT	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25.1	23	109.4	463	27050 113870	T	138	27119	11MIDDLT	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	464	27050 113870	T	138	27133	11PLAINV	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	464	27050 113870	T	138	27133	11PLAINV	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.8	144	143	101.3	464	27050 113870	T	138	27133	11PLAINV	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	464	27050 113870	T	138	27133	11PLAINV	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	464	27050 113870	T	138	27133	11PLAINV	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	466	27051 11ADAMS	T	138	27139	11SCOTT	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	466	27051 11ADAMS	T	138	27139	11SCOTT	138	1
27051	11ADAMS	138	27148	11TYRONE	97.4	95.8	97	100.4	466	27051 11ADAMS	T	138	27139	11SCOTT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	466	27051 11ADAMS	T	138	27139	11SCOTT	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	466	27051 11ADAMS	T	138	27139	11SCOTT	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25.1	23	109.4	466	27051 11ADAMS	T	138	27139	11SCOTT	138	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	467	27051 11ADAMS	T	138	27146	11TOYT S	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	467	27051 11ADAMS	T	138	27146	11TOYT S	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	467	27051 11ADAMS	T	138	27146	11TOYT S	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	467	27051 11ADAMS	T	138	27146	11TOYT S	138	1
29411	20LILY	J69.0	29634	20WOODLN	25.1	25.1	23	109.3	467	27051 11ADAMS	T	138	27146	11TOYT S	138	1
27023	11DELVIN	161	27045	11WI TAP	143.9	144.6	142	101.4	468	27051 11ADAMS	T	138	27148	11TYRONE	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	468	27051 11ADAMS	T	138	27148	11TYRONE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.3	144	143	100.2	468	27051 11ADAMS	T	138	27148	11TYRONE	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.8	468	27051 11ADAMS	T	138	27148	11TYRONE	138	1
29411	20LILY	J69.0	29634	20WOODLN	25	25.1	23	108.9	468	27051 11ADAMS	T	138	27148	11TYRONE	138	1
27023	11DELVIN	161	27045	11WI TAP	144.3	144.6	142	101.6	469	27051 11ADAMS	T	138	27160	11ADAMS	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	469	27051 11ADAMS	T	138	27160	11ADAMS	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	469	27051 11ADAMS	T	138	27160	11ADAMS	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	469	27051 11ADAMS	T	138	27160	11ADAMS	69.0	1
29411	20LILY	J69.0	29634	20WOODLN	25.2	25.1	23	109.4	469	27051 11ADAMS	T	138	27160	11ADAMS	69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	470	27052 11ALNGU	T	138	27082	11DIXIE	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	470	27052 11ALNGU	T	138	27082	11DIXIE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.7	144	143	101.2	470	27052 11ALNGU	T	138	27082	11DIXIE	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.4	470	27052 11ALNGU	T	138	27082	11DIXIE	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	470	27052 11ALNGU	138 27082 11DIXIE 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	471	27052 11ALNGU	138 27162 11ALNGU69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	471	27052 11ALNGU	138 27162 11ALNGU69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	144	143	101.2	471	27052 11ALNGU	138 27162 11ALNGU69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	471	27052 11ALNGU	138 27162 11ALNGU69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	471	27052 11ALNGU	138 27162 11ALNGU69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	472	27052 11AMERI	138 27097 11HAEFLI 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	472	27053 11AMERI	138 27097 11HAEFLI 138 1
27051	11ADAMS	138	27148 11TYRONE	97.3	95.8	95.8	74	100.4	473	27053 11AMERI	138 27136 11REYNOL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	473	27053 11AMERI	138 27136 11REYNOL 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	473	27053 11AMERI	138 27136 11REYNOL 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	473	27053 11AMERI	138 27136 11REYNOL 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	473	27053 11AMERI	138 27136 11REYNOL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	473	27053 11AMERI	138 27136 11REYNOL 138 1
27051	11ADAMS	138	27148 11TYRONE	97.3	95.8	95.8	74	100.4	474	27053 11AMERI	138 27136 11REYNOL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	474	27053 11AMERI	138 27136 11REYNOL 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	474	27053 11AMERI	138 27136 11REYNOL 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	474	27053 11AMERI	138 27136 11REYNOL 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	474	27053 11AMERI	138 27136 11REYNOL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	474	27053 11AMERI	138 27136 11REYNOL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.7	474	27053 11AMERI	138 27136 11REYNOL 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	474	27053 11AMERI	138 27136 11REYNOL 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.6	474	27053 11AMERI	138 27136 11REYNOL 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	475	27054 11APPLPA	138 27055 11ASHBOT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	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	21.9	22	22	19	115.5	475	27054 11APPLPA	138 27055 11ASHBOT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	475	27054 11APPLPA	138 27055 11ASHBOT 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	476	27054 11APPLPA	138 27084 11ETHEL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	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	21.9	22	22	19	115.5	476	27054 11APPLPA	138 27084 11ETHEL 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	476	27054 11APPLPA	138 27084 11ETHEL 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	477	27054 11APPLPA	138 27119 11MIDDLT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	477	27054 11APPLPA	138 27119 11MIDDLT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.8	144	144	143	101.9	477	27054 11APPLPA	138 27119 11MIDDLT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	477	27054 11APPLPA	138 27119 11MIDDLT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	477	27054 11APPLPA	138 27119 11MIDDLT 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	478	27055 11ASHBOT	138 27071 11CNE RN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	478	27055 11ASHBOT	138 27071 11CNE RN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	144	143	100.5	478	27055 11ASHBOT	138 27071 11CNE RN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.3	478	27055 11ASHBOT	138 27071 11CNE RN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	478	27055 11ASHBOT	138 27071 11CNE RN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	479	27055 11ASHBOT	138 27116 11MANSLI 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	479	27055 11ASHBOT	138 27116 11MANSLI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	479	27055 11ASHBOT	138 27116 11MANSLI 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	479	27055 11ASHBOT	138	27116	11MANSLI	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	479	27055 11ASHBOT	138	27116	11MANSLI	138	1
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	144.6	142	101.8	480	27055 11ASHBOT	138	27167	11ASHBOT	69.0	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	480	27055 11ASHBOT	138	27167	11ASHBOT	69.0	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.2	144	144	143	100.8	480	27055 11ASHBOT	138	27167	11ASHBOT	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	480	27055 11ASHBOT	138	27167	11ASHBOT	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	480	27055 11ASHBOT	138	27167	11ASHBOT	69.0	2
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	144.6	142	101.8	481	27055 11ASHBOT	138	27167	11ASHBOT	69.0	2
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	481	27055 11ASHBOT	138	27167	11ASHBOT	69.0	2
27161	11AIKEN	69.0	27253 11MIDDLT	144.2	144	144	143	100.8	481	27055 11ASHBOT	138	27167	11ASHBOT	69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	481	27055 11ASHBOT	138	27167	11ASHBOT	69.0	2
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	481	27055 11ASHBOT	138	27167	11ASHBOT	69.0	2
27023	11DELVIN	161	27045 11WI TAP	144.5	144.6	144.6	142	101.8	482	27055 11ASHBOT	138	27318	11GRADE	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	482	27055 11ASHBOT	138	27318	11GRADE	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	482	27055 11ASHBOT	138	27318	11GRADE	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	482	27055 11ASHBOT	138	27318	11GRADE	138	1
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	144.6	142	101.8	483	27056 11ASHBY	138	27121	11MILL C	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	483	27056 11ASHBY	138	27121	11MILL C	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.2	144	144	143	100.9	483	27056 11ASHBY	138	27121	11MILL C	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.9	483	27056 11ASHBY	138	27121	11MILL C	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	483	27056 11ASHBY	138	27121	11MILL C	138	1
27023	11DELVIN	161	27045 11WI TAP	144.6	144.6	144.6	142	101.8	484	27056 11ASHBY	138	27134	11PLSRDG	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	484	27056 11ASHBY	138	27134	11PLSRDG	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.1	144	144	143	100.8	484	27056 11ASHBY	138	27134	11PLSRDG	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	484	27056 11ASHBY	138	27134	11PLSRDG	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	484	27056 11ASHBY	138	27134	11PLSRDG	138	1
27023	11DELVIN	161	27045 11WI TAP	144.1	144.6	144.6	142	101.4	485	27057 11BKR LN	138	27064	11BRWN N	138	1
27044	11W IRVI	161	27045 11WI TAP	82.2	82.3	82.3	74	111.1	485	27057 11BKR LN	138	27064	11BRWN N	138	1
27051	11ADAMS	138	27148 11TYRONE	102.3	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	143	100.8	485	27057 11BKR LN	138	27064	11BRWN N	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	485	27057 11BKR LN	138	27064	11BRWN N	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.9	485	27057 11BKR LN	138	27064	11BRWN N	138	1
27023	11DELVIN	161	27045 11WI TAP	144.4	144.6	144.6	142	101.7	486	27057 11BKR LN	138	27101	11HIGBY	138	1
27044	11W IRVI	161	27045 11WI TAP	82.2	82.3	82.3	74	111.1	486	27057 11BKR LN	138	27101	11HIGBY	138	1
27051	11ADAMS	138	27148 11TYRONE	100.6	95.8	95.8	97	103.7	486	27057 11BKR LN	138	27101	11HIGBY	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.1	144	144	143	100.8	486	27057 11BKR LN	138	27101	11HIGBY	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	486	27057 11BKR LN	138	27101	11HIGBY	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.6	486	27057 11BKR LN	138	27101	11HIGBY	138	1
27023	11DELVIN	161	27045 11WI TAP	145.1	144.6	144.6	142	102.2	487	27058 11BARDST	138	27063	11BRWNCT	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	487	27058 11BARDST	138	27063	11BRWNCT	138	1
27161	11AIKEN	69.0	27253 11MIDDLT	144.1	144	144	143	100.8	487	27058 11BARDST	138	27063	11BRWNCT	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.4	22	22	19	112.5	487	27058 11BARDST	138	27063	11BRWNCT	138	1
29411	20LILYJ69.0	29634	20WOODLN	23.3	25.1	25.1	23	101.3	487	27058 11BARDST	138	27063	11BRWNCT	138	1
27023	11DELVIN	161	27045 11WI TAP	144	144.6	144.6	142	101.4	488	27058 11BARDST	138	27124	11NELSON	138	1
27044	11W IRVI	161	27045 11WI TAP	82.3	82.3	82.3	74	111.2	488	27058 11BARDST	138	27124	11NELSON	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144.5	144	143	101	488	27058	11BARDST 138 27124 11NELSON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.7	488	27058	11BARDST 138 27124 11NELSON 138 1
27023	11DELVIN 161	27045	11WI TAP	144.9	144.6	142	102	489	27058	11BARDST 138 27169 11BARDST69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.3	489	27058	11BARDST 138 27169 11BARDST69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	145.2	144	143	101.6	489	27058	11BARDST 138 27169 11BARDST69.0 1
27229	11HODGEN69.0	29359	20HODGEN	45.6	36.1	40	114	489	27058	11BARDST 138 27169 11BARDST69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	20.4	22	19	107.6	489	27058	11BARDST 138 27169 11BARDST69.0 1
29462	20NELSON69.0	29610	20WBARDJ	86.8	49	72	120.5	489	27058	11BARDST 138 27169 11BARDST69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	490	27059	11BEARGR 138 27104 11JEFFJC 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	490	27059	11BEARGR 138 27104 11JEFFJC 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	143	101.2	490	27059	11BEARGR 138 27104 11JEFFJC 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	490	27059	11BEARGR 138 27104 11JEFFJC 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.1	490	27059	11BEARGR 138 27104 11JEFFJC 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	491	27059	11BEARGR 138 27114 11LYNDON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	491	27059	11BEARGR 138 27114 11LYNDON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	491	27059	11BEARGR 138 27114 11LYNDON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	491	27059	11BEARGR 138 27114 11LYNDON 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	491	27059	11BEARGR 138 27114 11LYNDON 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	492	27059	11BEARGR 138 27125 11NORTHS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	492	27059	11BEARGR 138 27125 11NORTHS 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	492	27059	11BEARGR 138 27125 11NORTHS 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	493	27059	11BEARGR 138 27154 11WATRSD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	493	27059	11BEARGR 138 27154 11WATRSD 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	493	27059	11BEARGR 138 27154 11WATRSD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	493	27059	11BEARGR 138 27154 11WATRSD 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	493	27059	11BEARGR 138 27154 11WATRSD 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	494	27059	11BEARGR 138 27154 11WATRSD 138 2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	494	27059	11BEARGR 138 27154 11WATRSD 138 2
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	494	27059	11BEARGR 138 27154 11WATRSD 138 2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	494	27059	11BEARGR 138 27154 11WATRSD 138 2
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	494	27059	11BEARGR 138 27154 11WATRSD 138 2
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	151.4	144	143	105.9	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.3	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109	495	27059	11BEARGR 138 27170 11BEARGR69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	496	27060	11BLUJELI 138 27122 11MUD LA 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	496	27060	11BLUJELI 138 27122 11MUD LA 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	143	100.9	496	27060	11BLUJELI 138 27122 11MUD LA 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	496	27060	11BLUJELI 138 27122 11MUD LA 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	23	109.7	496	27060	11BLUJELI 138 27122 11MUD LA 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	497	27060	11BLUJELI 138 27322 11BLUJELI69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	497	27060	11BLUJELI 138 27322 11BLUJELI69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	497	27060	11BLUELI 138 27322 11BLUELI69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	497	27060	11BLUELI 138 27322 11BLUELI69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	23	109.4	497	27060	11BLUELI 138 27322 11BLUELI69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	498	27061	11BONNI 138 27173 11BONNI 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	498	27061	11BONNI 138 27173 11BONNI 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	498	27061	11BONNI 138 27173 11BONNI 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22.2	22	19	116.6	498	27061	11BONNI 138 27173 11BONNI 69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25.4	25.1	23	110.3	499	27061	11BONNI 138 27173 11BONNI 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	499	27061	11BONNI 138 27335 11LEBNW 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	499	27061	11BONNI 138 27335 11LEBNW 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	499	27061	11BONNI 138 27335 11LEBNW 138 1
29359	20HODGEN69.0	29419	20MAGNOL	23.6	22	19	124.2	499	27061	11BONNI 138 27335 11LEBNW 138 1
29411	20LILYJT69.0	29634	20WOODLN	27.1	25.1	23	117.9	499	27061	11BONNI 138 27335 11LEBNW 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	500	27061	11BONNI 138 27337 11MERIDT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.3	500	27061	11BONNI 138 27337 11MERIDT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	500	27061	11BONNI 138 27337 11MERIDT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	23.1	22	19	121.3	500	27061	11BONNI 138 27337 11MERIDT 138 1
29411	20LILYJT69.0	29634	20WOODLN	26.6	25.1	23	115.8	500	27061	11BONNI 138 27337 11MERIDT 138 1
29571	20STEPHN69.0	29606	20UPTONJ	26.1	12.9	19	137.3	500	27061	11BONNI 138 27337 11MERIDT 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	501	27062	11BRCKNG 138 27084 11ETHEL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.6	501	27062	11BRCKNG 138 27084 11ETHEL 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	23	109.3	501	27062	11BRCKNG 138 27084 11ETHEL 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	502	27062	11BRCKNG 138 27102 11HRSTBR 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.5	502	27062	11BRCKNG 138 27102 11HRSTBR 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	502	27062	11BRCKNG 138 27102 11HRSTBR 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	503	27062	11BRCKNG 138 27177 11BRCKNG69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	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	21.9	22	19	115.5	503	27062	11BRCKNG 138 27177 11BRCKNG69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.1	503	27062	11BRCKNG 138 27177 11BRCKNG69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	504	27063	11BRWN N 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	504	27063	11BRWN N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	504	27063	11BRWN N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	504	27063	11BRWN N 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	504	27063	11BRWN N 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	505	27063	11BRWN N 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	505	27063	11BRWN N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	505	27063	11BRWN N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	505	27063	11BRWN N 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	505	27063	11BRWN N 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	505	27063	11BRWN N 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	505	27063	11BRWN N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	505	27063	11BRWN N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	505	27063	11BRWN N 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	505	27063	11BRWN N 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	506	27063	11BRWN N 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	506	27063	11BRWN N 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.6	144.6	142	101.8	506	27063	11BRWN N 138 1
29359	20HODGEN69.0	29419	20MAGNOL	25.1	25.1	23	109.3	506	27063	11BRWN N 138 1
29411	20LILYJT69.0	29634	20WOODLN	144.6	144.6	142	101.8	506	27063	11BRWN N 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	506	27063	11BRWN N 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	%	Ncon	Contingency						
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2		506	27063	11BRWNT2	138	27067	11BRWNT2	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7		506	27063	11BRWNT2	138	27067	11BRWNT2	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6		506	27063	11BRWNT2	138	27067	11BRWNT2	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.3		506	27063	11BRWNT2	138	27067	11BRWNT2	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8		507	27064	11BRWN	138	27066	11BRWNT1	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2		507	27064	11BRWN	138	27066	11BRWNT1	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7		507	27064	11BRWN	138	27066	11BRWNT1	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6		507	27064	11BRWN	138	27066	11BRWNT1	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.2	25.1	23	109.4		507	27064	11BRWN	138	27066	11BRWNT1	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8		508	27064	11BRWN	138	27067	11BRWNT2	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2		508	27064	11BRWN	138	27067	11BRWNT2	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7		508	27064	11BRWN	138	27067	11BRWNT2	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6		508	27064	11BRWN	138	27067	11BRWNT2	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.2	25.1	23	109.4		508	27064	11BRWN	138	27067	11BRWNT2	138	1
27023	11DELVIN	161	27045	11WI TAP	144.3	144.6	142	101.6		509	27064	11BRWN	138	27078	11CLAYS	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1		509	27064	11BRWN	138	27078	11CLAYS	138	1
27051	11ADAMS	138	27148	11TYRONE	100.2	95.8	97	103.3		509	27064	11BRWN	138	27078	11CLAYS	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7		509	27064	11BRWN	138	27078	11CLAYS	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5		509	27064	11BRWN	138	27078	11CLAYS	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.3	25.1	23	109.8		509	27064	11BRWN	138	27078	11CLAYS	138	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8		510	27064	11BRWN	138	27101	11HIGBY	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1		510	27064	11BRWN	138	27101	11HIGBY	138	1
27051	11ADAMS	138	27148	11TYRONE	102.1	95.8	97	105.2		510	27064	11BRWN	138	27101	11HIGBY	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7		510	27064	11BRWN	138	27101	11HIGBY	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5		510	27064	11BRWN	138	27101	11HIGBY	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.3	25.1	23	109.8		510	27064	11BRWN	138	27101	11HIGBY	138	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8		511	27064	11BRWN	138	27132	11PISGAH	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1		511	27064	11BRWN	138	27132	11PISGAH	138	1
27051	11ADAMS	138	27148	11TYRONE	98.6	95.8	97	101.6		511	27064	11BRWN	138	27132	11PISGAH	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7		511	27064	11BRWN	138	27132	11PISGAH	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.9	22	19	115.5		511	27064	11BRWN	138	27132	11PISGAH	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.2	25.1	23	109.5		511	27064	11BRWN	138	27132	11PISGAH	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.7		512	27064	11BRWN	138	27148	11TYRONE	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	74	111.1		512	27064	11BRWN	138	27148	11TYRONE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8		512	27064	11BRWN	138	27148	11TYRONE	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6		512	27064	11BRWN	138	27148	11TYRONE	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.2		512	27064	11BRWN	138	27148	11TYRONE	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8		513	27065	11BRWN	138	27066	11BRWNT1	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2		513	27065	11BRWN	138	27066	11BRWNT1	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7		513	27065	11BRWN	138	27066	11BRWNT1	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6		513	27065	11BRWN	138	27066	11BRWNT1	138	1
29411	20LILYJ69.0	29634	20WOODLN		25.2	25.1	23	109.5		513	27065	11BRWN	138	27066	11BRWNT1	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.7		514	27065	11BRWN	138	27067	11BRWNT2	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2		514	27065	11BRWN	138	27067	11BRWNT2	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7		514	27065	11BRWN	138	27067	11BRWNT2	138	1

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

LF: Th South.sav
 Sys: estill.sub

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	514	27065	11BRWNT2 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	514	27065	11BRWNT2 138 1
27044	11W IRVI	161 27045	11WI TAP	82	82.3	74	110.8	515	27065	11FAWKES 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	143	100.6	515	27065	11FAWKES 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	515	27065	11FAWKES 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	23	110.6	515	27065	11FAWKES 138 1
27023	11DELVIN	161 27045	11WI TAP	149.1	144.6	142	105	516	27065	11MERCER 138 1
27044	11W IRVI	161 27045	11WI TAP	83	82.3	74	112.1	516	27065	11MERCER 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	143	100.6	516	27065	11MERCER 138 1
27285	11SPRNGF69.0	29459	20N SPR	28	12.9	19	147.5	516	27065	11MERCER 138 1
29326	20FRCKBJ69.0	29634	20WOODLN	26.4	19.1	23	114.7	516	27065	11MERCER 138 1
29359	20HODGEN69.0	29419	20MAGNOL	24.6	22	19	129.5	516	27065	11MERCER 138 1
29411	20LILYJ69.0	29634	20WOODLN	29.9	25.1	23	130.1	516	27065	11MERCER 138 1
27023	11DELVIN	161 27045	11WI TAP	145.8	144.6	142	102.7	517	27065	11W CLIF 138 1
27044	11W IRVI	161 27045	11WI TAP	82.5	82.3	74	111.5	517	27065	11W CLIF 138 1
27080	11DANVIL	138 27193	11DANVIL	129.4	102.6	129	100.3	517	27065	11W CLIF 138 1
27156	11WC-DD	138 27295	11WC-DD	194.7	97.5	143	136.1	517	27065	11W CLIF 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.3	144	143	100.9	517	27065	11W CLIF 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.8	517	27065	11W CLIF 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.9	25.1	23	112.7	517	27065	11W CLIF 138 1
27023	11DELVIN	161 27045	11WI TAP	145.1	144.6	142	102.2	518	27065	11WC-DD 138 1
27044	11W IRVI	161 27045	11WI TAP	82.4	82.3	74	111.3	518	27065	11WC-DD 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.8	518	27065	11WC-DD 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	518	27065	11WC-DD 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	110.8	518	27065	11WC-DD 138 1
27023	11DELVIN	161 27045	11WI TAP	144.4	144.6	142	101.7	519	27068	11CARN T 138 1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	519	27068	11CARN T 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	143	100.6	519	27068	11CARN T 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	519	27068	11CARN T 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	519	27068	11CARN T 138 1
27023	11DELVIN	161 27045	11WI TAP	144.4	144.6	142	101.7	520	27068	11GHENT 138 1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	520	27068	11GHENT 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	143	100.6	520	27068	11GHENT 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	520	27068	11GHENT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	520	27068	11GHENT 138 1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	521	27069	11CNE RN 138 1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	521	27069	11CNE RN 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.8	521	27069	11CNE RN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	521	27069	11CNE RN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	521	27069	11CNE RN 138 1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	522	27069	11PADDYR 138 1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	522	27069	11PADDYR 138 1
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.7	522	27069	11PADDYR 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	522	27069	11PADDYR 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	522	27069	11PADDYR 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	523	27070 11CANAL	138	27131	11P WEST 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	523	27070 11CANAL	138	27131	11P WEST 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.8	144	143	101.3	523	27070 11CANAL	138	27131	11P WEST 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	523	27070 11CANAL	138	27131	11P WEST 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	523	27070 11CANAL	138	27131	11P WEST 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	524	27070 11CANAL	138	27154	11WATRS D 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	524	27070 11CANAL	138	27154	11WATRS D 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.9	524	27070 11CANAL	138	27154	11WATRS D 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	524	27070 11CANAL	138	27154	11WATRS D 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	524	27070 11CANAL	138	27154	11WATRS D 138 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	525	27070 11CANAL	138	27180	11CANAL 69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	525	27070 11CANAL	138	27180	11CANAL 69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.8	525	27070 11CANAL	138	27180	11CANAL 69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	525	27070 11CANAL	138	27180	11CANAL 69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	525	27070 11CANAL	138	27180	11CANAL 69.0 2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	526	27070 11CANAL	138	27180	11CANAL 69.0 2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	526	27070 11CANAL	138	27180	11CANAL 69.0 2
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.8	526	27070 11CANAL	138	27180	11CANAL 69.0 2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	526	27070 11CANAL	138	27180	11CANAL 69.0 2
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	526	27070 11CANAL	138	27180	11CANAL 69.0 2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	527	27071 11CNE RN	138	27072	11CN RN6 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	527	27071 11CNE RN	138	27072	11CN RN6 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.7	144	143	101.2	527	27071 11CNE RN	138	27072	11CN RN6 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22.1	22	19	116.6	527	27071 11CNE RN	138	27072	11CN RN6 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.3	25.1	23	109.9	527	27071 11CNE RN	138	27072	11CN RN6 138 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	528	27071 11CNE RN	138	27072	11CN RN6 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	528	27071 11CNE RN	138	27072	11CN RN6 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	528	27071 11CNE RN	138	27072	11CN RN6 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	528	27071 11CNE RN	138	27072	11CN RN6 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	528	27071 11CNE RN	138	27072	11CN RN6 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	529	27071 11CNE RN	138	27181	11CANERN69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	529	27071 11CNE RN	138	27181	11CANERN69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.9	529	27071 11CNE RN	138	27181	11CANERN69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	529	27071 11CNE RN	138	27181	11CANERN69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	529	27071 11CNE RN	138	27181	11CANERN69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	530	27071 11CNE RN	138	27181	11CANERN69.0 2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	530	27071 11CNE RN	138	27181	11CANERN69.0 2
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.9	530	27071 11CNE RN	138	27181	11CANERN69.0 2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	530	27071 11CNE RN	138	27181	11CANERN69.0 2
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	530	27071 11CNE RN	138	27181	11CANERN69.0 2
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	531	27071 11CNE RN	138	27181	11CANERN69.0 3
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	531	27071 11CNE RN	138	27181	11CANERN69.0 3
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.9	531	27071 11CNE RN	138	27181	11CANERN69.0 3
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	531	27071 11CNE RN	138	27181	11CANERN69.0 3
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	531	27071 11CNE RN	138	27181	11CANERN69.0 3

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	532	27072 11CN RN6	138	27321	11BRIDGP 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	532	27072 11CN RN6	138	27321	11BRIDGP 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	532	27072 11CN RN6	138	27321	11BRIDGP 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	532	27072 11CN RN6	138	27321	11BRIDGP 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	532	27072 11CN RN6	138	27321	11BRIDGP 138 1
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	101.6	533	27073 11CARN T	138	27074	11CARNTW 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	533	27073 11CARN T	138	27074	11CARNTW 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	533	27073 11CARN T	138	27074	11CARNTW 138 1
27233	11KENTON69.0 27280 11SHARON	49.6	30.7	45	110.2	533	27073 11CARN T	138	27074	11CARNTW 138 1
27280	11SHARON69.0 29243 20BRACKN	33.4	16.5	28	119.2	533	27073 11CARN T	138	27074	11CARNTW 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	533	27073 11CARN T	138	27074	11CARNTW 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	534	27073 11CARN T	138	27074	11CARNTW 138 1
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	101.6	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
27233	11KENTON69.0 27280 11SHARON	49.6	30.7	45	110.2	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
27280	11SHARON69.0 29243 20BRACKN	33.4	16.5	28	119.2	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.5	535	27074 11CARNTW	138	27182	11CARNTN69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.7	144.6	142	101.9	536	27075 11CARROL	138	27083	11DW CRN 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	536	27075 11CARROL	138	27083	11DW CRN 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	145.7	144	143	101.9	536	27075 11CARROL	138	27083	11DW CRN 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	536	27075 11CARROL	138	27083	11DW CRN 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	536	27075 11CARROL	138	27083	11DW CRN 138 1
27023	11DELVIN 161 27045 11WI TAP	144	144.6	142	101.4	537	27075 11CARROL	138	27112	11LOCKPO 138 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	537	27075 11CARROL	138	27112	11LOCKPO 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.3	144	143	100.9	537	27075 11CARROL	138	27112	11LOCKPO 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	537	27075 11CARROL	138	27112	11LOCKPO 138 1
29411	20LILYJ69.0 29634 20WOODLN	25.4	25.1	23	110.6	537	27075 11CARROL	138	27112	11LOCKPO 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	538	27075 11CARROL	138	27183	11CARNOL69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	538	27075 11CARROL	138	27183	11CARNOL69.0 1
27075	11CARROL 138 27183 11CARROL	90.9	54.5	72	126.2	538	27075 11CARROL	138	27183	11CARNOL69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.8	144	143	101.2	538	27075 11CARROL	138	27183	11CARNOL69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	538	27075 11CARROL	138	27183	11CARNOL69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	538	27075 11CARROL	138	27183	11CARNOL69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	539	27075 11CARROL	138	27183	11CARNOL69.0 2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	539	27075 11CARROL	138	27183	11CARNOL69.0 2
27161	11AIKEN 69.0 27253 11MIDDLT	145.1	144	143	101.5	539	27075 11CARROL	138	27183	11CARNOL69.0 2
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	539	27075 11CARROL	138	27183	11CARNOL69.0 2
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	539	27075 11CARROL	138	27183	11CARNOL69.0 2

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	540	27076	11CENTRE	138	27119	11MIDDLT	138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	540	27076	11CENTRE	138	27119	11MIDDLT	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	540	27076	11CENTRE	138	27119	11MIDDLT	138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	540	27076	11CENTRE	138	27119	11MIDDLT	138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	540	27076	11CENTRE	138	27119	11MIDDLT	138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	541	27076	11CENTRE	138	27147	11TRIMBL	138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	541	27076	11CENTRE	138	27147	11TRIMBL	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	152.9	144	143	106.9	541	27076	11CENTRE	138	27147	11TRIMBL	138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	114.8	541	27076	11CENTRE	138	27147	11TRIMBL	138 1
29411	20LILYJTJ69.0 29634 20WOODLN	24.8	25.1	23	108	541	27076	11CENTRE	138	27147	11TRIMBL	138 1
27023	11DELVIN 161 27045 11WI TAP	144.4	144.6	142	101.7	542	27076	11CENTRE	138	27184	11CENTR	69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	542	27076	11CENTRE	138	27184	11CENTR	69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	177.8	144	143	124.3	542	27076	11CENTRE	138	27184	11CENTR	69.0 1
27319	11COLLIN69.0 27320 11COLLIN	136.7	111.5	129	106	542	27076	11CENTRE	138	27184	11CENTR	69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115	542	27076	11CENTRE	138	27184	11CENTR	69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	24.9	25.1	23	108.3	542	27076	11CENTRE	138	27184	11CENTR	69.0 1
27023	11DELVIN 161 27045 11WI TAP	146	144.6	142	102.8	543	27077	11CLARK	138	27088	11FAWKES	138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	543	27077	11CLARK	138	27088	11FAWKES	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	543	27077	11CLARK	138	27088	11FAWKES	138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	543	27077	11CLARK	138	27088	11FAWKES	138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	543	27077	11CLARK	138	27088	11FAWKES	138 1
27023	11DELVIN 161 27045 11WI TAP	143.8	144.6	142	101.2	544	27077	11CLARK	138	27143	11SPENC	138 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	544	27077	11CLARK	138	27143	11SPENC	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	544	27077	11CLARK	138	27143	11SPENC	138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	544	27077	11CLARK	138	27143	11SPENC	138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	544	27077	11CLARK	138	27143	11SPENC	138 1
27023	11DELVIN 161 27045 11WI TAP	146.1	144.6	142	102.9	545	27077	11CLARK	138	27186	11CLARK	69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.3	545	27077	11CLARK	138	27186	11CLARK	69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	545	27077	11CLARK	138	27186	11CLARK	69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.4	545	27077	11CLARK	138	27186	11CLARK	69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	545	27077	11CLARK	138	27186	11CLARK	69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.4	144.6	142	101.7	546	27078	11CLAYS	138	27101	11HIGBY	138 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	546	27078	11CLAYS	138	27101	11HIGBY	138 1
27051	11ADAMS 138 27148 11TYRONE	98.2	95.8	97	101.2	546	27078	11CLAYS	138	27101	11HIGBY	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	546	27078	11CLAYS	138	27101	11HIGBY	138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	546	27078	11CLAYS	138	27101	11HIGBY	138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	109.5	546	27078	11CLAYS	138	27101	11HIGBY	138 1
27023	11DELVIN 161 27045 11WI TAP	144.7	144.6	142	101.9	547	27079	11CLVRPR	138	27094	11GR STL	138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	547	27079	11CLVRPR	138	27094	11GR STL	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	547	27079	11CLVRPR	138	27094	11GR STL	138 1
29359	20HODGEN69.0 29419 20MAGNOL	22.1	22	19	116.6	547	27079	11CLVRPR	138	27094	11GR STL	138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	109.7	547	27079	11CLVRPR	138	27094	11GR STL	138 1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	548	27079	11CLVRPR	138	27099	11HARDBG	138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	548	27079	11CLVRPR	138	27099	11HARDBG	138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	548	27079	11CLVRPR	138	27099	11HARDBG	138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	548	27079	11CLVRPR 138 27099 11HARDBG 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	548	27079	11CLVRPR 138 27099 11HARDBG 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	549	27079	11CLVRPR 138 27144 11TIPTOP 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	549	27079	11CLVRPR 138 27144 11TIPTOP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	549	27079	11CLVRPR 138 27144 11TIPTOP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	549	27079	11CLVRPR 138 27144 11TIPTOP 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	549	27079	11CLVRPR 138 27144 11TIPTOP 138 1
27023	11DELVIN 161	27045	11WI TAP	145	144.6	142	102.1	550	27080	11DANVIL 138 27118 11MERC 138 1
27044	11W IRVI 161	27045	11WI TAP	82.5	82.3	74	111.5	550	27080	11DANVIL 138 27118 11MERC 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	143	100.9	550	27080	11DANVIL 138 27118 11MERC 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	22	19	113.3	550	27080	11DANVIL 138 27118 11MERC 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25.1	23	107.4	550	27080	11DANVIL 138 27118 11MERC 138 1
27023	11DELVIN 161	27045	11WI TAP	145	144.6	142	102.1	551	27080	11DANVIL 138 27193 11DANVIL69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.5	82.3	74	111.5	551	27080	11DANVIL 138 27193 11DANVIL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	143	100.9	551	27080	11DANVIL 138 27193 11DANVIL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	22	19	113.3	551	27080	11DANVIL 138 27193 11DANVIL69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.7	25.1	23	107.4	551	27080	11DANVIL 138 27193 11DANVIL69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	146.2	144	143	102.2	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.3	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	552	27081	11DAY-WA 138 27083 11DW CRN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	146.4	144	143	102.4	552	27081	11DAY-WA 138 27123 11NAS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.3	553	27081	11DAY-WA 138 27123 11NAS 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	108.9	553	27081	11DAY-WA 138 27123 11NAS 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	553	27081	11DAY-WA 138 27123 11NAS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	553	27081	11DAY-WA 138 27123 11NAS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.9	144	143	101.3	554	27082	11DIXIE 138 27130 11PADDYR 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.3	554	27082	11DIXIE 138 27130 11PADDYR 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	554	27082	11DIXIE 138 27130 11PADDYR 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	554	27082	11DIXIE 138 27130 11PADDYR 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	554	27082	11DIXIE 138 27130 11PADDYR 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.7	144	143	100.7	555	27084	11ETHEL 138 27202 11ETHEL 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	25.1	25.1	23	109.2	555	27084	11ETHEL 138 27202 11ETHEL 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.5	144.6	142	101.8	555	27084	11ETHEL 138 27202 11ETHEL 69.0 1
27023	11DELVIN 161	27045	11WI TAP	82.3	82.3	74	111.2	555	27084	11ETHEL 138 27202 11ETHEL 69.0 1
27044	11W IRVI 161	27045	11WI TAP	144	144.6	142	101.4	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
29359	20HODGEN69.0	29419	20MAGNOL	25.1	25.1	23	109.3	556	27085	11ETOWN 138 27100 11HARDN 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.5	144.6	142	101.4	556	27085	11ETOWN 138 27100 11HARDN 138 1
27023	11DELVIN 161	27045	11WI TAP	82.3	82.3	74	111.2	556	27085	11ETOWN 138 27100 11HARDN 138 1
27044	11W IRVI 161	27045	11WI TAP	180.8	110.8	172	105.1	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
29359	20HODGEN69.0	29419	20MAGNOL	19.1	22	19	100.5	556	27085	11ETOWN 138 27100 11HARDN 138 1
27023	11DELVIN 161	27045	11WI TAP	143.7	144.6	142	101.2	557	27085	11ETOWN 138 27124 11NELSON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	557	27085	11ETOWN 138 27124 11NELSON 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	101.4	557	27085	11ETOWN 138 1
27229	11HODGEN69.0	29359	20HODGEN	40	36.1	36.1	112.1	557	27085	11ETOWN 138 1
29310	20TOWN 69.0	29599	20TUNHLJ	37	19	19	109.3	557	27085	11ETOWN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	112.9	557	27085	11ETOWN 138 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	101.8	558	27085	11ETOWN 69.0 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	111.2	558	27085	11ETOWN 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.8	558	27085	11ETOWN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	106.3	558	27085	11ETOWN 69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	111.5	558	27085	11ETOWN 69.0 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	101.8	559	27086	11FARM T 138 27087 11FARMER 138 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	111.2	559	27086	11FARM T 138 27087 11FARMER 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	560	27086	11FARM T 138 27087 11FARMER 138 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	115.6	560	27086	11FARM T 138 27087 11FARMER 138 1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	109.2	560	27086	11FARM T 138 27087 11FARMER 138 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	102.4	560	27086	11FARM T 138 27087 11FARMER 138 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	111.2	560	27086	11FARM T 138 27087 11FARMER 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	560	27086	11FARM T 138 27087 11FARMER 138 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	115.6	560	27086	11FARM T 138 27087 11FARMER 138 1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	109.2	561	27086	11FARM T 138 27087 11FARMER 138 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	100.9	561	27086	11FARM T 138 27087 11FARMER 138 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	111.1	561	27086	11FARM T 138 27087 11FARMER 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	561	27086	11FARM T 138 27087 11FARMER 138 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	115.6	561	27086	11FARM T 138 27087 11FARMER 138 1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	109.7	561	27086	11FARM T 138 27087 11FARMER 138 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	101.8	562	27087	11FARMER 138 27207 11FARMER69.0 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	111.2	562	27087	11FARMER 138 27207 11FARMER69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	562	27087	11FARMER 138 27207 11FARMER69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	115.6	562	27087	11FARMER 138 27207 11FARMER69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	109.3	562	27087	11FARMER 138 27207 11FARMER69.0 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	101.2	563	27088	11FAWKES 138 27209 11FAWKES69.0 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	107.7	563	27088	11FAWKES 138 27209 11FAWKES69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	563	27088	11FAWKES 138 27209 11FAWKES69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	115.6	563	27088	11FAWKES 138 27209 11FAWKES69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	109.2	563	27088	11FAWKES 138 27209 11FAWKES69.0 1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	101.1	564	27088	11FAWKES 138 27209 11FAWKES69.0 2
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	107.1	564	27088	11FAWKES 138 27209 11FAWKES69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	564	27088	11FAWKES 138 27209 11FAWKES69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	115.6	564	27088	11FAWKES 138 27209 11FAWKES69.0 2
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	109.2	564	27088	11FAWKES 138 27209 11FAWKES69.0 2
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	101.9	565	27088	11FAWK T 138 1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	111.1	565	27088	11FAWK T 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	100.7	565	27088	11FAWK T 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	565	27088 11FAWKES	138	27334	11FAWK T	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	565	27088 11FAWKES	138	27334	11FAWK T	138	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	566	27089 11FERNVL	138	27127	11OKOLON	138	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	566	27089 11FERNVL	138	27127	11OKOLON	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	566	27089 11FERNVL	138	27127	11OKOLON	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	566	27089 11FERNVL	138	27127	11OKOLON	138	1
29411	20LILYJT69.0	29634	20WOODLN	144.6	144.6	144.6	142	101.8	567	27089 11FERNVL	138	27127	11OKOLON	138	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	567	27089 11FERNVL	138	27155	11WATTRS	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.7	567	27089 11FERNVL	138	27155	11WATTRS	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	567	27089 11FERNVL	138	27155	11WATTRS	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	567	27089 11FERNVL	138	27155	11WATTRS	138	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	567	27089 11FERNVL	138	27155	11WATTRS	138	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	568	27089 11FERNVL	138	27211	11FERNVL69.0	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	568	27089 11FERNVL	138	27211	11FERNVL69.0	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	568	27089 11FERNVL	138	27211	11FERNVL69.0	138	1
29411	20LILYJT69.0	29634	20WOODLN	144.5	144.6	144.6	142	101.8	569	27089 11FERNVL	138	27211	11FERNVL69.0	138	1
27023	11DELVIN 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	569	27089 11FERNVL	138	27211	11FERNVL69.0	138	1
27044	11W IRVI 161	27045	11WI TAP	144.1	144	144	143	100.8	569	27089 11FERNVL	138	27211	11FERNVL69.0	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	143	100	570	27089 11FERNVL	138	27318	11GRADE	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	570	27089 11FERNVL	138	27318	11GRADE	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	570	27089 11FERNVL	138	27318	11GRADE	138	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	570	27089 11FERNVL	138	27318	11GRADE	138	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	570	27089 11FERNVL	138	27318	11GRADE	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	571	27090 11FLEMIN	138	27093	11GODDRD	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	571	27090 11FLEMIN	138	27093	11GODDRD	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.4	25.1	25.1	23	110.6	571	27090 11FLEMIN	138	27093	11GODDRD	138	1
27023	11DELVIN 161	27045	11WI TAP	142.8	144.6	144.6	142	100.5	572	27090 11FLEMIN	138	27157	11WEDONI	138	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.3	82.3	74	100.9	572	27090 11FLEMIN	138	27157	11WEDONI	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	572	27090 11FLEMIN	138	27157	11WEDONI	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	572	27090 11FLEMIN	138	27157	11WEDONI	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.5	25.1	25.1	23	110.7	572	27090 11FLEMIN	138	27157	11WEDONI	138	1
27023	11DELVIN 161	27045	11WI TAP	144	144.6	144.6	142	101.4	573	27091 11FFRT E	138	27140	11SHADRA	138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	573	27091 11FFRT E	138	27140	11SHADRA	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.9	573	27091 11FFRT E	138	27140	11SHADRA	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	573	27091 11FFRT E	138	27140	11SHADRA	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.4	25.1	25.1	23	110.4	573	27091 11FFRT E	138	27140	11SHADRA	138	1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	574	27091 11FFRT E	138	27148	11TYRONE	138	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	574	27091 11FFRT E	138	27148	11TYRONE	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	144	143	100.6	574	27091 11FFRT E	138	27148	11TYRONE	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	574	27091 11FFRT E	138 27148 11TYRONE 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.6	574	27091 11FFRT E	138 27148 11TYRONE 138 1
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	144.6	142	101.6	575	27091 11FFRT E	138 27151 11W FRNK 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	575	27091 11FFRT E	138 27151 11W FRNK 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	144	143	100.9	575	27091 11FFRT E	138 27151 11W FRNK 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	575	27091 11FFRT E	138 27151 11W FRNK 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.3	25.1	25.1	23	110	575	27091 11FFRT E	138 27151 11W FRNK 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	576	27091 11FFRT E	138 27214 11FFRT E69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	576	27091 11FFRT E	138 27214 11FFRT E69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.9	576	27091 11FFRT E	138 27214 11FFRT E69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	576	27091 11FFRT E	138 27214 11FFRT E69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	576	27091 11FFRT E	138 27214 11FFRT E69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	577	27091 11FFRT E	138 27214 11FFRT E69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	577	27091 11FFRT E	138 27214 11FFRT E69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.9	577	27091 11FFRT E	138 27214 11FFRT E69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	578	27091 11FFRT E	138 27214 11FFRT E69.0 2
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	578	27091 11FFRT E	138 27214 11FFRT E69.0 3
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	578	27091 11FFRT E	138 27214 11FFRT E69.0 3
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	578	27091 11FFRT E	138 27214 11FFRT E69.0 3
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	144	143	100.9	578	27091 11FFRT E	138 27214 11FFRT E69.0 3
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	578	27091 11FFRT E	138 27214 11FFRT E69.0 3
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	578	27091 11FFRT E	138 27214 11FFRT E69.0 3
27023	11DELVIN 161	27045	11WI TAP	143.4	144.6	144.6	142	101	579	27092 11GHENT	138 27120 11MIDWAY 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	579	27092 11GHENT	138 27120 11MIDWAY 138 1
27051	11ADAMS 138	27148	11TYRONE	100.4	95.8	95.8	97	103.5	579	27092 11GHENT	138 27120 11MIDWAY 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	579	27092 11GHENT	138 27120 11MIDWAY 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	579	27092 11GHENT	138 27120 11MIDWAY 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.3	25.1	25.1	23	110.1	579	27092 11GHENT	138 27120 11MIDWAY 138 1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	144.6	142	101.9	580	27092 11GHENT	138 27123 11NAS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	580	27092 11GHENT	138 27123 11NAS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	147.4	144	144	143	103.1	580	27092 11GHENT	138 27123 11NAS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.2	580	27092 11GHENT	138 27123 11NAS 138 1
29411	20LILYJT69.0	29634	20WOODLN	25	25.1	25.1	23	108.8	580	27092 11GHENT	138 27123 11NAS 138 1
27023	11DELVIN 161	27045	11WI TAP	142.4	144.6	144.6	142	100.3	581	27092 11GHENT	138 27128 11OC TAP 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	581	27092 11GHENT	138 27128 11OC TAP 138 1
27051	11ADAMS 138	27148	11TYRONE	139.2	95.8	95.8	97	143.5	581	27092 11GHENT	138 27128 11OC TAP 138 1
27075	11CARROL 138	27183	11CARROL	72.4	54.5	54.5	72	100.6	581	27092 11GHENT	138 27128 11OC TAP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	146.7	144	144	143	102.6	581	27092 11GHENT	138 27128 11OC TAP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.2	581	27092 11GHENT	138 27128 11OC TAP 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.4	25.1	25.1	23	110.4	581	27092 11GHENT	138 27128 11OC TAP 138 1
27023	11DELVIN 161	27045	11WI TAP	143.3	144.6	144.6	142	100.9	582	27093 11GODDRD	138 27137 11RODBRN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	582	27093 11GODDRD	138 27137 11RODBRN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.7	582	27093 11GODDRD	138 27137 11RODBRN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	582	27093 11GODDRD	138 27137 11RODBRN 138 1
29411	20LILYJT69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.9	582	27093 11GODDRD	138 27137 11RODBRN 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27023	11DELVIN 161 27045 11WI TAP	144.4	144.6	142	583	27094	11GR	STL	138	27095	11GR	RVR	138	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	583	27094	11GR	STL	138	27095	11GR	RVR	138	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	583	27094	11GR	STL	138	27095	11GR	RVR	138	1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	583	27094	11GR	STL	138	27095	11GR	RVR	138	1
29411	20LLYTJ69.0 29634 20WOODLN	25	25.1	23	583	27094	11GR	STL	138	27095	11GR	RVR	138	1
27023	11DELVIN 161 27045 11WI TAP	144.7	144.6	142	584	27094	11GR	STL	138	27142	11SMITH	138	1	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	584	27094	11GR	STL	138	27142	11SMITH	138	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	584	27094	11GR	STL	138	27142	11SMITH	138	1	1
29359	20HODGEN69.0 29419 20MAGNOL	22.2	22	19	584	27094	11GR	STL	138	27142	11SMITH	138	1	1
29411	20LLYTJ69.0 29634 20WOODLN	25.4	25.1	23	584	27094	11GR	STL	138	27142	11SMITH	138	1	1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	585	27094	11GR	STL	138	27215	11GR	STL69.0	1	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	585	27094	11GR	STL	138	27215	11GR	STL69.0	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	585	27094	11GR	STL	138	27215	11GR	STL69.0	1	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	585	27094	11GR	STL	138	27215	11GR	STL69.0	1	1
29411	20LLYTJ69.0 29634 20WOODLN	25.2	25.1	23	585	27094	11GR	STL	138	27215	11GR	STL69.0	1	1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	586	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	586	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	586	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	586	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
29411	20LLYTJ69.0 29634 20WOODLN	25.3	25.1	23	586	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	587	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	587	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	587	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	587	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
29411	20LLYTJ69.0 29634 20WOODLN	25.3	25.1	23	587	27095	11GR	RVR	138	27126	11OHIO C	138	1	1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	588	27095	11GR	RVR	138	27216	11GR	RVR69.0	1	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	588	27095	11GR	RVR	138	27216	11GR	RVR69.0	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	588	27095	11GR	RVR	138	27216	11GR	RVR69.0	1	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	588	27095	11GR	RVR	138	27216	11GR	RVR69.0	1	1
29411	20LLYTJ69.0 29634 20WOODLN	25.2	25.1	23	588	27095	11GR	RVR	138	27216	11GR	RVR69.0	1	1
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	589	27095	11GR	RVR	138	27216	11GR	RVR69.0	2	2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	589	27095	11GR	RVR	138	27216	11GR	RVR69.0	2	2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	589	27095	11GR	RVR	138	27216	11GR	RVR69.0	2	2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	589	27095	11GR	RVR	138	27216	11GR	RVR69.0	2	2
29411	20LLYTJ69.0 29634 20WOODLN	25.2	25.1	23	589	27095	11GR	RVR	138	27216	11GR	RVR69.0	2	2
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	590	27097	11HAEFLI	138	27103	11IBM N	138	1	1	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	590	27097	11HAEFLI	138	27103	11IBM N	138	1	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	590	27097	11HAEFLI	138	27103	11IBM N	138	1	1	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	590	27097	11HAEFLI	138	27103	11IBM N	138	1	1	1
29411	20LLYTJ69.0 29634 20WOODLN	25.2	25.1	23	590	27097	11HAEFLI	138	27103	11IBM N	138	1	1	1
27023	11DELVIN 161 27045 11WI TAP	143.9	144.6	142	591	27097	11HAEFLI	138	27149	11VILEY	138	1	1	1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	591	27097	11HAEFLI	138	27149	11VILEY	138	1	1	1
27051	11ADAMS 138 27148 11TYRONE	101.8	95.8	97	591	27097	11HAEFLI	138	27149	11VILEY	138	1	1	1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	591	27097	11HAEFLI	138	27149	11VILEY	138	1	1	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	591	27097	11HAEFLI	138	27149	11VILEY	138	1	1	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	591	27097	11HAEFLI 138 27149 11VILEY 138 1
27023	11DELVIN 161	27045	11WI TAP	143.8	144.6	142	101.2	592	27097	11HAEFLI 138 27153 11W LEXN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	592	27097	11HAEFLI 138 27153 11W LEXN 138 1
27051	11ADAMS 138	27148	11TYRONE	103.1	95.8	97	106.2	592	27097	11HAEFLI 138 27153 11W LEXN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	592	27097	11HAEFLI 138 27153 11W LEXN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	592	27097	11HAEFLI 138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.8	592	27097	11HAEFLI 138 27153 11W LEXN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.1	144.6	142	101.5	593	27097	11HAEFLI 138 27220 11HAEFLN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	593	27097	11HAEFLI 138 27220 11HAEFLN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	593	27097	11HAEFLI 138 27220 11HAEFLN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	593	27097	11HAEFLI 138 27220 11HAEFLN69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	593	27097	11HAEFLI 138 27220 11HAEFLN69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	594	27098	11HANCOC 138 27115 11MAGAZI 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	594	27098	11HANCOC 138 27115 11MAGAZI 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	145	144	143	101.4	594	27098	11HANCOC 138 27115 11MAGAZI 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	594	27098	11HANCOC 138 27115 11MAGAZI 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	594	27098	11HANCOC 138 27115 11MAGAZI 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	595	27098	11HANCOC 138 27221 11HANCOC69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	595	27098	11HANCOC 138 27221 11HANCOC69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.9	144	143	101.3	595	27098	11HANCOC 138 27221 11HANCOC69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	595	27098	11HANCOC 138 27221 11HANCOC69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	595	27098	11HANCOC 138 27221 11HANCOC69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	142	101.6	596	27099	11HARDBG 138 27100 11HARDN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	596	27099	11HARDBG 138 27100 11HARDN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	596	27099	11HARDBG 138 27100 11HARDN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.2	22	19	111.5	596	27099	11HARDBG 138 27100 11HARDN 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.5	25.1	23	106.4	596	27099	11HARDBG 138 27100 11HARDN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	597	27100	11HARDN 138 27138 11ROGERS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	597	27100	11HARDN 138 27138 11ROGERS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	597	27100	11HARDN 138 27138 11ROGERS 138 1
27203	11ETOWN 69.0	29591	20THARP	89.4	52.4	79	113.2	597	27100	11HARDN 138 27138 11ROGERS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21	22	19	110.7	597	27100	11HARDN 138 27138 11ROGERS 138 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25.1	23	108.2	597	27100	11HARDN 138 27138 11ROGERS 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	598	27100	11HARDN 138 27222 11HARDN 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	598	27100	11HARDN 138 27222 11HARDN 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	598	27100	11HARDN 138 27222 11HARDN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	20.5	22	19	107.8	598	27100	11HARDN 138 27222 11HARDN 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	109.9	598	27100	11HARDN 138 27222 11HARDN 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	599	27100	11HARDN 138 27222 11HARDN 69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	599	27100	11HARDN 138 27222 11HARDN 69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	599	27100	11HARDN 138 27222 11HARDN 69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.1	22	19	110.9	599	27100	11HARDN 138 27222 11HARDN 69.0 2
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	599	27100	11HARDN 138 27222 11HARDN 69.0 2
27023	11DELVIN 161	27045	11WI TAP	144.2	144.6	142	101.5	600	27101	11HIGBY 138 27107 11LANSWD 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	600	27101	11HIGBY 138 27107 11LANSWD 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	600	27101	11HIGBY 138 27107 11LANSDW 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	600	27101	11HIGBY 138 27107 11LANSDW 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	600	27101	11HIGBY 138 27107 11LANSDW 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	601	27101	11HIGBY 138 27136 11REYNOL 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	601	27101	11HIGBY 138 27136 11REYNOL 138 1
27051	11ADAMS 138	27148	11TYRONE	100.9	95.8	97	104	601	27101	11HIGBY 138 27136 11REYNOL 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	601	27101	11HIGBY 138 27136 11REYNOL 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	601	27101	11HIGBY 138 27136 11REYNOL 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	601	27101	11HIGBY 138 27136 11REYNOL 138 1
27023	11DELVIN 161	27045	11WI TAP	143.9	144.6	142	101.4	602	27101	11HIGBY 138 27153 11W LEYN 138 04
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	602	27101	11HIGBY 138 27153 11W LEYN 138 04
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	602	27101	11HIGBY 138 27153 11W LEYN 138 04
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	602	27101	11HIGBY 138 27153 11W LEYN 138 04
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	602	27101	11HIGBY 138 27153 11W LEYN 138 04
27023	11DELVIN 161	27045	11WI TAP	143.3	144.6	142	100.9	603	27101	11HIGBY 138 27225 11HIGB A69.0 1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.3	74	110.7	603	27101	11HIGBY 138 27225 11HIGB A69.0 1
27051	11ADAMS 138	27148	11TYRONE	97.2	95.8	97	100.2	603	27101	11HIGBY 138 27225 11HIGB A69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	603	27101	11HIGBY 138 27225 11HIGB A69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	603	27101	11HIGBY 138 27225 11HIGB A69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.7	603	27101	11HIGBY 138 27225 11HIGB A69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	604	27101	11HIGBY 138 27226 11HIGB B69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	604	27101	11HIGBY 138 27226 11HIGB B69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	604	27101	11HIGBY 138 27226 11HIGB B69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	604	27101	11HIGBY 138 27226 11HIGB B69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	23	109.8	604	27101	11HIGBY 138 27226 11HIGB B69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	605	27102	11HRSTBR 138 27133 11PLAINV 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	605	27102	11HRSTBR 138 27133 11PLAINV 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.5	144	143	101	605	27102	11HRSTBR 138 27133 11PLAINV 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	605	27102	11HRSTBR 138 27133 11PLAINV 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	605	27102	11HRSTBR 138 27133 11PLAINV 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	606	27102	11HRSTBR 138 27332 11BG PWK 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	606	27102	11HRSTBR 138 27332 11BG PWK 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	147.4	144	143	103.1	606	27102	11HRSTBR 138 27332 11BG PWK 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	606	27102	11HRSTBR 138 27332 11BG PWK 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	606	27102	11HRSTBR 138 27332 11BG PWK 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	607	27103	11IBM N 138 27113 11LOUDON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	607	27103	11IBM N 138 27113 11LOUDON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	607	27103	11IBM N 138 27113 11LOUDON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	607	27103	11IBM N 138 27113 11LOUDON 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	608	27104	11JEFFJC 138 27125 11NORTHS 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	608	27104	11JEFFJC 138 27125 11NORTHS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	608	27104	11JEFFJC 138 27125 11NORTHS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.6	144	143	101.1	608	27104	11JEFFJC 138 27125 11NORTHS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	608	27104	11JEFFJC 138 27125 11NORTHS 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	608	27104	11JEFFJC 138 27125 11NORTHS 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	142.7	144.6	142	100.5	609	27105 11KENTON	138	27157	11WEDONI 138 1
27044	11W IRVI 161 27045 11WI TAP	82	82.3	74	110.9	609	27105 11KENTON	138	27157	11WEDONI 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	609	27105 11KENTON	138	27157	11WEDONI 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.8	609	27105 11KENTON	138	27157	11WEDONI 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.5	25.1	23	110.8	609	27105 11KENTON	138	27157	11WEDONI 138 1
27023	11DELVIN 161 27045 11WI TAP	144.1	144.6	142	101.5	610	27105 11KENTON	138	27233	11KENTON69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	610	27105 11KENTON	138	27233	11KENTON69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	610	27105 11KENTON	138	27233	11KENTON69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	610	27105 11KENTON	138	27233	11KENTON69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	109.6	610	27105 11KENTON	138	27233	11KENTON69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	611	27105 11KENTON	138	27340	11INLAND 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	611	27105 11KENTON	138	27340	11INLAND 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	611	27105 11KENTON	138	27340	11INLAND 138 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	611	27105 11KENTON	138	27340	11INLAND 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	611	27105 11KENTON	138	27340	11INLAND 138 1
27023	11DELVIN 161 27045 11WI TAP	144.8	144.6	142	101.9	612	27106 11KNOB C	138	27121	11MILL C 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	612	27106 11KNOB C	138	27121	11MILL C 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.3	144	143	100.9	612	27106 11KNOB C	138	27121	11MILL C 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	114.6	612	27106 11KNOB C	138	27121	11MILL C 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.1	612	27106 11KNOB C	138	27121	11MILL C 138 1
27023	11DELVIN 161 27045 11WI TAP	144.7	144.6	142	101.9	613	27106 11KNOB C	138	27135	11POND C 138 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	613	27106 11KNOB C	138	27135	11POND C 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.2	144	143	100.9	613	27106 11KNOB C	138	27135	11POND C 138 1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	22	19	114.9	613	27106 11KNOB C	138	27135	11POND C 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	613	27106 11KNOB C	138	27135	11POND C 138 1
27023	11DELVIN 161 27045 11WI TAP	144.2	144.6	142	101.5	614	27107 11LANSWDW	138	27238	11LANSWDW69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	614	27107 11LANSWDW	138	27238	11LANSWDW69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.1	144	143	100.8	614	27107 11LANSWDW	138	27238	11LANSWDW69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	614	27107 11LANSWDW	138	27238	11LANSWDW69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	109.7	614	27107 11LANSWDW	138	27238	11LANSWDW69.0 1
27023	11DELVIN 161 27045 11WI TAP	146.1	144.6	142	102.9	615	27108 11LEBANO	138	27117	11MARION 138 1
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.3	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	25.1	22	19	132.1	615	27108 11LEBANO	138	27117	11MARION 138 1
27023	11DELVIN 161 27045 11WI TAP	147.4	144.6	142	103.8	616	27108 11LEBANO	138	27118	11MERCER 138 1
27044	11W IRVI 161 27045 11WI TAP	82.6	82.3	74	111.7	616	27108 11LEBANO	138	27118	11MERCER 138 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.8	144	143	100.5	616	27108 11LEBANO	138	27118	11MERCER 138 1
27285	11SPRNGF69.0 29459 20N SPR	24.7	12.9	19	130.1	616	27108 11LEBANO	138	27118	11MERCER 138 1
29326	20FRCKBJ69.0 29634 20WOODLN	24.5	19.1	23	106.3	616	27108 11LEBANO	138	27118	11MERCER 138 1
29359	20HODGEN69.0 29419 20MAGNOL	24.4	22	19	128.4	616	27108 11LEBANO	138	27118	11MERCER 138 1
29411	20LILYJTJ69.0 29634 20WOODLN	29.3	25.1	23	127.4	616	27108 11LEBANO	138	27118	11MERCER 138 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	617	27108 11LEBANO	138	27239	11LEBANO69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	21.9	22	19	115.1	617	27108 11LEBANO	138	27239	11LEBANO69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency							
29411	20LILYJ69.0	29634	20WOODLN	26.6	25.1	23	115.5	617	27108	11LEBANO	138	27239	11LEBANO69.0	1			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	100.7	143	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.1	618	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29411	20LILYJ69.0	29634	20WOODLN	26.6	25.1	23	115.6	618	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	101.8	142	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	111.1	619	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29411	20LILYJ69.0	29634	20WOODLN	26.5	25.1	23	100.7	619	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	101.7	620	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	101.7	620	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29411	20LILYJ69.0	29634	20WOODLN	24.8	25.1	23	107.9	620	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	101.7	621	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	101.7	621	27108	11LEBANO	138	27239	11LEBANO69.0	2			
29411	20LILYJ69.0	29634	20WOODLN	24.8	25.1	23	107.9	621	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27108	11LEBANO	138	27239	11LEBANO69.0	2			
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	103.4	622	27110	11LR	TAP	138	27111	11LK	REB	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	103.4	622	27110	11LR	TAP	138	27111	11LK	REB	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	622	27110	11LR	TAP	138	27111	11LK	REB	138	1
27023	11DELVIN	161	27045	11WI	TAP	146.1	144.6	142	27110	11LR	TAP	138	27111	11LK	REB	138	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27110	11LR	TAP	138	27111	11LK	REB	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	623	27110	11LR	TAP	138	27111	11LK	REB	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	100.7	623	27110	11LR	TAP	138	27111	11LK	REB	138	1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25.1	23	109.3	623	27110	11LR	TAP	138	27111	11LK	REB	138	1
27023	11DELVIN	161	27045	11WI	TAP	146.8	144.6	142	27110	11LR	TAP	138	27111	11LK	REB	138	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27110	11LR	TAP	138	27111	11LK	REB	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	624	27111	11LK	REB	138	27243	11LK	REB	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	100.7	624	27111	11LK	REB	138	27243	11LK	REB	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	624	27111	11LK	REB	138	27243	11LK	REB	138	1
27023	11DELVIN	161	27045	11WI	TAP	146.8	144.6	142	27111	11LK	REB	138	27243	11LK	REB	138	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27111	11LK	REB	138	27243	11LK	REB	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	625	27112	11LK	REB	138	27243	11LK	REB	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	100.7	625	27112	11LK	REB	138	27243	11LK	REB	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	625	27112	11LK	REB	138	27243	11LK	REB	138	1
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	27112	11LK	REB	138	27243	11LK	REB	138	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27112	11LK	REB	138	27243	11LK	REB	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	100.9	625	27112	11LK	REB	138	27243	11LK	REB	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	100.9	625	27112	11LK	REB	138	27243	11LK	REB	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.4	25.1	23	110.5	625	27112	11LK	REB	138	27246	11LOUD	A69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	27113	11LOUDON	138	27246	11LOUD	A69.0	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	27113	11LOUDON	138	27246	11LOUD	A69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	112.8	626	27113	11LOUDON	138	27246	11LOUD	A69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	100.8	626	27113	11LOUDON	138	27246	11LOUD	A69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	115.5	626	27113	11LOUDON	138	27246	11LOUD	A69.0	1		

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045	11WI TAP	144.4	144.6	142	101.7	627	27113	11LOUD	138 27247 11LOUD B69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	627	27113	11LOUD	138 27247 11LOUD B69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.8	627	27113	11LOUD	138 27247 11LOUD B69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.5	627	27113	11LOUD	138 27247 11LOUD B69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.2	25.1	23	109.4	627	27113	11LOUD	138 27247 11LOUD B69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	142	101.8	628	27114	11LYNDON	138 27119 11MIDDLT 138 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.6	628	27114	11LYNDON	138 27119 11MIDDLT 138 1
29411	20LILYJ69.0 29634	20WOODLN	25.2	25.1	23	109.4	628	27114	11LYNDON	138 27119 11MIDDLT 138 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	629	27114	11LYNDON	138 27250 11LYND S69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	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	21.9	22	19	115.4	629	27114	11LYNDON	138 27250 11LYND S69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	109	629	27114	11LYNDON	138 27250 11LYND S69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	630	27115	11MAGAZI	138 27154 11WATRS D 138 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	630	27115	11MAGAZI	138 27154 11WATRS D 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	145.4	144	143	101.7	630	27115	11MAGAZI	138 27154 11WATRS D 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.5	630	27115	11MAGAZI	138 27154 11WATRS D 138 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	109.2	630	27115	11MAGAZI	138 27154 11WATRS D 138 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	631	27116	11MANSJI	138 27121 11MILL C 138 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	631	27116	11MANSJI	138 27121 11MILL C 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.8	631	27116	11MANSJI	138 27121 11MILL C 138 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.8	631	27116	11MANSJI	138 27121 11MILL C 138 1
29411	20LILYJ69.0 29634	20WOODLN	25.2	25.1	23	109.5	631	27116	11MANSJI	138 27121 11MILL C 138 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	632	27119	11MIDDLT	138 27253 11MIDDLT69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	632	27119	11MIDDLT	138 27253 11MIDDLT69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.4	632	27119	11MIDDLT	138 27253 11MIDDLT69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25	25.1	23	108.9	632	27119	11MIDDLT	138 27253 11MIDDLT69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	633	27119	11MIDDLT	138 27253 11MIDDLT69.0 2
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	633	27119	11MIDDLT	138 27253 11MIDDLT69.0 2
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.4	633	27119	11MIDDLT	138 27253 11MIDDLT69.0 2
29411	20LILYJ69.0 29634	20WOODLN	25	25.1	23	108.9	633	27119	11MIDDLT	138 27253 11MIDDLT69.0 2
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	634	27119	11MIDDLT	138 27253 11MIDDLT69.0 3
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	634	27119	11MIDDLT	138 27253 11MIDDLT69.0 3
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.4	634	27119	11MIDDLT	138 27253 11MIDDLT69.0 3
29411	20LILYJ69.0 29634	20WOODLN	25	25.1	23	108.9	634	27119	11MIDDLT	138 27253 11MIDDLT69.0 3
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.7	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	163.7	144	143	114.5	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.4	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	23	108.9	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.7	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	635	27119	11MIDDLT	138 27320 11COLLIN 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	148.3	144	143	103.7	636	27119	11MIDDLT	138 27332 11BG PKW 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	636	27119 11MIDDLT	138 27332 11BG PWK 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	636	27119 11MIDDLT	138 27332 11BG PWK 138 1
27023	11DELVIN 161	27045	11WI TAP	143.6	144.6	144.6	142	101.1	637	27120 11MIDWAY	138 27153 11W LEXN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	637	27120 11MIDWAY	138 27153 11W LEXN 138 1
27051	11ADAMS 138	27148	11TYRONE	99.8	95.8	95.8	97	102.9	637	27120 11MIDWAY	138 27153 11W LEXN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	637	27120 11MIDWAY	138 27153 11W LEXN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	637	27120 11MIDWAY	138 27153 11W LEXN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25.1	25.1	23	110	637	27120 11MIDWAY	138 27153 11W LEXN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	638	27121 11MILL C	138 27321 11BRIDGP 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	638	27121 11MILL C	138 27321 11BRIDGP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	638	27121 11MILL C	138 27321 11BRIDGP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	638	27121 11MILL C	138 27321 11BRIDGP 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	638	27121 11MILL C	138 27321 11BRIDGP 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	639	27122 11MUD LA	138 27127 11OKOLON 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	639	27122 11MUD LA	138 27127 11OKOLON 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	639	27122 11MUD LA	138 27127 11OKOLON 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	639	27122 11MUD LA	138 27127 11OKOLON 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	639	27122 11MUD LA	138 27127 11OKOLON 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	640	27122 11MUD LA	138 27256 11MUD LA69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	640	27122 11MUD LA	138 27256 11MUD LA69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	144	143	100.9	640	27122 11MUD LA	138 27256 11MUD LA69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	640	27122 11MUD LA	138 27256 11MUD LA69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	640	27122 11MUD LA	138 27256 11MUD LA69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	82.3	74	111.4	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27126	11OHIO C 138	27259	11OHIO C	69.1	38.8	38.8	60	115.2	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	144	143	101	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27203	11TOWN 69.0	29390	20KARGLE	76.2	49.8	49.8	69	110.5	641	27126 11OHIO C	138 27141 11SHREWS 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.2	22	22	19	111.6	641	27126 11OHIO C	138 27141 11SHREWS 138 1
29411	20LILYJ69.0	29634	20WOODLN	26.8	25.1	25.1	23	116.4	641	27126 11OHIO C	138 27141 11SHREWS 138 1
29571	20STEPHN69.0	29606	20UPTONJ	19.3	12.9	12.9	19	101.6	641	27126 11OHIO C	138 27141 11SHREWS 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	642	27126 11OHIO C	138 27259 11OHIO C69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	642	27126 11OHIO C	138 27259 11OHIO C69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	642	27126 11OHIO C	138 27259 11OHIO C69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	22	19	114.9	642	27126 11OHIO C	138 27259 11OHIO C69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	642	27126 11OHIO C	138 27259 11OHIO C69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.9	643	27128 11OC TAP	138 27129 11OWEN C 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	643	27128 11OC TAP	138 27129 11OWEN C 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	146.2	144	144	143	102.2	643	27128 11OC TAP	138 27129 11OWEN C 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.2	643	27128 11OC TAP	138 27129 11OWEN C 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.6	643	27128 11OC TAP	138 27129 11OWEN C 138 1
27023	11DELVIN 161	27045	11WI TAP	142.6	144.6	144.6	142	100.4	644	27128 11OC TAP	138 27139 11SCOTT 138 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	644	27128 11OC TAP	138 27139 11SCOTT 138 1
27051	11ADAMS 138	27148	11TYRONE	140.3	95.8	95.8	97	144.7	644	27128 11OC TAP	138 27139 11SCOTT 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.6	644	27128 11OC TAP	138 27139 11SCOTT 138 1

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	644	27128 11OC TAP 138 27139 11SCOTT 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	25.1	23	111.1	644	27128 11OC TAP 138 27139 11SCOTT 138 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.9	645	27130 11PADDYR 138 27131 11P WEST 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	645	27130 11PADDYR 138 27131 11P WEST 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	144	143	100.5	645	27130 11PADDYR 138 27131 11P WEST 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.3	645	27130 11PADDYR 138 27131 11P WEST 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	645	27130 11PADDYR 138 27131 11P WEST 138 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	646	27130 11PADDYR 138 27131 11P WEST 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	647	27130 11PADDYR 138 27131 11P WEST 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	647	27130 11PADDYR 138 27131 11P WEST 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	647	27130 11PADDYR 138 27131 11P WEST 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	648	27130 11PADDYR 138 27131 11P WEST 138 1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	648	27130 11PADDYR 138 27131 11P WEST 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	648	27130 11PADDYR 138 27131 11P WEST 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.7	649	27132 11PISGAH 138 27153 11W LEYN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	649	27132 11PISGAH 138 27153 11W LEYN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	649	27132 11PISGAH 138 27153 11W LEYN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.1	144.6	144.6	142	101.5	650	27132 11PISGAH 138 27153 11W LEYN 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	650	27132 11PISGAH 138 27153 11W LEYN 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	144	143	101	650	27132 11PISGAH 138 27153 11W LEYN 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.3	650	27132 11PISGAH 138 27153 11W LEYN 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	25.1	23	110.7	650	27132 11PISGAH 138 27153 11W LEYN 138 1
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	144.6	142	101.9	651	27135 11POND C 138 27144 11TIPTOP 138 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	651	27135 11POND C 138 27144 11TIPTOP 138 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.9	651	27135 11POND C 138 27144 11TIPTOP 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	22	19	114.9	651	27135 11POND C 138 27144 11TIPTOP 138 1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	651	27135 11POND C 138 27144 11TIPTOP 138 1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	652	27137 11RODBRN 138 27173 11RODBRN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	652	27137 11RODBRN 138 27173 11RODBRN69.0 1
27087	11FARMER 138	27207	11FARMER	53.5	33.1	33.1	48	111.5	652	27137 11RODBRN 138 27173 11RODBRN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	652	27137 11RODBRN 138 27173 11RODBRN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	652	27137 11RODBRN 138 27173 11RODBRN69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	652	27137 11RODBRN 138 27173 11RODBRN69.0 1
27023	11DELVIN 161	27045	11WI TAP	142.7	144.6	144.6	142	100.5	653	27137 11RODBRN 138 27173 11RODBRN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	653	27137 11RODBRN 138 27173 11RODBRN69.0 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
27137	11RODBRN	138	27273	11RODBRN	42.8	35.2	40	107.1	653	27137	11RODBRN	138	27336	11SHARKE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	653	27137	11RODBRN	138	27336	11SHARKE	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	653	27137	11RODBRN	138	27336	11SHARKE	138	1
29411	20LILY	69.0	29634	20WOODLN	25.3	25.1	23	109.9	653	27137	11RODBRN	138	27336	11SHARKE	138	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	654	27138	11ROGERS	138	27274	11ROGERS	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	654	27138	11ROGERS	138	27274	11ROGERS	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	654	27138	11ROGERS	138	27274	11ROGERS	69.0	1
27203	11TOWN	69.0	29591	20THARP	89.4	52.4	79	113.2	654	27138	11ROGERS	138	27274	11ROGERS	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21	22	19	110.7	654	27138	11ROGERS	138	27274	11ROGERS	69.0	1
29411	20LILY	69.0	29634	20WOODLN	24.9	25.1	23	108.2	654	27138	11ROGERS	138	27274	11ROGERS	69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.7	655	27139	11SCOTT	138	27145	11TOYT N	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	655	27139	11SCOTT	138	27145	11TOYT N	138	1
27051	11ADAMS	138	27148	11TYRONE	98.6	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	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.5	655	27139	11SCOTT	138	27145	11TOYT N	138	1
29411	20LILY	69.0	29634	20WOODLN	25.2	25.1	23	109.4	655	27139	11SCOTT	138	27145	11TOYT N	138	1
27023	11DELVIN	161	27045	11WI TAP	144.4	144.6	142	101.7	656	27139	11SCOTT	138	27145	11TOYT N	138	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	656	27139	11SCOTT	138	27145	11TOYT N	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	656	27139	11SCOTT	138	27145	11TOYT N	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	656	27139	11SCOTT	138	27145	11TOYT N	138	1
29411	20LILY	69.0	29634	20WOODLN	25.2	25.1	23	109.4	656	27139	11SCOTT	138	27145	11TOYT N	138	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.3	74	111.4	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	20HODGEN	69.0	29419	20MAGNOL	23.5	22	19	123.7	657	27141	11SHREWS	138	27337	11MERIDT	138	1
29411	20LILY	69.0	29634	20WOODLN	27.2	25.1	23	118.2	657	27141	11SHREWS	138	27337	11MERIDT	138	1
29571	20STEPHN	69.0	29606	20UPTONJ	33.2	12.9	19	174.6	657	27141	11SHREWS	138	27337	11MERIDT	138	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	658	27142	11SMITH	138	27261	11OMU	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	658	27142	11SMITH	138	27261	11OMU	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	658	27142	11SMITH	138	27261	11OMU	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	658	27142	11SMITH	138	27261	11OMU	69.0	1
29411	20LILY	69.0	29634	20WOODLN	25.2	25.1	23	109.4	658	27142	11SMITH	138	27261	11OMU	69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	659	27142	11SMITH	138	27261	11OMU	69.0	2
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	659	27142	11SMITH	138	27261	11OMU	69.0	2
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	659	27142	11SMITH	138	27261	11OMU	69.0	2
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	659	27142	11SMITH	138	27261	11OMU	69.0	2
29411	20LILY	69.0	29634	20WOODLN	25.2	25.1	23	109.4	659	27142	11SMITH	138	27261	11OMU	69.0	2
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	660	27142	11SMITH	138	27261	11OMU	69.0	3
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	660	27142	11SMITH	138	27261	11OMU	69.0	3
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	660	27142	11SMITH	138	27261	11OMU	69.0	3
29359	20HODGEN	69.0	29419	20MAGNOL	22	22	19	115.6	660	27142	11SMITH	138	27261	11OMU	69.0	3
29411	20LILY	69.0	29634	20WOODLN	25.2	25.1	23	109.4	660	27142	11SMITH	138	27261	11OMU	69.0	3
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	661	27142	11SMITH	138	27261	11OMU	69.0	4
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	661	27142	11SMITH	138	27261	11OMU	69.0	4
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	661	27142	11SMITH	138	27261	11OMU	69.0	4

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	661	27142 11SMITH	138	27261	11OMU	69.0	4
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	661	27142 11SMITH	138	27261	11OMU	69.0	4
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	662	27142 11SMITH	138	27261	11OMU	69.0	5
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	662	27142 11SMITH	138	27261	11OMU	69.0	5
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	662	27142 11SMITH	138	27261	11OMU	69.0	5
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	662	27142 11SMITH	138	27261	11OMU	69.0	5
27041	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	662	27142 11SMITH	138	27261	11OMU	69.0	6
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	663	27142 11SMITH	138	27261	11OMU	69.0	6
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	663	27142 11SMITH	138	27261	11OMU	69.0	6
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	663	27142 11SMITH	138	27261	11OMU	69.0	6
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	663	27142 11SMITH	138	27261	11OMU	69.0	6
27023	11DELVIN 161	27045	11WI TAP	145.2	144.6	144.6	142	102.2	664	27143 11SPENC	138	27284	11SPENC	69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.3	664	27143 11SPENC	138	27284	11SPENC	69.0	1
27087	11FARMER 138	27207	11FARMER	53.5	33.1	33.1	48	111.5	664	27143 11SPENC	138	27284	11SPENC	69.0	1
27137	11ROBBERN 138	27273	11ROBBERN	41.9	35.2	35.2	40	104.6	664	27143 11SPENC	138	27284	11SPENC	69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	664	27143 11SPENC	138	27284	11SPENC	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	664	27143 11SPENC	138	27284	11SPENC	69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.1	664	27143 11SPENC	138	27284	11SPENC	69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	665	27145 11TOYT N	138	27146	11TOYT S	138	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	665	27145 11TOYT N	138	27146	11TOYT S	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	665	27145 11TOYT N	138	27146	11TOYT S	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	665	27145 11TOYT N	138	27146	11TOYT S	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	665	27145 11TOYT N	138	27146	11TOYT S	138	1
27023	11DELVIN 161	27045	11WI TAP	143.8	144.6	144.6	142	101.3	666	27148 11TYRONE	138	27151	11W FRNK	138	04
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	666	27148 11TYRONE	138	27151	11W FRNK	138	04
27161	11AIKEN 69.0	27253	11MIDDLT	143.5	144	144	143	100.4	666	27148 11TYRONE	138	27151	11W FRNK	138	04
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	666	27148 11TYRONE	138	27151	11W FRNK	138	04
29411	20LILYJT69.0	29634	20WOODLN	25.5	25.1	25.1	23	110.7	666	27148 11TYRONE	138	27151	11W FRNK	138	04
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	144.6	142	101.7	667	27148 11TYRONE	138	27151	11W FRNK	138	04
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	667	27148 11TYRONE	138	27151	11W FRNK	138	04
27051	11ADAMS 138	27148	11TYRONE	110.3	95.8	95.8	97	113.7	667	27148 11TYRONE	138	27151	11W FRNK	138	04
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	667	27148 11TYRONE	138	27151	11W FRNK	138	04
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115	667	27148 11TYRONE	138	27151	11W FRNK	138	04
29411	20LILYJT69.0	29634	20WOODLN	26.1	25.1	25.1	23	113.7	667	27148 11TYRONE	138	27151	11W FRNK	138	04
27023	11DELVIN 161	27045	11WI TAP	143.7	144.6	144.6	142	101.2	668	27149 11VILEY	138	27153	11W LEKN	138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	668	27149 11VILEY	138	27153	11W LEKN	138	1
27051	11ADAMS 138	27148	11TYRONE	103.6	95.8	95.8	97	106.8	668	27149 11VILEY	138	27153	11W LEKN	138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	668	27149 11VILEY	138	27153	11W LEKN	138	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	668	27149 11VILEY	138	27153	11W LEKN	138	1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.8	668	27149 11VILEY	138	27153	11W LEKN	138	1
27023	11DELVIN 161	27045	11WI TAP	145.1	144.6	144.6	142	102.2	669	27150 11W CLIF	138	27290	11W CLIF	69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	82.3	74	111.3	669	27150 11W CLIF	138	27290	11W CLIF	69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	669	27150 11W CLIF	138	27290	11W CLIF	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.7	669	27150 11W CLIF	138	27290	11W CLIF	69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
29411	20LILYJT69.0	29634	20WOODLN	25.5	25.1	23	110.7	669	27150	11W CLIF	138	27290	11W CLIF69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.9	144.6	142	102	670	27150	11W CLIF	138	27290	11W CLIF69.0	2
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	670	27150	11W CLIF	138	27290	11W CLIF69.0	2
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	143	100.8	670	27150	11W CLIF	138	27290	11W CLIF69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	670	27150	11W CLIF	138	27290	11W CLIF69.0	2
29411	20LILYJT69.0	29634	20WOODLN	25.3	25.1	23	110.2	670	27150	11W CLIF	138	27290	11W CLIF69.0	2
27044	11W IRVI	161 27045	11WI TAP	144.6	144.6	142	111.8	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	103	671	27151	11W FRNK	138	27291	11W FRNK69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.1	671	27151	11W FRNK	138	27291	11W FRNK69.0	1
29411	20LILYJT69.0	29634	20WOODLN	24.9	25.1	23	108.5	671	27151	11W FRNK	138	27291	11W FRNK69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	671	27151	11WATRS	138	27294	11WATRS69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	672	27155	11WATRS	138	27294	11WATRS69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144.2	144	143	100.8	672	27155	11WATRS	138	27294	11WATRS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	672	27155	11WATRS	138	27294	11WATRS69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	672	27155	11WATRS	138	27294	11WATRS69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	673	27155	11WATRS	138	27294	11WATRS69.0	2
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	673	27155	11WATRS	138	27294	11WATRS69.0	2
27155	11WATRS	138 27294	11WATRS	50.3	24.5	48	104.7	673	27155	11WATRS	138	27294	11WATRS69.0	2
27161	11AIKEN	69.0 27253	11MIDDLT	144.7	144	143	101.2	673	27155	11WATRS	138	27294	11WATRS69.0	2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	673	27155	11WATRS	138	27294	11WATRS69.0	2
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	673	27155	11WATRS	138	27294	11WATRS69.0	2
27023	11DELVIN	161 27045	11WI TAP	145.1	144.6	142	102.2	674	27156	11WC-DD	138	27295	11WC-DD 69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.4	82.3	74	111.3	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
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	674	27156	11WC-DD	138	27295	11WC-DD 69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.5	25.1	23	110.8	674	27156	11WC-DD	138	27295	11WC-DD 69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	142	101.8	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT	145.8	144	143	101.9	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ
27319	11COLLIN69.0	27320	11COLLIN	129.2	111.5	129	100.2	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	675	27158	116659	T69.0	27249	11LYNDON69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT	144.2	144	143	100.8	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	676	27158	116659	T69.0	27287	11TAYLOR69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	677	27158	116659	T69.0	27319	11COLLIN69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	677	27158	116659	T69.0	27319	11COLLIN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	677	27158	116659	T69.0	27319	11COLLIN69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	23	109.3	677	27158	116659	T69.0	27319	11COLLIN69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	142	101.8	678	27159	116686	T69.0	27184	11CENTR 69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	74	111.2	678	27159	116686	T69.0	27184	11CENTR 69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	162.1	144	143	113.3	678	27159	116686 T69.0 27184 11CENTR 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	678	27159	116686 T69.0 27184 11CENTR 69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	678	27159	116686 T69.0 27184 11CENTR 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	679	27159	116686 T69.0 27319 11COLLIN69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	679	27159	116686 T69.0 27319 11COLLIN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	679	27159	116686 T69.0 27319 11COLLIN69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	679	27159	116686 T69.0 27319 11COLLIN69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	144.5	144.6	142	101.8	680	27159	116686 T69.0 27329 116658 T69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	680	27159	116658 T69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	680	27159	116686 T69.0 27329 116658 T69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	680	27159	116686 T69.0 27329 116658 T69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	104.1	680	27159	116686 T69.0 27329 116658 T69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	681	27160	11ADAMS 69.0 27194 11SCOTT 69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	681	27160	11ADAMS 69.0 27194 11SCOTT 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	681	27160	11ADAMS 69.0 27194 11SCOTT 69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	681	27160	11ADAMS 69.0 27194 11SCOTT 69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	682	27160	11ADAMS 69.0 27220 11HAEFLN69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	682	27160	11ADAMS 69.0 27220 11HAEFLN69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	682	27160	11ADAMS 69.0 27220 11HAEFLN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	682	27160	11ADAMS 69.0 27220 11HAEFLN69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	682	27160	11ADAMS 69.0 27220 11HAEFLN69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	683	27161	11AIKEN 69.0 27253 11MIDDLT69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	683	27161	11AIKEN 69.0 27253 11MIDDLT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	683	27161	11AIKEN 69.0 27253 11MIDDLT69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	683	27161	11AIKEN 69.0 27253 11MIDDLT69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	684	27161	11AIKEN 69.0 27263 11OXMOOR69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	684	27161	11AIKEN 69.0 27263 11OXMOOR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	684	27161	11AIKEN 69.0 27263 11OXMOOR69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	684	27161	11AIKEN 69.0 27263 11OXMOOR69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	685	27161	11AIKEN 69.0 27329 116658 T69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	685	27161	11AIKEN 69.0 27329 116658 T69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	685	27161	11AIKEN 69.0 27329 116658 T69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109	685	27161	11AIKEN 69.0 27329 116658 T69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	686	27162	11ALNGU69.0 27180 11CANAL 69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	686	27162	11ALNGU69.0 27180 11CANAL 69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	686	27162	11ALNGU69.0 27180 11CANAL 69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	686	27162	11ALNGU69.0 27180 11CANAL 69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	687	27162	11ALNGU69.0 27181 11CANERN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	687	27162	11ALNGU69.0 27181 11CANERN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	687	27162	11ALNGU69.0 27181 11CANERN69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	687	27162	11ALNGU69.0 27181 11CANERN69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	688	27162	11ALNGU69.0 27217 11GRADY 69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	688	27162 11ALNGU69.0	27217	11GRADY 69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	688	27162 11ALNGU69.0	27217	11GRADY 69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	688	27162 11ALNGU69.0	27217	11GRADY 69.0	1
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	689	27162 11ALNGU69.0	27264	11PADDYS69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	689	27162 11ALNGU69.0	27264	11PADDYS69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	689	27162 11ALNGU69.0	27264	11PADDYS69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	689	27162 11ALNGU69.0	27264	11PADDYS69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	689	27162 11ALNGU69.0	27264	11PADDYS69.0	EQ
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	689	27162 11ALNGU69.0	27264	11PADDYS69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	690	27162 11ALNGU69.0	27278	11SEMINO69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	690	27162 11ALNGU69.0	27278	11SEMINO69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.8	690	27162 11ALNGU69.0	27278	11SEMINO69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	690	27162 11ALNGU69.0	27278	11SEMINO69.0	1
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	690	27162 11ALNGU69.0	27278	11SEMINO69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	691	27163 11AMERI 69.0	27220	11HAEFLN69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.6	691	27163 11AMERI 69.0	27220	11HAEFLN69.0	EQ
29411	20LILYJT69.0 29634 20WOODLN	25.2	25.1	23	109.4	691	27163 11AMERI 69.0	27220	11HAEFLN69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.8	144.6	142	102	692	27163 11AMERI 69.0	27225	11HIGB A69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.4	82.3	74	111.3	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	22	22	19	115.5	692	27163 11AMERI 69.0	27225	11HIGB A69.0	EQ
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	692	27163 11AMERI 69.0	27225	11HIGB A69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	693	27163 11AMERI 69.0	27252	11MED CN69.0	1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	693	27163 11AMERI 69.0	27252	11MED CN69.0	1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	693	27163 11AMERI 69.0	27252	11MED CN69.0	1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	693	27163 11AMERI 69.0	27252	11MED CN69.0	1
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	693	27163 11AMERI 69.0	27252	11MED CN69.0	1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.7	694	27165 11ARNOLD69.0	27204	11EVARTS69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	694	27165 11ARNOLD69.0	27204	11EVARTS69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	694	27165 11ARNOLD69.0	27204	11EVARTS69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	694	27165 11ARNOLD69.0	27204	11EVARTS69.0	EQ
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	694	27165 11ARNOLD69.0	27204	11EVARTS69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.1	144.6	142	101.5	695	27165 11ARNOLD69.0	27248	11LYNCH 69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	695	27165 11ARNOLD69.0	27248	11LYNCH 69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	695	27165 11ARNOLD69.0	27248	11LYNCH 69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	695	27165 11ARNOLD69.0	27248	11LYNCH 69.0	EQ
29411	20LILYJT69.0 29634 20WOODLN	25.1	25.1	23	109.3	695	27165 11ARNOLD69.0	27248	11LYNCH 69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.9	144.6	142	102	696	27166 11ARTEMU69.0	27171	11BIMBLE69.0	EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.3	696	27166 11ARTEMU69.0	27171	11BIMBLE69.0	EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	696	27166 11ARTEMU69.0	27171	11BIMBLE69.0	EQ
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	696	27166 11ARTEMU69.0	27171	11BIMBLE69.0	EQ
29411	20LILYJT69.0 29634 20WOODLN	25.2	25.1	23	109.4	696	27166 11ARTEMU69.0	27171	11BIMBLE69.0	EQ
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	697	27167 11ASHBOT69.0	27278	11SEMINO69.0	EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	697	27167	11ASHBOT69.0	27278	11SEMINO69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144.7	144	143	101.2	697	27167	11ASHBOT69.0	27278	11SEMINO69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	697	27167	11ASHBOT69.0	27278	11SEMINO69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	697	27167	11ASHBOT69.0	27278	11SEMINO69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	698	27167	11ASHBOT69.0	27333	116676 T69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	698	27167	11ASHBOT69.0	27333	116676 T69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	698	27167	11ASHBOT69.0	27333	116676 T69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	698	27167	11ASHBOT69.0	27333	116676 T69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	698	27167	11ASHBOT69.0	27333	116676 T69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	699	27168	11BARD 169.0	27169	11BARDST69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	699	27168	11BARD 169.0	27169	11BARDST69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.6	144	143	100.4	699	27168	11BARD 169.0	27169	11BARDST69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22.9	22	19	120.3	699	27168	11BARD 169.0	27169	11BARDST69.0 1
29462	20NELSON69.0 29610 20WARDJ	80.4	49	72	111.7	699	27168	11BARD 169.0	27169	11BARDST69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	700	27169	11BARDST69.0	27212	11FINCHV69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	700	27169	11BARDST69.0	27212	11FINCHV69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	143.1	144	143	100.1	700	27169	11BARDST69.0	27212	11FINCHV69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.3	22	19	112.3	700	27169	11BARDST69.0	27212	11FINCHV69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	701	27169	11BARDST69.0	27258	11NEWHAV69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	701	27169	11BARDST69.0	27258	11NEWHAV69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.7	701	27169	11BARDST69.0	27258	11NEWHAV69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21	22	19	110.8	701	27169	11BARDST69.0	27258	11NEWHAV69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	26.5	25.1	23	115	701	27169	11BARDST69.0	27258	11NEWHAV69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	702	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	702	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144.8	144	143	101.2	702	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	702	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	702	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	703	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	703	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144.9	144	143	101.3	703	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	703	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	703	27170	11BEARGR69.0	27189	11CLIFTO69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	704	27170	11BEARGR69.0	27251	11MADISO69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	704	27170	11BEARGR69.0	27251	11MADISO69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	704	27170	11BEARGR69.0	27251	11MADISO69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25.2	25.1	23	109.4	704	27170	11BEARGR69.0	27251	11MADISO69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	705	27170	11BEARGR69.0	27287	11TAYLOR69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	705	27170	11BEARGR69.0	27287	11TAYLOR69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	145.4	144	143	101.7	705	27170	11BEARGR69.0	27287	11TAYLOR69.0 EQ
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	115.5	705	27170	11BEARGR69.0	27287	11TAYLOR69.0 EQ
29411	20LILYJ69.0 29634 20WOODLN	25.1	25.1	23	109.2	705	27170	11BEARGR69.0	27287	11TAYLOR69.0 EQ
27023	11DELVIN 161 27045 11WI TAP	145.4	144.6	142	102.4	706	27171	11BIMBLE69.0	27235	11KU PK 69.0 EQ
27044	11W IRVI 161 27045 11WI TAP	82.5	82.3	74	111.5	706	27171	11BIMBLE69.0	27235	11KU PK 69.0 EQ
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	706	27171	11BIMBLE69.0	27235	11KU PK 69.0 EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	706	27171	11BIMBLE69.0	27235	11KU PK 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	145.5	144.6	142	102.4	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.4	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	707	27171	11BIMBLE69.0	27245	11LONDON69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	708	27172	11BND69.0	27212	11FINCHV69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	708	27172	11BND69.0	27212	11FINCHV69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143.4	144	143	100.3	708	27172	11BND69.0	27212	11FINCHV69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	708	27172	11BND69.0	27212	11FINCHV69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	26.3	25.1	23	114.2	708	27172	11BND69.0	27212	11FINCHV69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	709	27172	11BND69.0	27289	11TYRONE69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	709	27172	11BND69.0	27289	11TYRONE69.0	EQ
27051	11ADAMS 138	27148	11TYRONE	99.6	95.8	97	102.7	709	27172	11BND69.0	27289	11TYRONE69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	143	101	709	27172	11BND69.0	27289	11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.8	22	19	114.6	709	27172	11BND69.0	27289	11TYRONE69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	26.6	25.1	23	115.7	709	27172	11BND69.0	27289	11TYRONE69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	710	27172	11BND69.0	27290	11W CLIF69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	710	27172	11BND69.0	27290	11W CLIF69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.3	144	143	100.9	710	27172	11BND69.0	27290	11W CLIF69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.2	710	27172	11BND69.0	27290	11W CLIF69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.5	25.1	23	110.8	710	27172	11BND69.0	27290	11W CLIF69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.9	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22.3	22	19	117.5	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.6	25.1	23	111.1	711	27173	11BONNI 69.0	27222	11HARDN 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	712	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	712	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	712	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	712	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.8	712	27174	11BOONSB69.0	27299	11WINCHS69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	142	102	713	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.3	713	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	713	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.2	713	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109	713	27176	11BOYLE 69.0	27193	11DANVIL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	142	101.9	714	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	714	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	714	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	714	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	714	27176	11BOYLE 69.0	27237	11LANCS 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.9	144.6	142	102	715	27176	11BOYLE 69.0	27290	11W CLIF69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.4	82.3	74	111.3	715	27176	11BOYLE 69.0	27290	11W CLIF69.0	EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	715	27176 11BOYLE 69.0	27290	11W CLIF69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	22	19	116.1	715	27176 11BOYLE 69.0	27290	11W CLIF69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.3	25.1	25.1	23	109.8	715	27176 11BOYLE 69.0	27290	11W CLIF69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	716	27177 11BRCKNG69.0	27227	11HLCRST69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	716	27177 11BRCKNG69.0	27227	11HLCRST69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	716	27177 11BRCKNG69.0	27227	11HLCRST69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	716	27177 11BRCKNG69.0	27227	11HLCRST69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	717	27177 11BRCKNG69.0	27263	11OXMOOR69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	717	27177 11BRCKNG69.0	27263	11OXMOOR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	717	27177 11BRCKNG69.0	27263	11OXMOOR69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	717	27177 11BRCKNG69.0	27263	11OXMOOR69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	718	27178 11BROMLY69.0	27183	11CARROL69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	718	27178 11BROMLY69.0	27183	11CARROL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.6	718	27178 11BROMLY69.0	27183	11CARROL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	718	27178 11BROMLY69.0	27183	11CARROL69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	718	27178 11BROMLY69.0	27183	11CARROL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	719	27179 11BEATTY69.0	27292	11W IRVI69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	122.6	719	27179 11BEATTY69.0	27292	11W IRVI69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	719	27179 11BEATTY69.0	27292	11W IRVI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	719	27179 11BEATTY69.0	27292	11W IRVI69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	719	27179 11BEATTY69.0	27292	11W IRVI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	720	27180 11CANAL 69.0	27217	11GRADY 69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	720	27180 11CANAL 69.0	27217	11GRADY 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.7	720	27180 11CANAL 69.0	27217	11GRADY 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	720	27180 11CANAL 69.0	27217	11GRADY 69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	719	27179 11BEATTY69.0	27292	11W IRVI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	721	27180 11CANAL 69.0	27251	11MADISO69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	721	27180 11CANAL 69.0	27251	11MADISO69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.8	144	144	143	101.2	721	27180 11CANAL 69.0	27251	11MADISO69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	721	27180 11CANAL 69.0	27251	11MADISO69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	721	27180 11CANAL 69.0	27251	11MADISO69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	722	27181 11CANERN69.0	27208	11FARNSL69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	722	27181 11CANERN69.0	27208	11FARNSL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	722	27181 11CANERN69.0	27208	11FARNSL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	722	27181 11CANERN69.0	27208	11FARNSL69.0	1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	722	27181 11CANERN69.0	27208	11FARNSL69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	723	27181 11CANERN69.0	27281	11SHIVEL69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	723	27181 11CANERN69.0	27281	11SHIVEL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	144	143	100.9	723	27181 11CANERN69.0	27281	11SHIVEL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	723	27181 11CANERN69.0	27281	11SHIVEL69.0	EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	723	27181 11CANERN69.0	27281	11SHIVEL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	724	27183 11CARROL69.0	27325	11EMINEN69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	724	27183 11CARROL69.0	27325	11EMINEN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	148.6	144	144	143	103.9	724	27183 11CARROL69.0	27325	11EMINEN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.1	724	27183 11CARROL69.0	27325	11EMINEN69.0	EQ

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency							
29411	20LILYJ69.0	29634	20WOODLN	24.9	25.1	23	108.4	724	27183	11CARROL69.0	27325	11EMINEN69.0	EQ				
27023	11DELVIN	161	27045	11WI	TAP	144.4	144.6	142	101.7	27184	11CENTR	69.0	27325	11EMINEN69.0	EQ		
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	27184	11CENTR	69.0	27325	11EMINEN69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	725	27184	11CENTR	69.0	27325	11EMINEN69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	108.9	725	27184	11CENTR	69.0	27325	11EMINEN69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	27186	11CLARK	69.0	27284	11SPENC	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	27186	11CLARK	69.0	27284	11SPENC	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	726	27186	11CLARK	69.0	27284	11SPENC	69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	726	27186	11CLARK	69.0	27284	11SPENC	69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	726	27186	11CLARK	69.0	27284	11SPENC	69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	145.6	144.6	142	102.6	27186	11CLARK	69.0	27299	11WINCHS69.0	EQ		
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.3	27186	11CLARK	69.0	27299	11WINCHS69.0	EQ		
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	100.8	727	27186	11CLARK	69.0	27299	11WINCHS69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	727	27186	11CLARK	69.0	27299	11WINCHS69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	727	27186	11CLARK	69.0	27299	11WINCHS69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	27187	11CLAY	69.0	27202	11ETHEL	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	27187	11CLAY	69.0	27202	11ETHEL	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	100.8	728	27187	11CLAY	69.0	27202	11ETHEL	69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	728	27187	11CLAY	69.0	27202	11ETHEL	69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	728	27187	11CLAY	69.0	27202	11ETHEL	69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	27187	11CLAY	69.0	27221	11HANCOC69.0	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	27187	11CLAY	69.0	27221	11HANCOC69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	145.2	144	101.5	729	27187	11CLAY	69.0	27251	11MADISO69.0	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	729	27187	11CLAY	69.0	27251	11MADISO69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	729	27187	11CLAY	69.0	27251	11MADISO69.0	1			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	730	27187	11CLAY	69.0	27251	11MADISO69.0	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	730	27187	11CLAY	69.0	27251	11MADISO69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	143.4	144	100.3	730	27187	11CLAY	69.0	27251	11MADISO69.0	1			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	730	27187	11CLAY	69.0	27251	11MADISO69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.3	730	27187	11CLAY	69.0	27251	11MADISO69.0	1			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	731	27188	11CLAY	69.0	27282	11SHLBYV69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	731	27188	11CLAY	69.0	27282	11SHLBYV69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	146.2	144	102.3	731	27188	11CLAY	69.0	27282	11SHLBYV69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.4	731	27188	11CLAY	69.0	27282	11SHLBYV69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25	25.1	23	108.8	731	27188	11CLAY	69.0	27282	11SHLBYV69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.7	144.6	142	101.9	732	27188	11CLAY	69.0	27291	11W	FRNK69.0	1
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	732	27188	11CLAY	69.0	27291	11W	FRNK69.0	1
27051	11ADAMS	138	27148	11TYRONE	98.7	95.8	101.8	732	27188	11CLAY	69.0	27291	11W	FRNK69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	147.5	144	103.1	732	27188	11CLAY	69.0	27291	11W	FRNK69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.2	732	27188	11CLAY	69.0	27291	11W	FRNK69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	24.9	25.1	23	108.3	732	27188	11CLAY	69.0	27291	11W	FRNK69.0	1		
27023	11DELVIN	161	27045	11WI	TAP	144.5	144.6	142	101.8	733	27189	11CLIFTO69.0	27227	11HLCRST69.0	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	733	27189	11CLIFTO69.0	27227	11HLCRST69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	146.8	144	102.6	733	27189	11CLIFTO69.0	27227	11HLCRST69.0	1				
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	733	27189	11CLIFTO69.0	27227	11HLCRST69.0	1				

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency							
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	733	27189	11CLIFT069.0	27227	11HLCRST69.0	1				
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	734	27190	11CORYD069.0	27198	11EARL	N69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	734	27190	11CORYD069.0	27198	11EARL	N69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	734	27190	11CORYD069.0	27198	11EARL	N69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	734	27190	11CORYD069.0	27198	11EARL	N69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	734	27190	11CORYD069.0	27198	11EARL	N69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	735	27190	11CORYD069.0	27215	11GR	STL69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	735	27190	11CORYD069.0	27215	11GR	STL69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	735	27190	11CORYD069.0	27215	11GR	STL69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	735	27190	11CORYD069.0	27215	11GR	STL69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	735	27190	11CORYD069.0	27215	11GR	STL69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	736	27190	11CORYD069.0	27255	11MORGNF	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	736	27190	11CORYD069.0	27255	11MORGNF	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	736	27190	11CORYD069.0	27255	11MORGNF	69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	736	27190	11CORYD069.0	27255	11MORGNF	69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	736	27190	11CORYD069.0	27255	11MORGNF	69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	737	27191	11CRITTE69.0	27269	11PRINCE	69.0	E2	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	737	27191	11CRITTE69.0	27269	11PRINCE	69.0	E2	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	737	27191	11CRITTE69.0	27269	11PRINCE	69.0	E2			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	737	27191	11CRITTE69.0	27269	11PRINCE	69.0	E2			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	737	27191	11CRITTE69.0	27269	11PRINCE	69.0	E2			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	738	27191	11CRITTE69.0	27269	11PRINCE	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	738	27191	11CRITTE69.0	27269	11PRINCE	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	738	27191	11CRITTE69.0	27269	11PRINCE	69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	738	27191	11CRITTE69.0	27269	11PRINCE	69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	738	27191	11CRITTE69.0	27269	11PRINCE	69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.6	144.6	142	101.8	739	27192	11CYNTH	69.0	27254	11MILLRS	69.0	EQ
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	739	27192	11CYNTH	69.0	27254	11MILLRS	69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	739	27192	11CYNTH	69.0	27254	11MILLRS	69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	739	27192	11CYNTH	69.0	27254	11MILLRS	69.0	EQ		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	739	27192	11CYNTH	69.0	27254	11MILLRS	69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	144.8	144.6	142	102	740	27193	11DANVIL69.0	27290	11W	CLIF69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.3	74	111.2	740	27193	11DANVIL69.0	27290	11W	CLIF69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	740	27193	11DANVIL69.0	27290	11W	CLIF69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	116	740	27193	11DANVIL69.0	27290	11W	CLIF69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.8	740	27193	11DANVIL69.0	27290	11W	CLIF69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	144.3	144.6	142	101.7	741	27195	11DIXDAM69.0	27226	11HIGB	B69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111.1	741	27195	11DIXDAM69.0	27226	11HIGB	B69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	741	27195	11DIXDAM69.0	27226	11HIGB	B69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	741	27195	11DIXDAM69.0	27226	11HIGB	B69.0	EQ			
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	741	27195	11DIXDAM69.0	27226	11HIGB	B69.0	EQ			
27023	11DELVIN	161	27045	11WI	TAP	147.9	144.6	142	104.1	742	27195	11DIXDAM69.0	27237	11LANCS	69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	82.9	74	112	742	27195	11DIXDAM69.0	27237	11LANCS	69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	742	27195	11DIXDAM69.0	27237	11LANCS	69.0	EQ			
29359	20HODGEN69.0	29419	20MAGNOL	22.1	22	19	116.1	742	27195	11DIXDAM69.0	27237	11LANCS	69.0	EQ			

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	742	27195	11DIXDAM69.0	27237	11LANCS	69.0	EQ	
27023	11DELVIN	161	27045	11WI	TAP	144.6	142	743	27195	11DIXDAM69.0	27295	11WC-DD	69.0	1	
27044	11W	IRVI	161	27045	11WI	TAP	74	743	27195	11DIXDAM69.0	27295	11WC-DD	69.0	1	
27051	11ADAMS	138	27148	11TYRONE	99.4	95.8	97	743	27195	11DIXDAM69.0	27295	11WC-DD	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	743	27195	11DIXDAM69.0	27295	11WC-DD	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.8	743	27195	11DIXDAM69.0	27295	11WC-DD	69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	743	27195	11DIXDAM69.0	27295	11WC-DD	69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.6	142	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ		
27044	11W	IRVI	161	27045	11WI	TAP	74	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ		
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ		
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	744	27196	11DORCHE69.0	27231	11IMBODE69.0	EQ		
27023	11DELVIN	161	27045	11WI	TAP	144.6	142	745	27198	11EARL	N69.0	27216	11GR	RVR69.0	EQ
27044	11W	IRVI	161	27045	11WI	TAP	74	745	27198	11EARL	N69.0	27216	11GR	RVR69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	745	27198	11EARL	N69.0	27216	11GR	RVR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	745	27198	11EARL	N69.0	27216	11GR	RVR69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	745	27198	11EARL	N69.0	27216	11GR	RVR69.0	EQ
27023	11DELVIN	161	27045	11WI	TAP	144.6	142	746	27198	11EARL	N69.0	27257	11NEBO	69.0	E2
27044	11W	IRVI	161	27045	11WI	TAP	74	746	27198	11EARL	N69.0	27257	11NEBO	69.0	E2
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	746	27198	11EARL	N69.0	27257	11NEBO	69.0	E2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	746	27198	11EARL	N69.0	27257	11NEBO	69.0	E2
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	746	27198	11EARL	N69.0	27257	11NEBO	69.0	E2
27023	11DELVIN	161	27045	11WI	TAP	144.6	142	747	27198	11EARL	N69.0	27257	11NEBO	69.0	EQ
27044	11W	IRVI	161	27045	11WI	TAP	74	747	27198	11EARL	N69.0	27257	11NEBO	69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	747	27198	11EARL	N69.0	27257	11NEBO	69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	747	27198	11EARL	N69.0	27257	11NEBO	69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	747	27198	11EARL	N69.0	27257	11NEBO	69.0	EQ
27023	11DELVIN	161	27045	11WI	TAP	144.5	142	748	27198	11EARL	N69.0	27293	11WALKER69.0	1	
27044	11W	IRVI	161	27045	11WI	TAP	74	748	27198	11EARL	N69.0	27293	11WALKER69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	748	27198	11EARL	N69.0	27293	11WALKER69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	748	27198	11EARL	N69.0	27293	11WALKER69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	748	27198	11EARL	N69.0	27293	11WALKER69.0	1	
27023	11DELVIN	161	27045	11WI	TAP	144.2	142	749	27200	11ELIHU	69.0	27210	11FERG	S69.0	1
27044	11W	IRVI	161	27045	11WI	TAP	74	749	27200	11ELIHU	69.0	27210	11FERG	S69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	749	27200	11ELIHU	69.0	27210	11FERG	S69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	116.1	749	27200	11ELIHU	69.0	27210	11FERG	S69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.6	749	27200	11ELIHU	69.0	27210	11FERG	S69.0	1
27023	11DELVIN	161	27045	11WI	TAP	145	142	750	27200	11ELIHU	69.0	27300	11WOFOR69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	74	750	27200	11ELIHU	69.0	27300	11WOFOR69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	750	27200	11ELIHU	69.0	27300	11WOFOR69.0	EQ	
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.2	750	27200	11ELIHU	69.0	27300	11WOFOR69.0	EQ	
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	751	27202	11ETHEL	69.0	27211	11FERNVL69.0	EQ	
27023	11DELVIN	161	27045	11WI	TAP	144.5	142	751	27202	11ETHEL	69.0	27211	11FERNVL69.0	EQ	
27044	11W	IRVI	161	27045	11WI	TAP	74	751	27202	11ETHEL	69.0	27211	11FERNVL69.0	EQ	
27161	11AIKEN	69.0	27253	11MIDDLT	144.3	144	143	751	27202	11ETHEL	69.0	27211	11FERNVL69.0	EQ	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	751	27202 11EHEL 69.0 27211 11FERNVL69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	751	27202 11EHEL 69.0 27211 11FERNVL69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	752	27202 11EHEL 69.0 27294 11WATTRS69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	752	27202 11EHEL 69.0 27294 11WATTRS69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.6	144	144	143	101.1	752	27202 11EHEL 69.0 27294 11WATTRS69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	752	27202 11EHEL 69.0 27294 11WATTRS69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	752	27202 11EHEL 69.0 27294 11WATTRS69.0 EQ
27044	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	753	27203 11ETOWN 69.0 27222 11HARDN 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	753	27203 11ETOWN 69.0 27222 11HARDN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	22	22	19	113.3	753	27203 11ETOWN 69.0 27222 11HARDN 69.0 1
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	753	27203 11ETOWN 69.0 27222 11HARDN 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	754	27203 11ETOWN 69.0 27222 11HARDN 69.0 2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	754	27203 11ETOWN 69.0 27222 11HARDN 69.0 2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	754	27203 11ETOWN 69.0 27222 11HARDN 69.0 2
29359	20HODGEN69.0	29419	20MAGNOL	21.6	22	22	19	113.6	754	27203 11ETOWN 69.0 27222 11HARDN 69.0 2
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	754	27203 11ETOWN 69.0 27222 11HARDN 69.0 2
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	755	27203 11ETOWN 69.0 27222 11HODGEN69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	755	27203 11ETOWN 69.0 27222 11HODGEN69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144.4	144	144	143	100.9	755	27203 11ETOWN 69.0 27222 11HODGEN69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	26.5	25.1	25.1	23	115.3	755	27203 11ETOWN 69.0 27222 11HODGEN69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	756	27203 11ETOWN 69.0 27274 11ROGERS69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	756	27203 11ETOWN 69.0 27274 11ROGERS69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	756	27203 11ETOWN 69.0 27274 11ROGERS69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.8	756	27203 11ETOWN 69.0 27274 11ROGERS69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.2	756	27203 11ETOWN 69.0 27274 11ROGERS69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	757	27204 11EVARTS69.0 27224 11HARLAN69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	757	27204 11EVARTS69.0 27224 11HARLAN69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	757	27204 11EVARTS69.0 27224 11HARLAN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	757	27204 11EVARTS69.0 27224 11HARLAN69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	757	27204 11EVARTS69.0 27224 11HARLAN69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.7	144.6	144.6	142	101.9	758	27204 11EVARTS69.0 27268 11POCKET69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	758	27204 11EVARTS69.0 27268 11POCKET69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	758	27204 11EVARTS69.0 27268 11POCKET69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	758	27204 11EVARTS69.0 27268 11POCKET69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	758	27204 11EVARTS69.0 27268 11POCKET69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	144.6	142	101.8	759	27205 11EASTVW69.0 27240 11LEITCH69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	759	27205 11EASTVW69.0 27240 11LEITCH69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	759	27205 11EASTVW69.0 27240 11LEITCH69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.3	22	22	19	112	759	27205 11EASTVW69.0 27240 11LEITCH69.0 EQ
29411	20LILYJT69.0	29634	20WOODLN	25	25.1	25.1	23	108.7	759	27205 11EASTVW69.0 27240 11LEITCH69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	146.9	144.6	144.6	142	103.5	760	27206 11FARLEY69.0 27286 11SWEETH69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.8	82.3	82.3	74	111.9	760	27206 11FARLEY69.0 27286 11SWEETH69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	760	27206 11FARLEY69.0 27286 11SWEETH69.0 EQ
27230	11HOPEWL69.0	29399	20LAURIC	75.5	48.2	48.2	72	104.9	760	27206 11FARLEY69.0 27286 11SWEETH69.0 EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	760	27206	11SWEETH69.0	27286	11SWEETH69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.5	760	27206	11FARLEY69.0	27286	11SWEETH69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144	144.6	101.4	761	27206	11FARLEY69.0	27300	11WOFFOR69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.2	82.3	111.1	761	27206	11FARLEY69.0	27300	11WOFFOR69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	761	27206	11FARLEY69.0	27300	11WOFFOR69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	761	27206	11FARLEY69.0	27300	11WOFFOR69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	761	27206	11FARLEY69.0	27300	11WOFFOR69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	101.8	763	27207	11FARMER69.0	27284	11SPENC 69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	111.2	763	27207	11FARMER69.0	27284	11SPENC 69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	763	27207	11FARMER69.0	27284	11SPENC 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	763	27207	11FARMER69.0	27284	11SPENC 69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	763	27207	11FARMER69.0	27284	11SPENC 69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	101.8	764	27208	11FARNSL69.0	27264	11PADDYS69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	111.2	764	27208	11FARNSL69.0	27264	11PADDYS69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	764	27208	11FARNSL69.0	27264	11PADDYS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	764	27208	11FARNSL69.0	27264	11PADDYS69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	764	27208	11FARNSL69.0	27264	11PADDYS69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	101.8	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	111.2	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	100.7	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.5	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	765	27208	11FARNSL69.0	27281	11SHIVEL69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	102.6	766	27209	11FAWKES69.0	27225	11HIGB A69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.6	82.3	111.7	766	27209	11FAWKES69.0	27225	11HIGB A69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	100.7	766	27209	11FAWKES69.0	27225	11HIGB A69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	19	115.5	766	27209	11FAWKES69.0	27225	11HIGB A69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.1	25.1	23	109.1	766	27209	11FAWKES69.0	27225	11HIGB A69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.1	144.6	101.5	767	27209	11FAWKES69.0	27243	11LK REB69.0	E2
27044	11W IRVI	161	27045	11WI TAP	81.5	82.3	110.1	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	20MAGNOL	22	22	19	115.6	767	27209	11FAWKES69.0	27243	11LK REB69.0	E2
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	767	27209	11FAWKES69.0	27243	11LK REB69.0	E2
27023	11DELVIN	161	27045	11WI TAP	143.1	144.6	100.8	768	27209	11FAWKES69.0	27243	11LK REB69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	80	82.3	108.1	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	20MAGNOL	22	22	19	115.6	768	27209	11FAWKES69.0	27243	11LK REB69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	768	27209	11FAWKES69.0	27243	11LK REB69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	101.8	769	27212	11FINCHV69.0	27244	11SC TAP69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	111.2	769	27212	11FINCHV69.0	27244	11SC TAP69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	769	27212 11FINCHV69.0	27244 11SC TAP69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.4	769	27212 11FINCHV69.0	27244 11SC TAP69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	108.9	769	27212 11FINCHV69.0	27244 11SC TAP69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.3	144.6	142	101.6	770	27212 11FINCHV69.0	27253 11MIDDLT69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	770	27212 11FINCHV69.0	27253 11MIDDLT69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	158.1	144	143	110.5	770	27212 11FINCHV69.0	27253 11MIDDLT69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.6	22	19	103.7	770	27212 11FINCHV69.0	27253 11MIDDLT69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN		24.1	25.1	23	114.9	770	27212 11FINCHV69.0	27253 11MIDDLT69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	771	27214 11FFRT E69.0	27289 11TYRONE69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	771	27214 11FFRT E69.0	27289 11TYRONE69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	771	27214 11FFRT E69.0	27289 11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.5	771	27214 11FFRT E69.0	27289 11TYRONE69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN		25.3	25.1	23	109.8	771	27214 11FFRT E69.0	27289 11TYRONE69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	772	27214 11FFRT E69.0	27291 11W FRNK69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	772	27214 11FFRT E69.0	27291 11W FRNK69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	143.3	144	143	100.2	772	27214 11FFRT E69.0	27291 11W FRNK69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.6	772	27214 11FFRT E69.0	27291 11W FRNK69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN		25.3	25.1	23	109.8	772	27214 11FFRT E69.0	27291 11W FRNK69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	773	27215 11GR STL69.0	27261 11OMU 69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	773	27215 11GR STL69.0	27261 11OMU 69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	773	27215 11GR STL69.0	27261 11OMU 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.5	773	27215 11GR STL69.0	27261 11OMU 69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.3	773	27215 11GR STL69.0	27261 11OMU 69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.5	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN		25.2	25.1	23	109.4	774	27216 11GR RVR69.0	27228 11HILLSI69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL		21.9	22	19	115.4	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
29411	20LILYJ69.0	29634	20WOODLN		25.2	25.1	23	109.4	775	27216 11GR RVR69.0	27232 11INDIAN69.0	EQ
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.7	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.3	776	27216 11GR RVR69.0	27271 11RQ TAP69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.5	144.6	142	101.8	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.9	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		22	22	19	115.5	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25.1	23	109.3	777	27217 11GRADY 69.0	27264 11PADDYS69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.6	144.6	142	101.8	778	27218 11GRAHVM69.0	27298 11WICKLI69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.3	74	111.2	778	27218 11GRAHVM69.0	27298 11WICKLI69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	778	27218	11GRAHMV69.0	27298	11WICKLI69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	778	27218	11GRAHMV69.0	27298	11WICKLI69.0	1
29411	20LILYRJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	778	27218	11GRAHMV69.0	27298	11WICKLI69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	779	27218	11GRAHMV69.0	27298	11WICKLI69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	779	27218	11GRAHMV69.0	27298	11WICKLI69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	779	27218	11GRAHMV69.0	27298	11WICKLI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	779	27218	11GRAHMV69.0	27298	11WICKLI69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	779	27218	11GRAHMV69.0	27298	11WICKLI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	780	27219	11GRBURG69.0	27288	11TAYLRC69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	780	27219	11GRBURG69.0	27288	11TAYLRC69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.5	22	19	112.9	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25.3	25.1	23	110.1	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.7	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	781	27220	11HAEFLN69.0	27241	11LEX PL69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	782	27221	11HANCOC69.0	27278	11SEMINO69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	782	27221	11HANCOC69.0	27278	11SEMINO69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.9	782	27221	11HANCOC69.0	27278	11SEMINO69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	782	27221	11HANCOC69.0	27278	11SEMINO69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	782	27221	11HANCOC69.0	27278	11SEMINO69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	783	27222	11HARLAN69.0	27272	11ROCKY 69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	783	27222	11HARLAN69.0	27272	11ROCKY 69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	783	27222	11HARLAN69.0	27272	11ROCKY 69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	783	27222	11HARLAN69.0	27272	11ROCKY 69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	783	27222	11HARLAN69.0	27272	11ROCKY 69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	784	27222	11HIGB 69.0	27238	11LANSWD69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	784	27222	11HIGB 69.0	27238	11LANSWD69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	784	27222	11HIGB 69.0	27238	11LANSWD69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	784	27222	11HIGB 69.0	27238	11LANSWD69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	784	27222	11HIGB 69.0	27238	11LANSWD69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	785	27222	11HIGB 69.0	27252	11MED CN69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	785	27222	11HIGB 69.0	27252	11MED CN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	785	27222	11HIGB 69.0	27252	11MED CN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	785	27222	11HIGB 69.0	27252	11MED CN69.0	1
29411	20LILYRJ69.0	29634	20WOODLN	25.1	25.1	23	109.2	785	27222	11HIGB 69.0	27252	11MED CN69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	786	27222	11HIGB 69.0	27289	11TYRONE69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	786	27222	11HIGB 69.0	27289	11TYRONE69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.6	786	27222	11HIGB 69.0	27289	11TYRONE69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.7	786	27222	11HIGB 69.0	27289	11TYRONE69.0	EQ
29411	20LILYRJ69.0	29634	20WOODLN	25	25.1	23	108.5	786	27222	11HIGB 69.0	27289	11TYRONE69.0	EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	142	101.8	787	27228	11HILLSI69.0	27232 11INDIAN69.0 EQ
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	787	27228	11HILLSI69.0	27232 11INDIAN69.0 EQ
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	787	27228	11HILLSI69.0	27232 11INDIAN69.0 EQ
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	787	27228	11HILLSI69.0	27232 11INDIAN69.0 EQ
29411	20LILYJTJ69.0 29634	20WOODLN	25.1	25.1	23	109.3	787	27228	11HILLSI69.0	27232 11INDIAN69.0 EQ
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	788	27228	11HILLSI69.0	27270 11RIVR Q69.0 EQ
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	788	27228	11HILLSI69.0	27270 11RIVR Q69.0 EQ
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	788	27228	11HILLSI69.0	27270 11RIVR Q69.0 EQ
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.5	788	27228	11HILLSI69.0	27270 11RIVR Q69.0 EQ
29411	20LILYJTJ69.0 29634	20WOODLN	25.2	25.1	23	109.4	788	27228	11HILLSI69.0	27270 11RIVR Q69.0 EQ
27023	11DELVIN 161 27045	11WI TAP	144.2	144.6	142	101.5	789	27230	11HOPEWL69.0	27286 11SWEETH69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.3	74	111.1	789	27230	11HOPEWL69.0	27286 11SWEETH69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	789	27230	11HOPEWL69.0	27286 11SWEETH69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.5	789	27230	11HOPEWL69.0	27286 11SWEETH69.0 1
29411	20LILYJTJ69.0 29634	20WOODLN	25.1	25.1	23	109.3	789	27230	11HOPEWL69.0	27286 11SWEETH69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	790	27231	11IMBODE69.0	27248 11LYNCH 69.0 EQ
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	790	27231	11IMBODE69.0	27248 11LYNCH 69.0 EQ
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	790	27231	11IMBODE69.0	27248 11LYNCH 69.0 EQ
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	790	27231	11IMBODE69.0	27248 11LYNCH 69.0 EQ
29411	20LILYJTJ69.0 29634	20WOODLN	25.1	25.1	23	109.3	790	27231	11IMBODE69.0	27248 11LYNCH 69.0 EQ
27023	11DELVIN 161 27045	11WI TAP	144.8	144.6	142	101.9	791	27231	11IMBODE69.0	27268 11POCKET69.0 EQ
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	791	27231	11IMBODE69.0	27268 11POCKET69.0 EQ
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	791	27231	11IMBODE69.0	27268 11POCKET69.0 EQ
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	791	27231	11IMBODE69.0	27268 11POCKET69.0 EQ
29411	20LILYJTJ69.0 29634	20WOODLN	25.2	25.1	23	109.4	791	27231	11IMBODE69.0	27268 11POCKET69.0 EQ
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	792	27232	11INDIAN69.0	27259 11OHIO C69.0 EQ
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	792	27232	11INDIAN69.0	27259 11OHIO C69.0 EQ
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	792	27232	11INDIAN69.0	27259 11OHIO C69.0 EQ
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.4	792	27232	11INDIAN69.0	27259 11OHIO C69.0 EQ
29411	20LILYJTJ69.0 29634	20WOODLN	25.2	25.1	23	109.5	792	27232	11INDIAN69.0	27259 11OHIO C69.0 EQ
27023	11DELVIN 161 27045	11WI TAP	144.5	144.6	142	101.8	793	27233	11KENTON69.0	27280 11SHARON69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	793	27233	11KENTON69.0	27280 11SHARON69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.7	793	27233	11KENTON69.0	27280 11SHARON69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	19	115.5	793	27233	11KENTON69.0	27280 11SHARON69.0 1
29411	20LILYJTJ69.0 29634	20WOODLN	25.1	25.1	23	109.3	793	27233	11KENTON69.0	27280 11SHARON69.0 1
27023	11DELVIN 161 27045	11WI TAP	146.4	144.6	142	103.1	794	27235	11KU PK 69.0	27265 11PINEVI69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.8	82.3	74	112	794	27235	11KU PK 69.0	27265 11PINEVI69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.7	794	27235	11KU PK 69.0	27265 11PINEVI69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.7	794	27235	11KU PK 69.0	27265 11PINEVI69.0 1
29411	20LILYJTJ69.0 29634	20WOODLN	25.2	25.1	23	109.6	794	27235	11KU PK 69.0	27265 11PINEVI69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	142	101.8	795	27235	11KU PK 69.0	27265 11PINEVI69.0 EQ
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	74	111.2	795	27235	11KU PK 69.0	27265 11PINEVI69.0 EQ
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	795	27235	11KU PK 69.0	27265 11PINEVI69.0 EQ
29359	20HODGEN69.0 29419	20MAGNOL	22	22	19	115.6	795	27235	11KU PK 69.0	27265 11PINEVI69.0 EQ
29411	20LILYJTJ69.0 29634	20WOODLN	25.1	25.1	23	109.3	795	27235	11KU PK 69.0	27265 11PINEVI69.0 EQ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	142	102	796	27235	11KU PK 69.0 27300 11WOFFOR69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	796	27235	11KU PK 69.0 27300 11WOFFOR69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	796	27235	11KU PK 69.0 27300 11WOFFOR69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	796	27235	11KU PK 69.0 27300 11WOFFOR69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	796	27235	11KU PK 69.0 27300 11WOFFOR69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	797	27236	11KY DAM69.0 27269 11PRINCE69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	797	27236	11KY DAM69.0 27269 11PRINCE69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	797	27236	11KY DAM69.0 27269 11PRINCE69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	797	27236	11KY DAM69.0 27269 11PRINCE69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	797	27236	11KY DAM69.0 27269 11PRINCE69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	798	27236	11KY DAM69.0 27276 11S PADU69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	798	27236	11KY DAM69.0 27276 11S PADU69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	798	27236	11KY DAM69.0 27276 11S PADU69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	798	27236	11KY DAM69.0 27276 11S PADU69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	798	27236	11KY DAM69.0 27276 11S PADU69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	147.3	144.6	142	103.7	799	27237	11LANCS 69.0 27331 11E BERN69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.6	82.3	74	111.6	799	27237	11LANCS 69.0 27331 11E BERN69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	799	27237	11LANCS 69.0 27331 11E BERN69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.9	799	27237	11LANCS 69.0 27331 11E BERN69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	23	109.4	799	27237	11LANCS 69.0 27331 11E BERN69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	800	27238	11LANSWDW69.0 27247 11LOUD B69.0 E2
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	800	27238	11LANSWDW69.0 27247 11LOUD B69.0 E2
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	800	27238	11LANSWDW69.0 27247 11LOUD B69.0 E2
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	800	27238	11LANSWDW69.0 27247 11LOUD B69.0 E2
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	800	27238	11LANSWDW69.0 27247 11LOUD B69.0 E2
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.8	801	27238	11LANSWDW69.0 27247 11LOUD B69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	801	27238	11LANSWDW69.0 27247 11LOUD B69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	801	27238	11LANSWDW69.0 27247 11LOUD B69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	19	115.6	801	27238	11LANSWDW69.0 27247 11LOUD B69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	23	109.3	801	27238	11LANSWDW69.0 27247 11LOUD B69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.4	144.6	142	101.7	802	27239	11LEBAN69.0 27285 11SPRNGF69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	74	111.1	802	27239	11LEBAN69.0 27285 11SPRNGF69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	802	27239	11LEBAN69.0 27285 11SPRNGF69.0 1
27285	11SPRNGF69.0	29459	20N SPR	22	12.9	19	115.8	802	27239	11LEBAN69.0 27285 11SPRNGF69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	22	19	113.3	802	27239	11LEBAN69.0 27285 11SPRNGF69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	26.7	25.1	23	115.9	802	27239	11LEBAN69.0 27285 11SPRNGF69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	142	101.9	803	27239	11LEBAN69.0 27288 11TAYLRC69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	803	27239	11LEBAN69.0 27288 11TAYLRC69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	803	27239	11LEBAN69.0 27288 11TAYLRC69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	22.7	22	19	119.6	803	27239	11LEBAN69.0 27288 11TAYLRC69.0 EQ
29411	20LILYJTJ69.0	29634	20WOODLN	24.3	25.1	23	105.5	803	27239	11LEBAN69.0 27288 11TAYLRC69.0 EQ
27023	11DELVIN 161	27045	11WI TAP	144.5	144.6	142	101.8	804	27240	11LEITCH69.0 27259 11OHIO C69.0 EQ
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	74	111.2	804	27240	11LEITCH69.0 27259 11OHIO C69.0 EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	804	27240	11LEITCH69.0 27259 11OHIO C69.0 EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.7	22	19	114.2	804	27240	11LEITCH69.0 27259 11OHIO C69.0 EQ

**	From bus	**	**	To bu	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.2	25.1	23	109.7	804	27240 1LEITCH69.0	27259 1LOHIO C69.0	EQ	
27023	11DELVIN 161	27045	11WI TAP	142	145.1	144.6	142	102.2	805	27241 1LLEX	PL69.0	27246 1LLOUD A69.0	1
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	74	111.2	805	27241 1LLEX	PL69.0	27246 1LLOUD A69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	143	144.1	144	143	100.8	805	27241 1LLEX	PL69.0	27246 1LLOUD A69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	19	21.9	22	19	115.4	805	27241 1LLEX	PL69.0	27246 1LLOUD A69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	23	109.2	805	27241 1LLEX	PL69.0	27246 1LLOUD A69.0	1
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	142	101.8	806	27241 1LLEX	PL69.0	27252 11MED CN69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	74	111.2	806	27241 1LLEX	PL69.0	27252 11MED CN69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	143	100.7	806	27241 1LLEX	PL69.0	27252 11MED CN69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	19	115.6	806	27241 1LLEX	PL69.0	27252 11MED CN69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	23	109.3	806	27241 1LLEX	PL69.0	27252 11MED CN69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	142	144.2	144.6	142	101.6	807	27241 1LLEX	PL69.0	27266 11PISGAH69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	82.2	82.3	74	111.1	807	27241 1LLEX	PL69.0	27266 11PISGAH69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143	144.1	144	143	100.7	807	27241 1LLEX	PL69.0	27266 11PISGAH69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	19	115.5	807	27241 1LLEX	PL69.0	27266 11PISGAH69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	23	109.3	807	27241 1LLEX	PL69.0	27266 11PISGAH69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	142	101.2	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	79.3	82.3	74	107.1	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	19	115.6	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	23	109.3	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	142	143.7	144.6	142	101.2	808	27241 1LLEX	PL69.0	27327 11BOURNB69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	74	111.2	808	27241 1LLEX	PL69.0	27327 11BOURNB69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143	144.1	144	143	100.7	808	27241 1LLEX	PL69.0	27327 11BOURNB69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	19	115.5	808	27241 1LLEX	PL69.0	27327 11BOURNB69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	23	109.3	808	27241 1LLEX	PL69.0	27327 11BOURNB69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	142	144.6	144.6	142	101.2	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	79.3	82.3	74	107.1	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	19	115.6	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	23	25.1	25.1	23	109.3	809	27243 11LK	REB69.0	27292 11W IRVI69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	142	144.5	144.6	142	101.8	810	27244 11SC	TAP69.0	27282 11SHLBYV69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	74	111.2	810	27244 11SC	TAP69.0	27282 11SHLBYV69.0	EQ
27161	11AIKEN 69.0	27253	11MIDDLT	143	144	144	143	100.7	810	27244 11SC	TAP69.0	27282 11SHLBYV69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	19	21.8	22	19	115	810	27244 11SC	TAP69.0	27282 11SHLBYV69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	23	24.8	25.1	23	107.8	810	27244 11SC	TAP69.0	27282 11SHLBYV69.0	EQ
27023	11DELVIN 161	27045	11WI TAP	142	144.5	144.6	142	101.8	810	27244 11SC	TAP69.0	27282 11SHLBYV69.0	EQ
27044	11W IRVI 161	27045	11WI TAP	74	81.9	82.3	74	110.7	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	11HOPEWL69.0	29399	20LAURIC	72	80.8	48.2	72	112.2	811	27245 11LONDON69.0	27267 11PITTSB69.0	1	
27235	11KU PK 69.0	27265	11PINEVI	82	86.2	69.6	82	105.1	811	27245 11LONDON69.0	27267 11PITTSB69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	19	22	22	19	115.6	811	27245 11LONDON69.0	27267 11PITTSB69.0	1	
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	25.1	23	108.9	811	27245 11LONDON69.0	27267 11PITTSB69.0	1	
27023	11DELVIN 161	27045	11WI TAP	144.9	144.9	144.6	142	102.1	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ	
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	74	111.2	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	19	21.9	22	19	115.5	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ	
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.2	25.1	23	109.4	812	27245 11LONDON69.0	27286 11SWEETH69.0	EQ	
27023	11DELVIN 161	27045	11WI TAP	144.5	144.5	144.6	142	101.7	813	27246 11LOUD A69.0	27247 11LOUD B69.0	1	
27044	11W IRVI 161	27045	11WI TAP	74	82.3	82.3	74	111.2	813	27246 11LOUD A69.0	27247 11LOUD B69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	813	27246 11LOUD A69.0	27247 11LOUD B69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	813	27246
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	813	27246
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	814	27246
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	814	27246
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	814	27246
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	814	27246
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	814	27246
27044	11W IRVI 161	27045	11WI TAP	144.8	144.6	144.6	142	102	815	27247
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	815	27247
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	815	27247
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	815	27247
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	815	27247
27023	11DELVIN 161	27045	11WI TAP	144.8	144.6	144.6	142	102	816	27248
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	816	27248
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	816	27248
29359	20HODGEN69.0	29419	20MAGNOL	25.2	25.1	25.1	19	115.5	816	27248
29411	20LILYJTJ69.0	29634	20WOODLN	144.5	144.6	144.6	142	101.8	817	27249
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	817	27249
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	817	27249
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.5	818	27249
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	819	27249
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	819	27249
27161	11AIKEN 69.0	27253	11MIDDLT	155.2	144	144	143	108.5	818	27249
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	818	27249
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	818	27249
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	819	27249
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	819	27249
27161	11AIKEN 69.0	27253	11MIDDLT	158.2	144	144	143	110.6	821	27250
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	820	27250
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	820	27250
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	820	27250
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	820	27250
27161	11AIKEN 69.0	27253	11MIDDLT	155.1	144	144	143	108.5	820	27250
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	820	27250
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	820	27250
27023	11DELVIN 161	27045	11WI TAP	144.6	144.6	144.6	142	101.8	821	27250
27044	11W IRVI 161	27045	11WI TAP	82.3	82.3	82.3	74	111.2	821	27250
27161	11AIKEN 69.0	27253	11MIDDLT	158.2	144	144	143	110.6	821	27250
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	821	27250
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	821	27250
27023	11DELVIN 161	27045	11WI TAP	144.3	144.6	144.6	142	101.7	822	27254
27044	11W IRVI 161	27045	11WI TAP	82.2	82.3	82.3	74	111.1	822	27254
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	822	27254
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	822	27254
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.5	822	27254

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading†	Ncon	Contingency	
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	823	27254 11MILRS69.0	27327 11BOURN69.0 E2
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	823	27254 11MILRS69.0	27327 11BOURN69.0 E2
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	144	143	100.7	823	27254 11MILRS69.0	27327 11BOURN69.0 E2
29359	20HODGEN69.0 29419	20MAGNOL	22	22	22	22	19	115.6	823	27254 11MILRS69.0	27327 11BOURN69.0 E2
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	823	27254 11MILRS69.0	27327 11BOURN69.0 E2
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	824	27254 11MILRS69.0	27327 11BOURN69.0 E2
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	824	27254 11MILRS69.0	27327 11BOURN69.0 E2
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	144	143	100.7	824	27254 11MILRS69.0	27327 11BOURN69.0 E2
29359	20HODGEN69.0 29419	20MAGNOL	22	22	22	22	19	115.6	825	27255 11MORGNF69.0	27257 11NEBO 69.0 E2
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	825	27255 11MORGNF69.0	27257 11NEBO 69.0 E2
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	826	27255 11MORGNF69.0	27296 11WHTC T69.0 E2
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	826	27255 11MORGNF69.0	27296 11WHTC T69.0 E2
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	144	143	100.7	826	27255 11MORGNF69.0	27296 11WHTC T69.0 E2
29359	20HODGEN69.0 29419	20MAGNOL	22	22	22	22	19	115.6	827	27255 11MORGNF69.0	27297 11WHEATC69.0 E2
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	827	27255 11MORGNF69.0	27297 11WHEATC69.0 E2
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	828	27256 11MUD LA69.0	27333 116676 T69.0 E2
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	828	27256 11MUD LA69.0	27333 116676 T69.0 E2
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	144	143	100.7	828	27256 11MUD LA69.0	27333 116676 T69.0 E2
29359	20HODGEN69.0 29419	20MAGNOL	22	22	22	22	19	115.6	829	27257 11NEBO 69.0	27296 11WHTC T69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	829	27257 11NEBO 69.0	27296 11WHTC T69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	829	27257 11NEBO 69.0	27296 11WHTC T69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	829	27257 11NEBO 69.0	27296 11WHTC T69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	144	143	100.7	829	27257 11NEBO 69.0	27296 11WHTC T69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	22	22	22	22	19	115.6	830	27257 11NEBO 69.0	27296 11WHTC T69.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	830	27257 11NEBO 69.0	27296 11WHTC T69.0 1
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	830	27257 11NEBO 69.0	27297 11WHEATC69.0 E2
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	830	27257 11NEBO 69.0	27297 11WHEATC69.0 E2
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	144	143	100.7	830	27257 11NEBO 69.0	27297 11WHEATC69.0 E2
29359	20HODGEN69.0 29419	20MAGNOL	22	22	22	22	19	115.6	830	27257 11NEBO 69.0	27297 11WHEATC69.0 E2
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.3	830	27257 11NEBO 69.0	27297 11WHEATC69.0 E2
27023	11DELVIN 161 27045	11WI TAP	144.6	144.6	144.6	144.6	142	101.8	831	27264 11PADDYS69.0	27315 11PR 3 M99.0 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.3	82.3	82.3	74	111.2	831	27264 11PADDYS69.0	27315 11PR 3 M99.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.6	144.6	144.6	144.6	143	101.1	831	27264 11PADDYS69.0	27315 11PR 3 M99.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	22	22	22	19	115.4	831	27264 11PADDYS69.0	27315 11PR 3 M99.0 1
29411	20LILYJ69.0 29634	20WOODLN	25.1	25.1	25.1	25.1	23	109.2	831	27264 11PADDYS69.0	27315 11PR 3 M99.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	% Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	832	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	832	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	832	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	832	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	832	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.9	833	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	833	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	833	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.5	833	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	833	27265	11PINEVI69.0	27272	11ROCKY 69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.7	834	27266	11PISGAH69.0	27289	11TYRONE69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	834	27266	11PISGAH69.0	27289	11TYRONE69.0 E2
27051	11ADAMS 138 27148 11TYRONE	98.4	95.8	97	101.5	834	27266	11PISGAH69.0	27289	11TYRONE69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.6	834	27266	11PISGAH69.0	27289	11TYRONE69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.7	834	27266	11PISGAH69.0	27289	11TYRONE69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25	25.1	23	108.7	834	27266	11PISGAH69.0	27289	11TYRONE69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.3	144.6	142	101.6	835	27267	11PITTSB69.0	27331	11E BERN69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.3	74	111.1	835	27267	11PITTSB69.0	27331	11E BERN69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	835	27267	11PITTSB69.0	27331	11E BERN69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.9	22	19	109.3	835	27267	11PITTSB69.0	27331	11E BERN69.0 1
29411	20LILYJTJ69.0 29634 20WOODLN	25.2	25.1	23	115.3	835	27267	11PITTSB69.0	27331	11E BERN69.0 1
27023	11DELVIN 161 27045 11WI TAP	144.5	144.6	142	101.8	836	27268	11POCKET69.0	27272	11ROCKY 69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	836	27268	11POCKET69.0	27272	11ROCKY 69.0 E2
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	836	27268	11POCKET69.0	27272	11ROCKY 69.0 E2
29359	20HODGEN69.0 29419 20MAGNOL	22	22	19	115.6	836	27268	11POCKET69.0	27272	11ROCKY 69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	836	27268	11POCKET69.0	27272	11ROCKY 69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	837	27269	11PRINCE69.0	27293	11WALKER69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.6	837	27269	11PRINCE69.0	27293	11WALKER69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	837	27269	11PRINCE69.0	27293	11WALKER69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	838	27269	11PRINCE69.0	27293	11WALKER69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.6	838	27269	11PRINCE69.0	27293	11WALKER69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	838	27269	11PRINCE69.0	27293	11WALKER69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	839	27270	11RIVR Q69.0	27271	11RQ TAP69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.5	839	27270	11RIVR Q69.0	27271	11RQ TAP69.0 E2
29411	20LILYJTJ69.0 29634 20WOODLN	25.1	25.1	23	109.3	839	27270	11RIVR Q69.0	27271	11RQ TAP69.0 E2
27023	11DELVIN 161 27045 11WI TAP	144.6	144.6	142	101.8	840	27271	11RQ TAP69.0	27293	11WALKER69.0 E2
27044	11W IRVI 161 27045 11WI TAP	82.3	82.3	74	111.2	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	22	22	19	115.7	840	27271	11RQ TAP69.0	27293	11WALKER69.0 E2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	Ncon	Contingency		
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	840	27271 11RQ TAP69.0	27293 11WALKER69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	144.6	142	101.8	841	27276 11S PADU69.0	27298 11WICKLI69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	841	27276 11S PADU69.0	27298 11WICKLI69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	841	27276 11S PADU69.0	27298 11WICKLI69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	841	27276 11S PADU69.0	27298 11WICKLI69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	841	27276 11S PADU69.0	27298 11WICKLI69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	144.6	142	101.8	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144.2	144	144	143	100.8	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.5	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	842	27278 11SEMINO69.0	27281 11SHIVEL69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	144.6	142	101.8	843	27279 11SEWELL69.0	27283 11SSET S69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	843	27279 11SEWELL69.0	27283 11SSET S69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	843	27279 11SEWELL69.0	27283 11SSET S69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.5	843	27279 11SEWELL69.0	27283 11SSET S69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25	25.1	25.1	23	108.6	844	27282 11SHLBYV69.0	27325 11EMINEN69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.4	144.6	144.6	142	101.7	845	27282 11SHLBYV69.0	27329 116658 T69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	845	27282 11SHLBYV69.0	27329 116658 T69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115	845	27282 11SHLBYV69.0	27329 116658 T69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	24.9	25.1	25.1	23	108.2	845	27282 11SHLBYV69.0	27329 116658 T69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	144.6	142	101.8	846	27290 11W CLIF69.0	27295 11WC-DD 69.0	1
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	846	27290 11W CLIF69.0	27295 11WC-DD 69.0	1
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	846	27290 11W CLIF69.0	27295 11WC-DD 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	846	27290 11W CLIF69.0	27295 11WC-DD 69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.1	846	27290 11W CLIF69.0	27295 11WC-DD 69.0	1
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	144.6	142	101.8	847	27296 11WHTC T69.0	27297 11WHEATC69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	847	27296 11WHTC T69.0	27297 11WHEATC69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	144	143	100.7	847	27296 11WHTC T69.0	27297 11WHEATC69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	847	27296 11WHTC T69.0	27297 11WHEATC69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	109.3	847	27296 11WHTC T69.0	27297 11WHEATC69.0	EQ
27023	11DELVIN	161 27045	11WI TAP	144.5	144.6	144.6	142	101.7	848	27319 11COLLN69.0	27320 11COLLN 138 1	
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	848	27319 11COLLN69.0	27320 11COLLN 138 1	
27161	11AIKEN	69.0 27253	11MIDDLT	163.7	144	144	143	114.5	848	27319 11COLLN69.0	27320 11COLLN 138 1	
29359	20HODGEN69.0	29419	20MAGNOL	21.9	22	22	19	115.4	848	27319 11COLLN69.0	27320 11COLLN 138 1	
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25.1	25.1	23	108.9	848	27319 11COLLN69.0	27320 11COLLN 138 1	
27023	11DELVIN	161 27045	11WI TAP	144.6	144.6	144.6	142	101.8	849	27322 11BLUELI69.0	27333 116676 T69.0	EQ
27044	11W IRVI	161 27045	11WI TAP	82.3	82.3	82.3	74	111.2	849	27322 11BLUELI69.0	27333 116676 T69.0	EQ
27161	11AIKEN	69.0 27253	11MIDDLT	144.1	144	144	143	100.8	849	27322 11BLUELI69.0	27333 116676 T69.0	EQ
29359	20HODGEN69.0	29419	20MAGNOL	22	22	22	19	115.6	849	27322 11BLUELI69.0	27333 116676 T69.0	EQ
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25.1	25.1	23	109.4	849	27322 11BLUELI69.0	27333 116676 T69.0	EQ

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency

Branch Violations

*** MUST 5.0 *** FRI, MAY 30 2003 14:26 ***
 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	**	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	**	**	Base Case
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	**	**	Base Case
27137	11RODBRN	138	27273	11RODBRN	35.1	35.1	33	106.5	**	**	Base Case
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	**	**	Base Case
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	**	**	Base Case
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	**	**	Base Case
27023	11DELVIN	161	27045	11WI TAP	143.9	143.5	142	101.3	1	29191	203M
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	1	29191	203M
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	1	29191	203M
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.3	1	29191	203M
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	1	29191	203M
27023	11DELVIN	161	27045	11WI TAP	144.1	143.5	142	101.5	2	29191	203M
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	2	29191	203M
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	2	29191	203M
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.5	2	29191	203M
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	2	29191	203M
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	3	29192	20ALBANY69.0
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	3	29192	20ALBANY69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	3	29192	20ALBANY69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	3	29192	20ALBANY69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	3	29192	20ALBANY69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	100.9	4	29192	20ALBANY69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	4	29192	20ALBANY69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	4	29192	20ALBANY69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22	21.7	19	115.6	4	29192	20ALBANY69.0
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25	23	108.9	4	29192	20ALBANY69.0
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.2	5	29194	20ALCAN 69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Neon	Contingency
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	82.2	74	111.1	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.1	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	5	29194 20ALCAN	69.0 29506 20PPG J 69.0 1
27023	11DELVIN 161 27045	11WI TAP	142.8	143.5	143.5	142	100.6	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
27044	11W IRVI 161 27045	11WI TAP	81.9	82.2	82.2	74	110.6	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.1	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	6	29194 20ALCAN	69.0 29614 20WBBEREA69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	82.2	74	111.1	7	29195 20ANNVLJ69.0	29307 20EBERLJ69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	7	29195 20ANNVLJ69.0	29307 20EBERLJ69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.2	7	29195 20ANNVLJ69.0	29307 20EBERLJ69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.7	7	29195 20ANNVLJ69.0	29307 20EBERLJ69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.4	143.5	143.5	142	101	8	29195 20ANNVLJ69.0	29603 20TYNER 69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	82.2	74	111	8	29195 20ANNVLJ69.0	29603 20TYNER 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	8	29195 20ANNVLJ69.0	29603 20TYNER 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.2	8	29195 20ANNVLJ69.0	29603 20TYNER 69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.7	8	29195 20ANNVLJ69.0	29603 20TYNER 69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.4	143.5	143.5	142	101	9	29196 20ARGTM	138 29198 20ARGTM 69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	82.2	74	111	9	29196 20ARGTM	138 29198 20ARGTM 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	9	29196 20ARGTM	138 29198 20ARGTM 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.1	9	29196 20ARGTM	138 29198 20ARGTM 69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	9	29196 20ARGTM	138 29198 20ARGTM 69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.3	143.5	143.5	142	100.9	10	29196 20ARGTM	138 29198 20ARGTM 69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	82.2	74	111	10	29196 20ARGTM	138 29198 20ARGTM 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	10	29196 20ARGTM	138 29198 20ARGTM 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.1	10	29196 20ARGTM	138 29198 20ARGTM 69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	10	29196 20ARGTM	138 29198 20ARGTM 69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.3	143.5	143.5	142	100.9	11	29198 20ARGTM	69.0 29624 20WARNCK69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	82.2	74	111	11	29198 20ARGTM	69.0 29624 20WARNCK69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	11	29198 20ARGTM	69.0 29624 20WARNCK69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.1	11	29198 20ARGTM	69.0 29624 20WARNCK69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	11	29198 20ARGTM	69.0 29624 20WARNCK69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.2	143.5	143.5	142	100.8	12	29199 20ASAHJ69.0	29544 20SHOPVL69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	82.2	74	111	12	29199 20ASAHJ69.0	29544 20SHOPVL69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	12	29199 20ASAHJ69.0	29544 20SHOPVL69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114	12	29199 20ASAHJ69.0	29544 20SHOPVL69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	12	29199 20ASAHJ69.0	29544 20SHOPVL69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.6	143.5	143.5	142	101.1	13	29199 20ASAHJ69.0	29623 20WALNUT69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	82.2	74	111	13	29199 20ASAHJ69.0	29623 20WALNUT69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	144	143	100.7	13	29199 20ASAHJ69.0	29623 20WALNUT69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	21.7	19	114.1	13	29199 20ASAHJ69.0	29623 20WALNUT69.0 1
29411	20LILYJT69.0 29634	20WOODLN	25	25	25	23	108.8	13	29199 20ASAHJ69.0	29623 20WALNUT69.0 1
27023	11DELVIN 161 27045	11WI TAP	82.5	82.2	82.2	74	111.5	14	29200 20AVON	345 29202 20AVON 138 1
27044	11W IRVI 161 27045	11WI TAP	82.5	82.2	82.2	74	111.5	14	29200 20AVON	345 29202 20AVON 138 1
27161	11AIKEN 69.0 27253	11MIDDLT	145.9	144	144	143	102	14	29200 20AVON	345 29202 20AVON 138 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.1	14	29200	20AVON	
29411	20LILYJ69.0	29634	20WOODLN	27	25	23	117.3	14	29200	20AVON	
27044	11W IRVI	161	27045	11WI TAP	82.5	82.2	74	111.4	15	29200	20AVON
27051	11ADAMS	138	27148	11TYRONE	114.4	95.8	97	118	15	29200	20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	145.9	144	143	102	15	29200	20AVON
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.1	15	29200	20AVON	
29411	20LILYJ69.0	29634	20WOODLN	27	25	23	117.4	15	29200	20AVON	
27044	11W IRVI	161	27045	11WI TAP	81.8	82.2	74	110.6	16	29202	20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	16	29202	20AVON
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.4	16	29202	20AVON	
29411	20LILYJ69.0	29634	20WOODLN	25.8	25	23	112	16	29202	20AVON	
27023	11DELVIN	161	27045	11WI TAP	144.5	143.5	142	101.8	17	29202	20AVON
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	17	29202	20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	17	29202	20AVON
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	17	29202	20AVON	
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	17	29202	20AVON	
27023	11DELVIN	161	27045	11WI TAP	144.2	143.5	142	101.6	18	29202	20AVON
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	18	29202	20AVON
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	18	29202	20AVON
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	18	29202	20AVON	
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	18	29202	20AVON	
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	19	29203	20BKR
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	19	29203	20BKR
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	19	29203	20BKR
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	19	29203	20BKR	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	19	29203	20BKR	
27023	11DELVIN	161	27045	11WI TAP	144.6	143.5	142	101.8	20	29204	20BALLR
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.2	20	29204	20BALLR
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	20	29204	20BALLR
29326	20FRCKBJ69.0	29634	20WOODLN	27.2	19	23	118.2	20	29204	20BALLR	
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	19	111.4	20	29204	20BALLR	
29411	20LILYJ69.0	29634	20WOODLN	30.9	25	23	134.2	20	29204	20BALLR	
27023	11DELVIN	161	27045	11WI TAP	144.3	143.5	142	101.6	21	29204	20BALLR
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.1	21	29204	20BALLR
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	21	29204	20BALLR
29326	20FRCKBJ69.0	29634	20WOODLN	23.9	19	23	104.1	21	29204	20BALLR	
29359	20HODGEN69.0	29419	20MAGNOL	21.3	21.7	19	112.2	21	29204	20BALLR	
29411	20LILYJ69.0	29634	20WOODLN	29.3	25	23	127.6	21	29204	20BALLR	
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	22	29206	20BANKLK
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	22	29206	20BANKLK
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.7	22	29206	20BANKLK
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	22	29206	20BANKLK	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	22	29206	20BANKLK	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	23	29207	20BARDSJ
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	23	29207	20BARDSJ

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	23	29207	20BARSDJ69.0	29303	20E	BARD69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.3	23	29207	20BARSDJ69.0	29303	20E	BARD69.0	1
29411	20LILYJ69.0	29634	20WOODLN	23.2	25	23	100.8	23	29207	20BARSDJ69.0	29303	20E	BARD69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	24	29207	20BARSDJ69.0	29610	20WBARDJ69.0	1	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	24	29207	20BARSDJ69.0	29610	20WBARDJ69.0	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	24	29207	20BARSDJ69.0	29610	20WBARDJ69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113	24	29207	20BARSDJ69.0	29610	20WBARDJ69.0	1	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
29219	20FOX HO69.0	29482	20PATRJ	72.3	30.8	72	100.4	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	19	111.4	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
29571	20STEPHN69.0	29606	20UPTONJ	21.4	12.7	19	112.7	25	29208	20BARREN 161	29210	20BARREN69.0	1	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
29219	20FOX HO69.0	29482	20PATRJ	72.3	30.8	72	100.4	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.1	21.7	19	111.3	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
29571	20STEPHN69.0	29606	20UPTONJ	21.5	12.7	19	112.9	26	29208	20BARREN 161	29583	20SSHADE 161	1	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	27	29210	20BARREN69.0	29259	20CAVEJ69.0	1	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	27	29210	20BARREN69.0	29259	20CAVEJ69.0	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	27	29210	20BARREN69.0	29259	20CAVEJ69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.7	27	29210	20BARREN69.0	29259	20CAVEJ69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	27	29210	20BARREN69.0	29259	20CAVEJ69.0	1	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	28	29210	20BARREN69.0	29335	20GOODNT69.0	1	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	28	29210	20BARREN69.0	29335	20GOODNT69.0	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	28	29210	20BARREN69.0	29335	20GOODNT69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	22	21.7	19	115.9	28	29210	20BARREN69.0	29335	20GOODNT69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	28	29210	20BARREN69.0	29335	20GOODNT69.0	1	1
27023	11DELVIN 161	27045	11WI TAP	143.2	143.5	142	100.8	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
29227	20BONNIE69.0	29452	20MUNFVL	77.2	43.3	72	107.2	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21	21.7	19	110.6	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	23	108	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
29452	20MUNFVL69.0	29454	20MUNFKU	59.5	29.4	54	110.1	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
29571	20STEPHN69.0	29606	20UPTONJ	24.4	12.7	19	128.2	29	29210	20BARREN69.0	29363	20HCAVKU69.0	1	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	30	29211	20BASS 69.0	29258	20CASEYC69.0	1	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	30	29211	20BASS 69.0	29258	20CASEYC69.0	1	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	30	29211	20BASS 69.0	29258	20CASEYC69.0	1	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.7	30	29211	20BASS 69.0	29258	20CASEYC69.0	1	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	30	29211	20BASS 69.0	29258	20CASEYC69.0	1	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	31	29211	20BASS 69.0	29280	20CRESTN69.0	1	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	31	29211	20BASS	69.0	29280	20CRESTN69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	31	29211	20BASS	69.0	29280	20CRESTN69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	21.6	21.7	19	113.9	31	29211	20BASS	69.0	29280	20CRESTN69.0	1
29411	20LILYTJ69.0 29634	20WOODLN	24.9	25	23	108.5	31	29211	20BASS	69.0	29280	20CRESTN69.0	1
27023	11DELVIN 161 27045	11WI TAP	143.2	143.5	142	100.9	32	29212	20BEAM	J69.0	29250	20BLIT C69.0	1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	32	29212	20BEAM	J69.0	29250	20BLIT C69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144.3	144	143	100.9	32	29212	20BEAM	J69.0	29250	20BLIT C69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	20.9	21.7	19	110.4	33	29212	20BEAM	J69.0	29542	20SHEPPVJ69.0	1
27023	11DELVIN 161 27045	11WI TAP	143.3	143.5	142	100.9	33	29212	20BEAM	J69.0	29542	20SHEPPVJ69.0	1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	33	29212	20BEAM	J69.0	29542	20SHEPPVJ69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144.3	144	143	100.9	33	29212	20BEAM	J69.0	29542	20SHEPPVJ69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	21	21.7	19	110.4	33	29212	20BEAM	J69.0	29542	20SHEPPVJ69.0	1
29411	20LILYTJ69.0 29634	20WOODLN	23	25	23	100.1	33	29212	20BEAM	J69.0	29542	20SHEPPVJ69.0	1
27023	11DELVIN 161 27045	11WI TAP	142.5	143.5	142	100.3	34	29214	20BTYV	D69.0	29216	20BEATTY69.0	1
27044	11W IRVI 161 27045	11WI TAP	82.9	82.2	74	112.1	34	29214	20BTYV	D69.0	29216	20BEATTY69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	34	29214	20BTYV	D69.0	29216	20BEATTY69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.2	34	29214	20BTYV	D69.0	29216	20BEATTY69.0	1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.6	34	29214	20BTYV	D69.0	29216	20BEATTY69.0	1
27044	11W IRVI 161 27045	11WI TAP	75.8	82.2	74	102.5	35	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	35	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114	35	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.9	35	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
27023	11DELVIN 161 27045	11WI TAP	170.8	143.5	142	120.3	36	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
27044	11W IRVI 161 27045	11WI TAP	85.8	82.2	74	115.9	36	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	36	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	21.8	21.7	19	114.7	36	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
29411	20LILYTJ69.0 29634	20WOODLN	24.9	25	23	108.1	36	29215	20BTYV	D69.0	29216	20BEATTY69.0	1
27023	11DELVIN 161 27045	11WI TAP	145.2	143.5	142	102.3	37	29216	20BEATTY69.0	29472	200AKD J69.0	1	
27044	11W IRVI 161 27045	11WI TAP	84.6	82.2	74	114.3	37	29216	20BEATTY69.0	29472	200AKD J69.0	1	
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	37	29216	20BEATTY69.0	29472	200AKD J69.0	1	
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.2	37	29216	20BEATTY69.0	29472	200AKD J69.0	1	
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.7	37	29216	20BEATTY69.0	29472	200AKD J69.0	1	
27023	11DELVIN 161 27045	11WI TAP	143.2	143.5	142	100.8	38	29216	20BEATTY69.0	29638	20ZACHAR69.0	1	
27044	11W IRVI 161 27045	11WI TAP	82.5	82.2	74	111.4	38	29216	20BEATTY69.0	29638	20ZACHAR69.0	1	
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	38	29216	20BEATTY69.0	29638	20ZACHAR69.0	1	
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	38	29216	20BEATTY69.0	29638	20ZACHAR69.0	1	
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.8	38	29216	20BEATTY69.0	29638	20ZACHAR69.0	1	
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101.1	39	29219	20FOX	HO69.0	29336	20GORINJ69.0	1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	39	29219	20FOX	HO69.0	29336	20GORINJ69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	39	29219	20FOX	HO69.0	29336	20GORINJ69.0	1
29359	20HODGEN69.0 29419	20MAGNOL	21.9	21.7	19	115	39	29219	20FOX	HO69.0	29336	20GORINJ69.0	1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.8	39	29219	20FOX	HO69.0	29336	20GORINJ69.0	1
27023	11DELVIN 161 27045	11WI TAP	143.3	143.5	142	100.9	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	74	111	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1
27161	11AIKEN 69.0 27253	11MIDDLT	143.9	144	143	100.7	40	29219	20FOX	HO69.0	29480	20PARKWY69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL	21.1	21.7	19	111	40	29219	20FOX HO69.0	29480	20PARKWY69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	24.8	25	23	107.9	40	29219	20FOX HO69.0	29480	20PARKWY69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	41	29219	20FOX HO69.0	29482	20PATRJR69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	41	29219	20FOX HO69.0	29482	20PATRJR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	41	29219	20FOX HO69.0	29482	20PATRJR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.1	21.7	19	110.8	41	29219	20FOX HO69.0	29482	20PATRJR69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	24.9	25	23	108.4	41	29219	20FOX HO69.0	29482	20PATRJR69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	25	25	23	108.8	42	29220	20BERLIN69.0	29243	20BRACKN69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	43	29222	20BIGB J69.0	29230	20BOONE 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	43	29222	20BIGB J69.0	29230	20BOONE 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	43	29222	20BIGB J69.0	29230	20BOONE 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	43	29222	20BIGB J69.0	29230	20BOONE 69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	25	25	23	108.7	43	29222	20BIGB J69.0	29230	20BOONE 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	44	29222	20BIGB J69.0	29455	20MUNK 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	44	29222	20BIGB J69.0	29455	20MUNK 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	44	29222	20BIGB J69.0	29455	20MUNK 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	44	29222	20BIGB J69.0	29455	20MUNK 69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	25	25	23	108.8	44	29222	20BIGB J69.0	29455	20MUNK 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	45	29223	20BWELLS69.0	29224	20BWELLSJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	45	29223	20BWELLS69.0	29224	20BWELLSJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	45	29223	20BWELLS69.0	29224	20BWELLSJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	45	29223	20BWELLS69.0	29224	20BWELLSJ69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	25	25	23	108.7	45	29223	20BWELLS69.0	29224	20BWELLSJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	142	101.2	46	29224	20BWELLSJ69.0	29380	20JNYWLJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	74	110.7	46	29224	20BWELLSJ69.0	29380	20JNYWLJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	46	29224	20BWELLSJ69.0	29380	20JNYWLJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	46	29224	20BWELLSJ69.0	29380	20JNYWLJ69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	25.1	25	23	109	46	29224	20BWELLSJ69.0	29380	20JNYWLJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	47	29224	20BWELLSJ69.0	29442	20MDLCKJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	47	29224	20BWELLSJ69.0	29442	20MDLCKJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	47	29224	20BWELLSJ69.0	29442	20MDLCKJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	47	29224	20BWELLSJ69.0	29442	20MDLCKJ69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	25	25	23	108.8	47	29224	20BWELLSJ69.0	29442	20MDLCKJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	143	100.6	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1
29326	20FRCKBJ69.0	29634	20WOODLN	23.4	19	23	101.5	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.3	21.7	19	112.2	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1
29411	20LILYTYJ69.0	29634	20WOODLN	30.8	25	23	134	48	29226	20BLMFLD69.0	29262	20CHAPLJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	49	29226	20BLMFLD69.0	29459	20N SPR 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	49	29226	20BLMFLD69.0	29459	20N SPR 69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	49	29226	20BLMFLD69.0	29459	20N SPR 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.5	49	29226	20BLMFLD69.0	29459	20N SPR 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	26.3	25	23	114.5	49	29226	20BLMFLD69.0	29459	20N SPR 69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.1	143.5	142	101.5	50	29227	20BONNIE69.0	29452	20MUNFVL69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	50	29227	20BONNIE69.0	29452	20MUNFVL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	50	29227	20BONNIE69.0	29452	20MUNFVL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	23.2	21.7	19	122.1	50	29227	20BONNIE69.0	29452	20MUNFVL69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	50	29227	20BONNIE69.0	29452	20MUNFVL69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	51	29227	20BONNIE69.0	29606	20UPTONJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	51	29227	20BONNIE69.0	29606	20UPTONJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	51	29227	20BONNIE69.0	29606	20UPTONJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	22.1	21.7	19	116.5	51	29227	20BONNIE69.0	29606	20UPTONJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.4	51	29227	20BONNIE69.0	29606	20UPTONJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	52	29228	20BOONE 138	29230	20BOONE 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	52	29228	20BOONE 138	29230	20BOONE 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	52	29228	20BOONE 138	29230	20BOONE 69.0	1
29302	20DURO J69.0	29572	20SERKJ1	105.7	48.2	72	146.8	52	29228	20BOONE 138	29230	20BOONE 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	52	29228	20BOONE 138	29230	20BOONE 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	52	29228	20BOONE 138	29230	20BOONE 69.0	1
29572	20SPRJK169.0	29576	20SPARK	121.7	63.6	72	169.1	52	29228	20BOONE 138	29230	20BOONE 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	53	29228	20BOONE 138	29328	20GALTN 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	53	29228	20BOONE 138	29328	20GALTN 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.6	144	143	100.4	53	29228	20BOONE 138	29328	20GALTN 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.6	53	29228	20BOONE 138	29328	20GALTN 138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.1	53	29228	20BOONE 138	29328	20GALTN 138	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	54	29228	20BOONE 138	29512	20RENAKR 138	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	54	29228	20BOONE 138	29512	20RENAKR 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	54	29228	20BOONE 138	29512	20RENAKR 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	54	29228	20BOONE 138	29512	20RENAKR 138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	54	29228	20BOONE 138	29512	20RENAKR 138	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	55	29228	20BOONE 138	29575	20S PARK 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	55	29228	20BOONE 138	29575	20S PARK 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	55	29228	20BOONE 138	29575	20S PARK 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	55	29228	20BOONE 138	29575	20S PARK 138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	55	29228	20BOONE 138	29575	20S PARK 138	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	56	29230	20BOONE 69.0	29299	20DEVON 69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	56	29230	20BOONE 69.0	29299	20DEVON 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	56	29230	20BOONE 69.0	29299	20DEVON 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	56	29230	20BOONE 69.0	29299	20DEVON 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	56	29230	20BOONE 69.0	29299	20DEVON 69.0	1
29572	20SPRJK169.0	29576	20SPARK	73.5	63.6	72	102.1	56	29230	20BOONE 69.0	29299	20DEVON 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	57	29231	20BOONST 138	29235	20BOONSB 138	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	57	29231	20BOONST 138	29235	20BOONSB 138	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.7	57	29231	20BOONST 138	29235	20BOONSB 138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	57	29231	20BOONST 138	29235	20BOONSB 138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency					
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.1	57	29231	20BOONST	138	29235	20BOONSB	138	1
27023	11DELVIN	161	27045	11WI TAP	145.4	142	102.4	58	29231	20BOONST	138	29286	20DALE	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111.1	58	29231	20BOONST	138	29286	20DALE	138	1
27051	11ADAMS	138	27148	11TYRONE	98.2	97	101.2	58	29231	20BOONST	138	29286	20DALE	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	143	100.8	58	29231	20BOONST	138	29286	20DALE	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	58	29231	20BOONST	138	29286	20DALE	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	58	29232	20BOONST	138	29286	20DALE	138	1
27023	11DELVIN	161	27045	11WI TAP	142.7	142	100.5	59	29232	20BOONST	138	29234	20BOONVJ69.0	138	1
27044	11W IRVI	161	27045	11WI TAP	82.5	74	111.4	59	29232	20BOONST	138	29234	20BOONVJ69.0	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	59	29232	20BOONST	138	29234	20BOONVJ69.0	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	59	29232	20BOONST	138	29234	20BOONVJ69.0	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	59	29232	20BOONST	138	29234	20BOONVJ69.0	138	1
27023	11DELVIN	161	27045	11WI TAP	144.6	142	101.8	60	29234	20BOONVJ69.0	29472	200AKD	J69.0	138	1
27044	11W IRVI	161	27045	11WI TAP	83.7	74	113.2	60	29234	20BOONVJ69.0	29472	200AKD	J69.0	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	60	29234	20BOONVJ69.0	29472	200AKD	J69.0	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	60	29234	20BOONVJ69.0	29472	200AKD	J69.0	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	60	29234	20BOONVJ69.0	29472	200AKD	J69.0	138	1
27023	11DELVIN	161	27045	11WI TAP	144	142	101.4	61	29234	20BOONVJ69.0	29530	20S FORK	69.0	138	1
27044	11W IRVI	161	27045	11WI TAP	82.9	74	112	61	29234	20BOONVJ69.0	29530	20S FORK	69.0	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	61	29234	20BOONVJ69.0	29530	20S FORK	69.0	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	61	29234	20BOONVJ69.0	29530	20S FORK	69.0	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	61	29234	20BOONVJ69.0	29530	20S FORK	69.0	138	1
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	62	29236	20BOSTNJ69.0	29272	20COLES	J69.0	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	62	29236	20BOSTNJ69.0	29272	20COLES	J69.0	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	143	100.7	62	29236	20BOSTNJ69.0	29272	20COLES	J69.0	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.6	62	29236	20BOSTNJ69.0	29272	20COLES	J69.0	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.6	25	23	111.3	62	29236	20BOSTNJ69.0	29272	20COLES	J69.0	138	1
27023	11DELVIN	161	27045	11WI TAP	143.5	142	101.1	63	29236	20BOSTNJ69.0	29462	20NELSON	69.0	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	63	29236	20BOSTNJ69.0	29462	20NELSON	69.0	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	143	100.7	63	29236	20BOSTNJ69.0	29462	20NELSON	69.0	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.6	63	29236	20BOSTNJ69.0	29462	20NELSON	69.0	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.6	25	23	111.3	63	29236	20BOSTNJ69.0	29462	20NELSON	69.0	138	1
27023	11DELVIN	161	27045	11WI TAP	144	142	101.4	64	29237	20BOUR T	138	29239	20BOURBN	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111.1	64	29237	20BOUR T	138	29239	20BOURBN	138	1
27051	11ADAMS	138	27148	11TYRONE	98.3	97	101.3	64	29237	20BOUR T	138	29239	20BOURBN	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	143	100.8	64	29237	20BOUR T	138	29239	20BOURBN	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	64	29237	20BOUR T	138	29239	20BOURBN	138	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	64	29237	20BOUR T	138	29239	20BOURBN	138	1
27023	11DELVIN	161	27045	11WI TAP	142.6	142	100.4	65	29237	20BOUR T	138	29374	20JACKVJ	138	1
27044	11W IRVI	161	27045	11WI TAP	82.1	74	111	65	29237	20BOUR T	138	29374	20JACKVJ	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	65	29237	20BOUR T	138	29374	20JACKVJ	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	65	29237	20BOUR T	138	29374	20JACKVJ	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.2	65	29237	20BOUR T	138	29374	20JACKVJ	138	1
27023	11DELVIN	161	27045	11WI TAP	143.4	142	101	66	29238	20BOSTKU69.0	29403	20LEBAN	J69.0	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	74	111	66	29238	20BOSTKU69.0	29403	20LEBAN	J69.0	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Neon	Contingency			
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	66	29238	20BOSTKU69.0	29403	20LEBANJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.3	21.7	19	112	66	29238	20BOSTKU69.0	29403	20LEBANJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	23.8	25	23	103.6	66	29238	20BOSTKU69.0	29403	20LEBANJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	67	29238	20BOSTKU69.0	29635	20WOOSLY69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	67	29238	20BOSTKU69.0	29635	20WOOSLY69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	67	29238	20BOSTKU69.0	29635	20WOOSLY69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.4	67	29238	20BOSTKU69.0	29635	20WOOSLY69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.6	25	23	107	67	29238	20BOSTKU69.0	29635	20WOOSLY69.0	1
27023	11DELVIN 161	27045	11WI TAP	144.6	143.5	142	101.8	68	29240	20BOURNE69.0	29464	20NEWBY269.0	1
27044	11W IRVI 161	27045	11WI TAP	82.3	82.2	74	111.2	68	29240	20BOURNE69.0	29464	20NEWBY269.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	143	100.8	68	29240	20BOURNE69.0	29464	20NEWBY269.0	1
29326	20FRCKBJ69.0	29634	20WOODLN	27.2	19	23	118.1	68	29240	20BOURNE69.0	29464	20NEWBY269.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.2	21.7	19	111.4	68	29240	20BOURNE69.0	29464	20NEWBY269.0	1
29411	20LILYJ69.0	29634	20WOODLN	30.9	25	23	134.3	68	29240	20BOURNE69.0	29464	20NEWBY269.0	1
27023	11DELVIN 161	27045	11WI TAP	145.8	143.5	142	102.7	69	29242	20BOWEN 69.0	29503	20POWELL69.0	1
27044	11W IRVI 161	27045	11WI TAP	79.9	82.2	74	108	69	29242	20BOWEN 69.0	29503	20POWELL69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	69	29242	20BOWEN 69.0	29503	20POWELL69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	69	29242	20BOWEN 69.0	29503	20POWELL69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.1	69	29242	20BOWEN 69.0	29503	20POWELL69.0	1
27023	11DELVIN 161	27045	11WI TAP	145.4	143.5	142	102.4	70	29242	20BOWEN 69.0	29536	20SANDLK69.0	1
27044	11W IRVI 161	27045	11WI TAP	80.2	82.2	74	108.4	70	29242	20BOWEN 69.0	29536	20SANDLK69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	70	29242	20BOWEN 69.0	29536	20SANDLK69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	70	29242	20BOWEN 69.0	29536	20SANDLK69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.2	70	29242	20BOWEN 69.0	29536	20SANDLK69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	71	29243	20BRACKN69.0	29323	20FOAKJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	71	29243	20BRACKN69.0	29323	20FOAKJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	71	29243	20BRACKN69.0	29323	20FOAKJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	71	29243	20BRACKN69.0	29323	20FOAKJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.9	71	29243	20BRACKN69.0	29323	20FOAKJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	72	29243	20BRACKN69.0	29347	20GRIFFFJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	72	29243	20BRACKN69.0	29347	20GRIFFFJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	72	29243	20BRACKN69.0	29347	20GRIFFFJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	72	29243	20BRACKN69.0	29347	20GRIFFFJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	72	29243	20BRACKN69.0	29347	20GRIFFFJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	73	29244	20BRISTW69.0	29302	20DURO J69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	73	29244	20BRISTW69.0	29302	20DURO J69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	73	29244	20BRISTW69.0	29302	20DURO J69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	73	29244	20BRISTW69.0	29302	20DURO J69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	73	29244	20BRISTW69.0	29302	20DURO J69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	74	29244	20BRISTW69.0	29600	20TRKYFJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	74	29244	20BRISTW69.0	29600	20TRKYFJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	74	29244	20BRISTW69.0	29600	20TRKYFJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	74	29244	20BRISTW69.0	29600	20TRKYFJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	74	29244	20BRISTW69.0	29600	20TRKYFJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	75	29244	20BRISTW69.0	29600	20TRKYFJ69.0	2

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Neon	Contingency	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	75	29244 20BRISTW69.0	29600 20TRKYFJ69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	75	29244 20BRISTW69.0	29600 20TRKYFJ69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	75	29244 20BRISTW69.0	29600 20TRKYFJ69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	75	29244 20BRISTW69.0	29600 20TRKYFJ69.0
27023	11BELVIN	161	27045	11WI TAP	144.6	143.5	142	101.8	76	29246 20BRODHD69.0	29424 20MARETJ69.0
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	76	29246 20BRODHD69.0	29424 20MARETJ69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	76	29246 20BRODHD69.0	29424 20MARETJ69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.6	76	29246 20BRODHD69.0	29424 20MARETJ69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	76	29246 20BRODHD69.0	29424 20MARETJ69.0
27023	11BELVIN	161	27045	11WI TAP	145.5	143.5	142	102.5	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
27044	11W IRVI	161	27045	11WI TAP	82.6	82.2	74	111.6	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.9	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	77	29246 20BRODHD69.0	29595 20THLNKJ69.0
27023	11BELVIN	161	27045	11WI TAP	143.4	143.5	142	101	78	29247 20BRONSJ69.0	29276 20COOPER69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	78	29247 20BRONSJ69.0	29276 20COOPER69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	78	29247 20BRONSJ69.0	29276 20COOPER69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	78	29247 20BRONSJ69.0	29276 20COOPER69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.7	78	29247 20BRONSJ69.0	29276 20COOPER69.0
27023	11BELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	79	29247 20BRONSJ69.0	29298 20DENNY 69.0
27023	11BELVIN	161	27045	11WI TAP	143	143.5	142	100.7	80	29248 20BLIT C	161 29250 20BLIT C69.0
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	80	29248 20BLIT C	161 29250 20BLIT C69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144.6	144	143	101.1	80	29248 20BLIT C	161 29250 20BLIT C69.0
29359	20HODGEN	69.0	29419	20MAGNOL	20.4	21.7	19	107.1	80	29248 20BLIT C	161 29250 20BLIT C69.0
27023	11BELVIN	161	27045	11WI TAP	143.9	143.5	142	101.3	81	29248 20BLIT C	161 29294 20DARWJ 161
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	81	29248 20BLIT C	161 29294 20DARWJ 161
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	81	29248 20BLIT C	161 29294 20DARWJ 161
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.6	81	29248 20BLIT C	161 29294 20DARWJ 161
29411	20LILYJTJ69.0	29634	20WOODLN	25.4	25	23	23	110.5	81	29248 20BLIT C	161 29294 20DARWJ 161
27023	11BELVIN	161	27045	11WI TAP	144.7	143.5	142	101.9	82	29248 20BLIT C	161 29586 20SSSHADT 161
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.2	82	29248 20BLIT C	161 29586 20SSSHADT 161
27161	11AIKEN	69.0	27253	11MIDDLT	144.5	144	143	101	82	29248 20BLIT C	161 29586 20SSSHADT 161
29359	20HODGEN	69.0	29419	20MAGNOL	23.9	21.7	19	125.8	82	29248 20BLIT C	161 29586 20SSSHADT 161
29411	20LILYJTJ69.0	29634	20WOODLN	26.7	25	23	23	116.2	82	29248 20BLIT C	161 29586 20SSSHADT 161
27023	11BELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.9	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
29411	20LILYJTJ69.0	29634	20WOODLN	25.5	25	23	23	110.9	83	29250 20BLIT C69.0	29260 20CEDRGR69.0
27023	11BELVIN	161	27045	11WI TAP	143.6	143.5	142	101.1	84	29251 20BURKSJ69.0	29559 20SNOWJ 69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	84	29251 20BURKSJ69.0	29559 20SNOWJ 69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	84	29251 20BURKSJ69.0	29559	20SNOWJ 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.7	19	113.5	84	29251 20BURKSJ69.0	29559	20SNOWJ 69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	84	29251 20BURKSJ69.0	29559	20SNOWJ 69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	143.5	142	101.1	85	29251 20BURKSJ69.0	29584	20SSHADE69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	85	29251 20BURKSJ69.0	29584	20SSHADE69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	85	29251 20BURKSJ69.0	29584	20SSHADE69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.7	19	113.5	85	29251 20BURKSJ69.0	29584	20SSHADE69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	85	29251 20BURKSJ69.0	29584	20SSHADE69.0	1
27044	11W IRVI 161	27045	11WI TAP	81.9	82.2	82.2	74	110.7	86	29252 20CABN H69.0	29471	20NORWDJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	86	29252 20CABN H69.0	29471	20NORWDJ69.0	1
29246	20BRODHD69.0	29595	20THLNKJ	58.2	23.2	23.2	54	107.7	86	29252 20CABN H69.0	29471	20NORWDJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	21.7	19	113.3	86	29252 20CABN H69.0	29471	20NORWDJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25	23	108.9	86	29252 20CABN H69.0	29471	20NORWDJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.4	82.2	82.2	74	111.4	87	29252 20CABN H69.0	29555	20SOMERS69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144.1	144	144	143	100.8	87	29252 20CABN H69.0	29555	20SOMERS69.0	1
29246	20BRODHD69.0	29424	20MARETJ	70.2	14.3	14.3	69	101.8	87	29252 20CABN H69.0	29555	20SOMERS69.0	1
29359	20HODGEN69.0	29595	20THLNKJ	84	23.2	23.2	54	155.6	87	29252 20CABN H69.0	29555	20SOMERS69.0	1
29411	20LILYJ69.0	29634	20WOODLN	21.5	21.7	21.7	19	113	87	29252 20CABN H69.0	29555	20SOMERS69.0	1
27023	11DELVIN 161	27045	11WI TAP	142.3	143.5	143.5	142	100.2	88	29254 20CAMPNTN69.0	29352	20HELCHW69.0	1
27044	11W IRVI 161	27045	11WI TAP	83	82.2	82.2	74	112.2	88	29254 20CAMPNTN69.0	29352	20HELCHW69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	88	29254 20CAMPNTN69.0	29352	20HELCHW69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114	88	29254 20CAMPNTN69.0	29352	20HELCHW69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	25	23	108.3	88	29254 20CAMPNTN69.0	29352	20HELCHW69.0	1
27044	11W IRVI 161	27045	11WI TAP	83.4	82.2	82.2	74	112.7	89	29254 20CAMPNTN69.0	29638	20ZACHAR69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	144	143	100.7	89	29254 20CAMPNTN69.0	29638	20ZACHAR69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114	89	29254 20CAMPNTN69.0	29638	20ZACHAR69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	25	23	108.1	89	29254 20CAMPNTN69.0	29638	20ZACHAR69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	90	29255 20CARTCJ69.0	29479	20PCTLSJ69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	90	29255 20CARTCJ69.0	29479	20PCTLSJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	90	29255 20CARTCJ69.0	29479	20PCTLSJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	90	29255 20CARTCJ69.0	29479	20PCTLSJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	90	29255 20CARTCJ69.0	29479	20PCTLSJ69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	143.5	142	101	91	29255 20CARTCJ69.0	29624	20WARNCK69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	82.2	74	111	91	29255 20CARTCJ69.0	29624	20WARNCK69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	91	29255 20CARTCJ69.0	29624	20WARNCK69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	91	29255 20CARTCJ69.0	29624	20WARNCK69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.9	91	29255 20CARTCJ69.0	29624	20WARNCK69.0	1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	143.5	142	101.1	92	29256 20CASEYC 161	29258	20CASEY69.0	1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	82.2	74	111.1	92	29256 20CASEYC 161	29258	20CASEY69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	144	143	100.7	92	29256 20CASEYC 161	29258	20CASEY69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	21.7	19	113.1	92	29256 20CASEYC 161	29258	20CASEY69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	25	23	107.8	92	29256 20CASEYC 161	29258	20CASEY69.0	1
27023	11DELVIN 161	27045	11WI TAP	142.9	143.5	143.5	142	100.6	93	29256 20CASEYC 161	29408	20LIBERT 161	1
27044	11W IRVI 161	27045	11WI TAP	82	82.2	82.2	74	110.9	93	29256 20CASEYC 161	29408	20LIBERT 161	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	93	29256	20CASEYC	161	29408	20LIBERT	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.7	93	29256	20CASEYC	161	29408	20LIBERT	161	1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	23	109.3	93	29256	20CASEYC	161	29408	20LIBERT	161	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	94	29256	20CASEYC	161	29428	20MARION	161	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	94	29256	20CASEYC	161	29428	20MARION	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	94	29256	20CASEYC	161	29428	20MARION	161	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.2	21.7	19	111.5	94	29256	20CASEYC	161	29428	20MARION	161	1
29411	20LILYJTJ69.0	29634	20WOODLN	24.3	25	23	23	105.8	94	29256	20CASEYC	161	29428	20MARION	161	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	95	29258	20CASEYC	69.0	29488	20PEYTON	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	95	29258	20CASEYC	69.0	29488	20PEYTON	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	95	29258	20CASEYC	69.0	29488	20PEYTON	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.8	95	29258	20CASEYC	69.0	29488	20PEYTON	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.5	95	29258	20CASEYC	69.0	29488	20PEYTON	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.1	96	29262	20CHAPLJ69.0	0	29547	20SINAI	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	96	29262	20CHAPLJ69.0	0	29547	20SINAI	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.8	144	143	100.6	96	29262	20CHAPLJ69.0	0	29547	20SINAI	69.0	1
29326	20FRCKBJ69.0	29634	20WOODLN	23.9	19	23	23	103.8	96	29262	20CHAPLJ69.0	0	29547	20SINAI	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.3	21.7	19	112.1	96	29262	20CHAPLJ69.0	0	29547	20SINAI	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	31	25	23	23	134.9	96	29262	20CHARTR69.0	0	29332	20GODDRD	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	97	29263	20CHARTR69.0	0	29332	20GODDRD	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	97	29263	20CHARTR69.0	0	29332	20GODDRD	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	97	29263	20CHARTR69.0	0	29332	20GODDRD	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	97	29263	20CHARTR69.0	0	29332	20GODDRD	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.8	97	29263	20CHARTR69.0	0	29332	20GODDRD	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	98	29263	20CHARTR69.0	0	29508	20RECTVL	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	98	29263	20CHARTR69.0	0	29508	20RECTVL	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	98	29263	20CHARTR69.0	0	29508	20RECTVL	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	98	29263	20CHARTR69.0	0	29508	20RECTVL	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.9	98	29263	20CHARTR69.0	0	29508	20RECTVL	69.0	1
27023	11DELVIN	161	27045	11WI TAP	144.8	143.5	142	102	99	29264	20CLAYCJ69.0	0	29350	20HARGTJ	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	99	29264	20CLAYCJ69.0	0	29350	20HARGTJ	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	99	29264	20CLAYCJ69.0	0	29350	20HARGTJ	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	99	29264	20CLAYCJ69.0	0	29350	20HARGTJ	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	24.7	25	23	23	107.4	99	29264	20CLAYCJ69.0	0	29350	20HARGTJ	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	100	29264	20CLAYCJ69.0	0	29570	20STANTN	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	100	29264	20CLAYCJ69.0	0	29570	20STANTN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	100	29264	20CLAYCJ69.0	0	29570	20STANTN	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	100	29264	20CLAYCJ69.0	0	29570	20STANTN	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	24.9	25	23	23	108.3	100	29264	20CLAYCJ69.0	0	29570	20STANTN	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	101	29266	20CLAY V69.0	0	29466	20NCASSTL	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	101	29266	20CLAY V69.0	0	29466	20NCASSTL	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.6	144	143	101.1	101	29266	20CLAY V69.0	0	29466	20NCASSTL	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	101	29266	20CLAY V69.0	0	29466	20NCASSTL	69.0	1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	23	108.7	101	29266	20CLAY V69.0	0	29466	20NCASSTL	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	102	29267	20CMFVPU	161	29430	20MAR IJ	161	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency		
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	102	29267	20CMPVPJ	161	29430	20MAR IJ 161 1	
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.6	102	29267	20CMPVPJ	161	29430	20MAR IJ 161 1	
29359	20HODGEN69.0 29419 20MAGNOL	25	21.7	19	131.5	102	29267	20CMPVPJ	161	29430	20MAR IJ 161 1	
29411	20LILYJTJ69.0 29634 20WOODLN	24.4	25	23	106.2	102	29267	20CMPVPJ	161	29430	20MAR IJ 161 1	
27023	11DELVIN 161 27045 11WI TAP	143.6	143.5	142	101.1	103	29267	20CMPVPJ	161	29587	20TAYCTP 161 1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	103	29267	20CMPVPJ	161	29587	20TAYCTP 161 1	
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	100.7	103	29267	20CMPVPJ	161	29587	20TAYCTP 161 1	
29359	20HODGEN69.0 29419 20MAGNOL	23.4	21.7	19	123.4	103	29267	20CMPVPJ	161	29587	20TAYCTP 161 1	
29411	20LILYJTJ69.0 29634 20WOODLN	24.7	25	23	107.4	103	29267	20CMPVPJ	161	29587	20TAYCTP 161 1	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	104	29268	20COBURG69.0	29270	20COBURJ69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	104	29268	20COBURG69.0	29270	20COBURJ69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.5	21.7	19	113.4	104	29268	20COBURG69.0	29270	20COBURJ69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25	23	108.5	104	29268	20COBURG69.0	29270	20COBURJ69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.3	143.5	142	100.9	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.9	21.7	19	115	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25	23	108.7	105	29270	20COBURJ69.0	29274	20COLUMB69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.3	143.5	142	100.9	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	22	21.7	19	115.6	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25	23	108.6	106	29270	20COBURJ69.0	29538	20SEWLTJ69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	101	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25	23	108.8	107	29271	20COLMSV69.0	29323	20F OAKJ69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	111	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	114.1	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25	23	108.8	108	29271	20COLMSV69.0	29514	20RENAKR69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101.1	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	113.9	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25.3	25	23	110.1	109	29272	20COLESJ69.0	29415	20LYMANJ69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143.8	143.5	142	101.3	110	29274	20COLMB69.0	29618	20WCOLMJ69.0	1	
27044	11W IRVI 161 27045 11WI TAP	82.3	82.2	74	111.2	110	29274	20COLMB69.0	29618	20WCOLMJ69.0	1	
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	110	29274	20COLMB69.0	29618	20WCOLMJ69.0	1	
29359	20HODGEN69.0 29419 20MAGNOL	21.5	21.7	19	113	110	29274	20COLMB69.0	29618	20WCOLMJ69.0	1	
29411	20LILYJTJ69.0 29634 20WOODLN	25	25	23	108.8	110	29274	20COLMB69.0	29618	20WCOLMJ69.0	1	
27023	11DELVIN 161 27045 11WI TAP	143	143.5	142	100.7	111	29275	20COOPER	161	29276	20COOPER69.0	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency	
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	74	111	29275	20COOPER	161	29276	20COOPER69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29275	20COOPER	161	29276	20COOPER69.0 1
27200	11LELHU 69.0 27210	11FERG S	87.2	41.2	79	110.4	29275	20COOPER	161	29276	20COOPER69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114	29275	20COOPER	161	29276	20COOPER69.0 1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.6	29275	20COOPER	161	29276	20COOPER69.0 1
27023	11DELVIN 161 27045	11WI TAP	143	143.5	142	100.7	29275	20COOPER	161	29296	20DENNY 161 1
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	74	111	29275	20COOPER	161	29296	20DENNY 161 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29275	20COOPER	161	29296	20DENNY 161 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.4	29275	20COOPER	161	29296	20DENNY 161 1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.6	29275	20COOPER	161	29296	20DENNY 161 1
27023	11DELVIN 161 27045	11WI TAP	162.4	143.5	142	114.4	29275	20COOPER	161	29400	20LAURLD 161 1
27044	11W IRVI 161 27045	11WI TAP	86.5	82.2	74	116.9	29275	20COOPER	161	29400	20LAURLD 161 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.7	29275	20COOPER	161	29400	20LAURLD 161 1
29359	20HODGEN69.0 29419	20MAGNOL	21.1	21.7	19	110.9	29275	20COOPER	161	29400	20LAURLD 161 1
29411	20LILYTJ69.0 29634	20WOODLN	24.9	25	23	108.1	29275	20COOPER	161	29400	20LAURLD 161 1
27044	11W IRVI 161 27045	11WI TAP	81.9	82.2	74	110.7	29275	20COOPER	161	29408	20LIBERT 161 1
27161	11AIKEN 69.0 27253	11MIDDLT	144.1	144	143	100.8	29275	20COOPER	161	29408	20LIBERT 161 1
29359	20HODGEN69.0 29419	20MAGNOL	22.4	21.7	19	117.8	29275	20COOPER	161	29408	20LIBERT 161 1
29411	20LILYTJ69.0 29634	20WOODLN	26	25	23	113	29275	20COOPER	161	29408	20LIBERT 161 1
27023	11DELVIN 161 27045	11WI TAP	143.8	143.5	142	101.3	29275	20COOPER	161	29531	20S OAKH 161 1
27044	11W IRVI 161 27045	11WI TAP	82.3	82.2	74	111.2	29275	20COOPER	161	29531	20S OAKH 161 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29275	20COOPER	161	29531	20S OAKH 161 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114	29275	20COOPER	161	29531	20S OAKH 161 1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.8	29275	20COOPER	161	29531	20S OAKH 161 1
27023	11DELVIN 161 27045	11WI TAP	143.4	143.5	142	101	29276	20COOPER	161	29555	20SOMERS69.0 1
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	29276	20COOPER	161	29555	20SOMERS69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29276	20COOPER	161	29555	20SOMERS69.0 1
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	29276	20COOPER	161	29555	20SOMERS69.0 1
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.8	29276	20COOPER	161	29555	20SOMERS69.0 1
27023	11DELVIN 161 27045	11WI TAP	143.4	143.5	142	101	29276	20COOPER	161	29555	20SOMERS69.0 2
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	29276	20COOPER	161	29555	20SOMERS69.0 2
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29276	20COOPER	161	29555	20SOMERS69.0 2
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	29276	20COOPER	161	29555	20SOMERS69.0 2
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.8	29276	20COOPER	161	29555	20SOMERS69.0 2
27023	11DELVIN 161 27045	11WI TAP	143.5	143.5	142	101.1	29280	20CRESTN69.0	29490	20PHIL 69.0 1	
27044	11W IRVI 161 27045	11WI TAP	82.2	82.2	74	111	29280	20CRESTN69.0	29490	20PHIL 69.0 1	
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29280	20CRESTN69.0	29490	20PHIL 69.0 1	
29359	20HODGEN69.0 29419	20MAGNOL	21.6	21.7	19	113.9	29280	20CRESTN69.0	29490	20PHIL 69.0 1	
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.5	29280	20CRESTN69.0	29490	20PHIL 69.0 1	
27023	11DELVIN 161 27045	11WI TAP	143.4	143.5	142	101	29282	20CROCKJ69.0	29550	20SKAGGS69.0 1	
27044	11W IRVI 161 27045	11WI TAP	82.1	82.2	74	111	29282	20CROCKJ69.0	29550	20SKAGGS69.0 1	
27161	11AIKEN 69.0 27253	11MIDDLT	144	144	143	100.7	29282	20CROCKJ69.0	29550	20SKAGGS69.0 1	
29359	20HODGEN69.0 29419	20MAGNOL	21.7	21.7	19	114.1	29282	20CROCKJ69.0	29550	20SKAGGS69.0 1	
29411	20LILYTJ69.0 29634	20WOODLN	25	25	23	108.7	29282	20CROCKJ69.0	29550	20SKAGGS69.0 1	
27023	11DELVIN 161 27045	11WI TAP	143.2	143.5	142	100.9	29282	20CROCKJ69.0	29619	20W LIB 69.0 1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI 161 27045	11WI	TAP	82.1	82.2	74	111	120	29282	20CROCKJ69.0 29619 20W LIB 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		144	144	143	100.7	120	29282	20CROCKJ69.0 29619 20W LIB 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		21.7	21.7	19	114.1	120	29282	20CROCKJ69.0 29619 20W LIB 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		25	25	23	108.6	120	29282	20CROCKJ69.0 29619 20W LIB 69.0 1
27023	11DELVIN 161 27045	11WI	TAP	144.4	143.5	142	101.7	121	29282	20CROCKJ69.0 29354 20HICK P69.0 1
27044	11W IRVI 161 27045	11WI	TAP	82.6	82.2	74	111.6	121	29283	20CROCKJ69.0 29354 20HICK P69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		144	144	143	100.7	121	29283	20CROCKJ69.0 29354 20HICK P69.0 1
29411	20LILYJ69.0 29634	20WOODLN		21.7	21.7	19	114.2	121	29283	20CROCKJ69.0 29354 20HICK P69.0 1
27023	11DELVIN 161 27045	11WI	TAP	25	25	23	108.8	121	29283	20CROCKJ69.0 29354 20HICK P69.0 1
27044	11W IRVI 161 27045	11WI	TAP	147.6	143.5	142	104	122	29286	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		82.1	82.2	74	110.9	122	29286	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		144	144	143	100.7	122	29286	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		21.6	21.7	19	113.8	122	29286	20DALE 69.0 1
27023	11DELVIN 161 27045	11WI	TAP	29	25	23	126.2	122	29286	20DALE 69.0 1
27044	11W IRVI 161 27045	11WI	TAP	145	143.5	142	102.1	123	29286	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		82.3	82.2	74	111.2	123	29286	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		144.1	144	143	100.7	123	29286	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		21.6	21.7	19	113.8	123	29286	20DALE 69.0 1
27044	11W IRVI 161 27045	11WI	TAP	25.1	25	23	109.2	123	29286	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		81.7	82.2	74	110.4	123	29286	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		144	144	143	100.7	124	29286	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		21.7	21.7	19	114.3	124	29286	20DALE 69.0 1
27023	11DELVIN 161 27045	11WI	TAP	144.8	25	23	107.3	124	29286	20DALE 69.0 1
27044	11W IRVI 161 27045	11WI	TAP	82.3	143.5	142	102.4	125	29287	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		82.3	82.2	74	111.2	125	29287	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		143.9	144	143	100.6	125	29287	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		21.8	21.7	19	114.5	125	29287	20DALE 69.0 1
27023	11DELVIN 161 27045	11WI	TAP	24.5	25	23	106.4	125	29287	20DALE 69.0 1
27044	11W IRVI 161 27045	11WI	TAP	145.4	143.5	142	102.4	126	29287	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		82.1	82.2	74	110.9	126	29287	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		144	144	143	100.7	126	29287	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		21.7	21.7	19	114.2	126	29287	20DALE 69.0 1
27023	11DELVIN 161 27045	11WI	TAP	24.6	25	23	106.9	126	29287	20DALE 69.0 1
27044	11W IRVI 161 27045	11WI	TAP	147	143.5	142	103.5	127	29287	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		82.7	82.2	74	111.8	127	29287	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		144	144	143	100.7	127	29287	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		22.2	16.7	69	100.1	127	29287	20DALE 69.0 1
29410	20LIBERT69.0 29450	20MT	OLJ	72	17.3	69	117.1	127	29287	20DALE 69.0 1
29411	20LILYJ69.0 29634	20WOODLN		24.4	25	23	104.3	127	29287	20DALE 69.0 1
27023	11DELVIN 161 27045	11WI	TAP	144.6	143.5	142	106.1	127	29287	20DALE 69.0 1
27044	11W IRVI 161 27045	11WI	TAP	82.3	82.2	74	111.2	128	29287	20DALE 69.0 1
27161	11AIKEN 69.0 27253	11MIDDLT		144.1	144	143	100.8	128	29287	20DALE 69.0 1
29326	20FRCKBJ69.0 29634	20WOODLN		27.1	19	23	118	128	29287	20DALE 69.0 1
29359	20HODGEN69.0 29419	20MAGNOL		21.2	21.7	19	111.4	128	29287	20DALE 69.0 1

LF: Th_North.sav
 Sys: estill.sub

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

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJTJ69.0	29634	20WOODLN		30.9	25	23	134.4	128	29287 20DALE
27023	11DELVIN 161	27045	11WI TAP		143.8	143.5	142	101.3	129	29294 20DARWJ
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111.1	129	29294 20DARWJ
27161	11AIKEN 69.0	27253	11MIDDLT		144.1	144	143	100.8	129	29294 20DARWJ
29359	20HODGEN69.0	29419	20MAGNOL		21.8	21.7	19	114.5	129	29294 20DARWJ
29411	20LILYJTJ69.0	29634	20WOODLN		25.4	25	23	110.3	129	29294 20DARWJ
27023	11DELVIN 161	27045	11WI TAP		144	143.5	142	101.4	130	29295 20DAVIS
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111.1	130	29295 20DAVIS
27161	11AIKEN 69.0	27253	11MIDDLT		144.1	144	143	100.8	130	29295 20DAVIS
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114	130	29295 20DAVIS
29411	20LILYJTJ69.0	29634	20WOODLN		24.9	25	23	108.5	130	29295 20DAVIS
27023	11DELVIN 161	27045	11WI TAP		143.9	143.5	142	101.3	130	29295 20DAVIS
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111.1	131	29295 20DAVIS
27161	11AIKEN 69.0	27253	11MIDDLT		144.1	144	143	100.7	131	29295 20DAVIS
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114	131	29295 20DAVIS
29411	20LILYJTJ69.0	29634	20WOODLN		21.7	21.7	19	114	131	29295 20DAVIS
27023	11DELVIN 161	27045	11WI TAP		25	25	23	108.5	131	29295 20DAVIS
27044	11W IRVI 161	27045	11WI TAP		143	143.5	142	100.7	132	29296 20DENNY
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.9	132	29296 20DENNY
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.4	132	29296 20DENNY
29411	20LILYJTJ69.0	29634	20WOODLN		25	25	23	108.6	132	29296 20DENNY
27023	11DELVIN 161	27045	11WI TAP		143.2	143.5	142	100.9	133	29298 20DENNY
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	133	29298 20DENNY
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	133	29298 20DENNY
29359	20HODGEN69.0	29419	20MAGNOL		21.8	21.7	19	114.6	133	29298 20DENNY
29411	20LILYJTJ69.0	29634	20WOODLN		25	25	23	108.7	133	29298 20DENNY
27023	11DELVIN 161	27045	11WI TAP		143.2	143.5	142	100.9	133	29298 20DENNY
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	134	29298 20DENNY
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	134	29298 20DENNY
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	134	29298 20DENNY
29411	20LILYJTJ69.0	29634	20WOODLN		21.7	21.7	19	114.1	134	29298 20DENNY
27023	11DELVIN 161	27045	11WI TAP		25	25	23	108.6	134	29298 20DENNY
27044	11W IRVI 161	27045	11WI TAP		143.5	143.5	142	101	135	29299 20DEVON
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	135	29299 20DEVON
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	135	29299 20DEVON
29411	20LILYJTJ69.0	29634	20WOODLN		21.7	21.7	19	114.1	135	29299 20DEVON
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	101	135	29299 20DEVON
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	135	29299 20DEVON
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	135	29299 20DEVON
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	135	29299 20DEVON
29411	20LILYJTJ69.0	29634	20WOODLN		25	25	23	108.8	135	29299 20DEVON
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	102.1	135	29299 20DEVON
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	101.1	136	29302 20DURO
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	136	29302 20DURO
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114	136	29302 20DURO
29411	20LILYJTJ69.0	29634	20WOODLN		21.7	21.7	19	114	136	29302 20DURO
27023	11DELVIN 161	27045	11WI TAP		25	25	23	108.7	136	29302 20DURO
27044	11W IRVI 161	27045	11WI TAP		143.5	143.5	142	101	137	29302 20DURO
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	137	29302 20DURO

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency			
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	137	29302 20DURO J69.0	29600	20TRKYFJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	137	29302 20DURO J69.0	29600	20TRKYFJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		143.4	143.5	142	101	138	29303 20E BARD69.0	29411	20LILYJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	138	29303 20E BARD69.0	29411	20LILYJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		143.9	144	143	100.6	138	29303 20E BARD69.0	29411	20LILYJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		22.1	21.7	19	116.1	138	29303 20E BARD69.0	29411	20LILYJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		143.3	143.5	142	100.9	139	29304 20EERNST69.0	29402	20LAURIJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	139	29304 20EERNST69.0	29402	20LAURIJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	139	29304 20EERNST69.0	29402	20LAURIJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	139	29304 20EERNST69.0	29402	20LAURIJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	139	29304 20EERNST69.0	29402	20LAURIJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		142.9	143.5	142	100.6	140	29304 20EERNST69.0	29423	20MAPLSJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	140	29304 20EERNST69.0	29423	20MAPLSJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	140	29304 20EERNST69.0	29423	20MAPLSJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	140	29304 20EERNST69.0	29423	20MAPLSJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	140	29304 20EERNST69.0	29423	20MAPLSJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		142.8	143.5	142	100.6	141	29306 20EERLE69.0	29307	20EERLJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	141	29306 20EERLE69.0	29307	20EERLJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	141	29306 20EERLE69.0	29307	20EERLJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	141	29306 20EERLE69.0	29307	20EERLJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.7	141	29306 20EERLE69.0	29307	20EERLJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		142.4	143.5	142	100.3	142	29307 20EERLJ69.0	29423	20MAPLSJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	142	29307 20EERLJ69.0	29423	20MAPLSJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	142	29307 20EERLJ69.0	29423	20MAPLSJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.2	142	29307 20EERLJ69.0	29423	20MAPLSJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.7	142	29307 20EERLJ69.0	29423	20MAPLSJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		143.7	143.5	142	101.2	143	29308 20ELTLVL69.0	29519	20ROWAN 69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	143	29308 20ELTLVL69.0	29519	20ROWAN 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	143	29308 20ELTLVL69.0	29519	20ROWAN 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.2	143	29308 20ELTLVL69.0	29519	20ROWAN 69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.7	143	29308 20ELTLVL69.0	29519	20ROWAN 69.0	1
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	101	144	29310 20ETOWN 69.0	29552	20SMTHVJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	144	29310 20ETOWN 69.0	29552	20SMTHVJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	144	29310 20ETOWN 69.0	29552	20SMTHVJ69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	144	29310 20ETOWN 69.0	29552	20SMTHVJ69.0	1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25	23	109	144	29310 20ETOWN 69.0	29552	20SMTHVJ69.0	1
27023	11DELVIN 161	27045	11WI TAP		143.4	143.5	142	101	145	29310 20ETOWN 69.0	29591	20THARP 69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	145	29310 20ETOWN 69.0	29591	20THARP 69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	145	29310 20ETOWN 69.0	29591	20THARP 69.0	1
27274	11ROGERS69.0	29516	20ROGV J		81.1	49.7	72	112.6	145	29310 20ETOWN 69.0	29591	20THARP 69.0	1
29359	20HODGEN69.0	29419	20MAGNOL		21.9	21.7	19	115.5	145	29310 20ETOWN 69.0	29591	20THARP 69.0	1
29411	20LILYJ69.0	29634	20WOODLN		24.2	25	23	105.3	145	29310 20ETOWN 69.0	29591	20THARP 69.0	1
27023	11DELVIN 161	27045	11WI TAP		143.4	143.5	142	101	146	29310 20ETOWN 69.0	29599	20TUNHLJ69.0	1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	146	29310 20ETOWN 69.0	29599	20TUNHLJ69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	146	29310 20ETOWN 69.0	29599	20TUNHLJ69.0	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency							
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	146	29310	20TOWN	69.0	29599	20TUNHLJ69.0	1				
29411	20LILYJ69.0	29634	20WOODLN	23.9	25	23	103.9	146	29310	20TOWN	69.0	29599	20TUNHLJ69.0	1				
27023	11DELVIN	161	27045	11WI	TAP	144.5	143.5	142	101.7	147	29311	20FALCON69.0	29418	20MAGGRD69.0	1			
27044	11W	IRVI	161	27045	11WI	TAP	81.8	82.2	74	110.5	147	29311	20FALCON69.0	29418	20MAGGRD69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	147	29311	20FALCON69.0	29418	20MAGGRD69.0	29418	20MAGGRD69.0	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	148	29311	20FALCON69.0	29578	20SUBLET69.0	29418	20MAGGRD69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	148	29311	20FALCON69.0	29578	20SUBLET69.0	29418	20MAGGRD69.0	1			
27044	11W	IRVI	161	27045	11WI	TAP	81.7	82.2	74	110.4	149	29312	20FALLRK	161	29314	20FALLRK69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	149	29312	20FALLRK	161	29314	20FALLRK69.0	29314	20FALLRK69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	149	29312	20FALLRK	161	29314	20FALLRK69.0	29314	20FALLRK69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	149	29312	20FALLRK	161	29314	20FALLRK69.0	29314	20FALLRK69.0	1		
27044	11W	IRVI	161	27045	11WI	TAP	81.7	82.2	74	110.5	150	29312	20FALLRK	161	29602	20TYNER	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	150	29312	20FALLRK	161	29602	20TYNER	161	1	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	150	29312	20FALLRK	161	29602	20TYNER	161	1	1		
27044	11W	IRVI	161	27045	11WI	TAP	81.6	82.2	74	108.7	150	29312	20FALLRK	161	29602	20TYNER	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	143	100.6	151	29314	20FALLRK69.0	29475	20ONEIDJ69.0	29475	20ONEIDJ69.0	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	151	29314	20FALLRK69.0	29475	20ONEIDJ69.0	29475	20ONEIDJ69.0	1			
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	151	29314	20FALLRK69.0	29475	20ONEIDJ69.0	29475	20ONEIDJ69.0	1			
27044	11W	IRVI	161	27045	11WI	TAP	143.5	143.5	142	101.1	152	29314	20FALLRK69.0	29603	20TYNER	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	152	29314	20FALLRK69.0	29603	20TYNER	69.0	1	1			
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	152	29314	20FALLRK69.0	29603	20TYNER	69.0	1	1			
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	152	29314	20FALLRK69.0	29603	20TYNER	69.0	1	1			
27023	11DELVIN	161	27045	11WI	TAP	143.6	143.5	142	101.1	153	29315	20FALMKU69.0	29324	20F	OAKS69.0	1		
27044	11W	IRVI	161	27045	11WI	TAP	82.2	82.2	74	111	153	29315	20FALMKU69.0	29324	20F	OAKS69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	153	29315	20FALMKU69.0	29324	20F	OAKS69.0	29324	20F	OAKS69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	153	29315	20FALMKU69.0	29324	20F	OAKS69.0	29324	20F	OAKS69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	153	29315	20FALMKU69.0	29324	20F	OAKS69.0	29324	20F	OAKS69.0	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.1	82.2	74	111	154	29316	20FAWKES	138	29387	20JKSMIT	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	143	100.7	154	29316	20FAWKES	138	29387	20JKSMIT	138	1	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	154	29316	20FAWKES	138	29387	20JKSMIT	138	1	1		
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.2	154	29316	20FAWKES	138	29387	20JKSMIT	138	1	1		
27044	11W	IRVI	161	27045	11WI	TAP	81.7	82.2	74	110.4	155	29316	20FAWKES	138	29594	20TFJ	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	155	29316	20FAWKES	138	29594	20TFJ	138	1	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	155	29316	20FAWKES	138	29594	20TFJ	138	1	1		
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.3	155	29316	20FAWKES	138	29594	20TFJ	138	1	1		
27044	11W	IRVI	161	27045	11WI	TAP	148.3	143.5	142	104.4	156	29316	20FAWKES	138	29612	20WBAREA	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	156	29316	20FAWKES	138	29612	20WBAREA	138	1	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	110.5	156	29316	20FAWKES	138	29612	20WBAREA	138	1	1		
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.3	156	29316	20FAWKES	138	29612	20WBAREA	138	1	1		
27044	11W	IRVI	161	27045	11WI	TAP	81.8	82.2	74	110.5	156	29316	20FAWKES	138	29612	20WBAREA	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	143	100.7	156	29316	20FAWKES	138	29612	20WBAREA	138	1	1		

** From bus	** **	** **	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27209	11FAWKES69.0	29283	20CROOKJ	62	21.7	54	114.9	156	29316 20FAWKES 138 29612 20WBAREA 138 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.6	156	29316 20FAWKES 138 29612 20WBAREA 138 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	156	29316 20FAWKES 138 29612 20WBAREA 138 1
27023	11DELVIN 161	27045	11WI TAP	144.2	143.5	142	101.6	157	29318 20FAYETT 138 29319 20FAYETT69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	157	29318 20FAYETT 138 29319 20FAYETT69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.2	144	143	100.8	157	29318 20FAYETT 138 29319 20FAYETT69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	157	29318 20FAYETT 138 29319 20FAYETT69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	157	29318 20FAYETT 138 29319 20FAYETT69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.1	158	29320 20FRTKNX69.0 29322 20FRTKNJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	158	29320 20FRTKNX69.0 29322 20FRTKNJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	158	29320 20FRTKNX69.0 29322 20FRTKNJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	22	21.7	19	115.6	158	29320 20FRTKNX69.0 29322 20FRTKNJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.7	158	29320 20FRTKNX69.0 29322 20FRTKNJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	159	29322 20FRTKNJ69.0 29516 20ROGV J69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	159	29322 20FRTKNJ69.0 29516 20ROGV J69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	159	29322 20FRTKNJ69.0 29516 20ROGV J69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.5	159	29322 20FRTKNJ69.0 29516 20ROGV J69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	159	29322 20FRTKNJ69.0 29516 20ROGV J69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	160	29322 20FRTKNJ69.0 29552 20SMTHVJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	160	29322 20FRTKNJ69.0 29552 20SMTHVJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	160	29322 20FRTKNJ69.0 29552 20SMTHVJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	160	29322 20FRTKNJ69.0 29552 20SMTHVJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	160	29322 20FRTKNJ69.0 29552 20SMTHVJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	142	101.2	161	29323 20F OAKJ69.0 29324 20F OAKS69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	161	29323 20F OAKJ69.0 29324 20F OAKS69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	161	29323 20F OAKJ69.0 29324 20F OAKS69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	161	29323 20F OAKJ69.0 29324 20F OAKS69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	161	29323 20F OAKJ69.0 29324 20F OAKS69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	162	29326 20FRCCKBJ69.0 29459 20N SPR 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	162	29326 20FRCCKBJ69.0 29459 20N SPR 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	162	29326 20FRCCKBJ69.0 29459 20N SPR 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.1	162	29326 20FRCCKBJ69.0 29459 20N SPR 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	143.5	143.5	142	101	163	29326 20FRCCKBJ69.0 29634 20WOODLN69.0 1
27023	11DELVIN 161	27045	11WI TAP	82.2	82.2	74	111.1	163	29326 20FRCCKBJ69.0 29634 20WOODLN69.0 1
27044	11W IRVI 161	27045	11WI TAP	143.9	144	143	100.6	163	29326 20FRCCKBJ69.0 29634 20WOODLN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	163	29326 20FRCCKBJ69.0 29634 20WOODLN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.5	163	29326 20FRCCKBJ69.0 29634 20WOODLN69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	164	29327 20FRNCHB69.0 29362 20HOPE 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	164	29327 20FRNCHB69.0 29362 20HOPE 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	164	29327 20FRNCHB69.0 29362 20HOPE 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	164	29327 20FRNCHB69.0 29362 20HOPE 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	164	29327 20FRNCHB69.0 29362 20HOPE 69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	165	29327 20FRNCHB69.0 29427 20MARIJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	165	29327 20FRNCHB69.0 29427 20MARIJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	165	29327 20FRNCHB69.0 29427 20MARIJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	165	29327 20FRNCHB69.0 29427 20MARIJ69.0 1

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 Branch Violations

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading% Ncon	Contingency							
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	165	29327	20FRNCB69.0	29427	20MARIBJ69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	20.7	21.7	21.7	19	109.1	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25	23	109.1	166	29330	20GLENDL69.0	29359	20HODGEN69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1		
27229	11HODGEN69.0	29359	20HODGEN	42.4	35.9	35.9	40	106	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	19.9	21.7	21.7	19	104.6	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	25	23	109.4	167	29330	20GLENDL69.0	29571	20STEPHN69.0	1		
27023	11DELVIN	161	27045	11WI TAP	144	143.5	142	101.4	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25	23	109.2	168	29331	20GODDRD	138	29332	20GODDRD69.0	1	
27023	11DELVIN	161	27045	11WI TAP	142.3	143.5	142	100.2	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.8	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	185.1	129.1	158	117.1	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27090	11FLEMIN	138	27157	11WEDONI	190.9	134.7	179	106.6	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27105	11KENTON	138	27157	11WEDONI	196.6	140.3	179	109.8	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.7	169	29331	20GODDRD	138	29498	20PLUMV	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.2	169	29331	20GODDRD	138	29498	20PLUMV	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	25	23	109.7	169	29331	20GODDRD	138	29498	20PLUMV	138	1
27023	11DELVIN	161	27045	11WI TAP	142.6	143.5	142	100.4	170	29331	20GODDRD	138	29640	20CRANST	138	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	170	29331	20GODDRD	138	29640	20CRANST	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	170	29331	20GODDRD	138	29640	20CRANST	138	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	170	29331	20GODDRD	138	29640	20CRANST	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	25	23	109.2	170	29331	20GODDRD	138	29640	20CRANST	138	1
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	171	29332	20GODDRD69.0	29356	20HILDA	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	171	29332	20GODDRD69.0	29356	20HILDA	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	171	29332	20GODDRD69.0	29356	20HILDA	69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.1	171	29332	20GODDRD69.0	29356	20HILDA	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.8	171	29332	20GODDRD69.0	29356	20HILDA	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.9	143.5	142	102.1	172	29332	20GODDRD69.0	29358	20HILLSB69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	172	29332	20GODDRD69.0	29358	20HILLSB69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	172	29332	20GODDRD69.0	29358	20HILLSB69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	21.7	19	114.2	172	29332	20GODDRD69.0	29358	20HILLSB69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	25	23	109.6	172	29332	20GODDRD69.0	29358	20HILLSB69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	173	29334	20GOLDBG69.0	29379	20JELLCJ69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	173	29334	20GOLDBG69.0	29379	20JELLCJ69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	173	29334	20GOLDBG69.0	29379	20JELLCJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	21.7	19	113.9	173	29334	20GOLDBG69.0	29379	20JELLCJ69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25	25	25	23	108.7	173	29334	20GOLDBG69.0	29379	20JELLCJ69.0	1		

LF: Th_North.sav
 Sys: estill.sub

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

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	143.5	142	101.1	174	29335	20GOODNT69.0 29336 20GORINJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	74	111	174	29335	20GOODNT69.0 29336 20GORINJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	174	29335	20GOODNT69.0 29336 20GORINJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.8	21.7	19	21.7	19	115	174	29335	20GOODNT69.0 29336 20GORINJ69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.8	174	29335	20GOODNT69.0 29336 20GORINJ69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	143.5	142	101.1	175	29338	20GRNTLK69.0 29347 20GRIFFJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	74	111	175	29338	20GRNTLK69.0 29347 20GRIFFJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	175	29338	20GRNTLK69.0 29347 20GRIFFJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	175	29338	20GRNTLK69.0 29347 20GRIFFJ69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.7	175	29338	20GRNTLK69.0 29347 20GRIFFJ69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	143.5	142	101	176	29338	20GRNTLK69.0 29574 20SPRKJ269.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	82.2	74	111	176	29338	20GRNTLK69.0 29574 20SPRKJ269.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	176	29338	20GRNTLK69.0 29574 20SPRKJ269.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	176	29338	20GRNTLK69.0 29574 20SPRKJ269.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.8	176	29338	20GRNTLK69.0 29574 20SPRKJ269.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	143.5	142	101.1	177	29339	20GRAYS69.0 29406 20LEON 69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	74	111	177	29339	20GRAYS69.0 29406 20LEON 69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	177	29339	20GRAYS69.0 29406 20LEON 69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	177	29339	20GRAYS69.0 29406 20LEON 69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.7	177	29339	20GRAYS69.0 29406 20LEON 69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	143.5	142	101	178	29339	20GRAYS69.0 29479 20PCTLSJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.1	82.2	74	82.2	74	111	178	29339	20GRAYS69.0 29479 20PCTLSJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	178	29339	20GRAYS69.0 29479 20PCTLSJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	178	29339	20GRAYS69.0 29479 20PCTLSJ69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.8	178	29339	20GRAYS69.0 29479 20PCTLSJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	81.9	82.2	74	82.2	74	110.7	179	29340	20GRNBRJ69.0 29342 20GRNBRJ69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	179	29340	20GRNBRJ69.0 29342 20GRNBRJ69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	179	29340	20GRNBRJ69.0 29342 20GRNBRJ69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.6	179	29340	20GRNBRJ69.0 29342 20GRNBRJ69.0 1
27044	11W IRVI 161 27045 11WI TAP	81.9	82.2	74	82.2	74	110.7	180	29342	20MNCST69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	180	29342	20MNCST69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	180	29342	20MNCST69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.5	180	29342	20MNCST69.0 1
27044	11W IRVI 161 27045 11WI TAP	81.7	82.2	74	82.2	74	110.4	181	29342	20MNCST69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	143.9	144	143	144	143	100.7	181	29342	20MNCST69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.7	21.7	19	21.7	19	114.1	181	29342	20MNCST69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.3	181	29342	20MNCST69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.4	143.5	142	143.5	142	101	182	29343	20GREENC 161 29344 20GREENC69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	74	111	182	29343	20GREENC 161 29344 20GREENC69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	144	143	100.7	182	29343	20GREENC 161 29344 20GREENC69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	29.5	21.7	19	21.7	19	155.1	182	29343	20GREENC 161 29344 20GREENC69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	25	23	108.8	182	29343	20GREENC 161 29344 20GREENC69.0 1
27023	11DELVIN 161 27045 11WI TAP	143	143.5	142	143.5	142	100.7	183	29343	20GREENC 161 29583 20SSHADE 161 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	82.2	74	111.1	183	29343	20GREENC 161 29583 20SSHADE 161 1
27161	11AIKEN 69.0 27253 11MIDDLT	144.3	144	143	144	143	100.9	183	29343	20GREENC 161 29583 20SSHADE 161 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading	%	Ncon	Contingency							
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	26.5	21.7	19	139.5		183	29343	20GREENC	161	29583	20SSHADE	161	1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	26.7	25	23	116.1		183	29343	20GREENC	161	29583	20SSHADE	161	1	
27023	11DELVIN	161	27045	11WI	TAP	143.4	143.5	142	101		184	29343	20GREENC	161	29587	20TAYCTP	161	1	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111.1		184	29343	20GREENC	161	29587	20TAYCTP	161	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	144	143	100.7		184	29343	20GREENC	161	29587	20TAYCTP	161	1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	21.4	21.7	19	112.9		184	29343	20GREENC	161	29587	20TAYCTP	161	1	
27023	11DELVIN	161	27045	11WI	TAP	25.2	25	23	109.7		184	29343	20GREENC	161	29587	20TAYCTP	161	1	
27044	11W	IRVI	161	27045	11WI	TAP	143.6	142	101.1		185	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	82.2	82.2	74	111		185	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	20.1	21.7	19	100.7		185	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	24.8	25	23	107.9		185	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101		186	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
27044	11W	IRVI	161	27045	11WI	TAP	82.1	74	111		186	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		186	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	14.4	25	23	108.8		186	29344	20GREENC69.0	29346	20GRSBRG69.0	1		1	
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101.1		187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1		1	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111		187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1		1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	20.8	21.7	19	109.4		187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1		1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	24.9	25	23	108.2		187	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1		1	
27044	11W	IRVI	161	27045	11WI	TAP	75.3	74	101.8		188	29346	20GRSBRG69.0	29440	20MCKNYJ69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		188	29348	20GRNHLJ	161	29602	20TYNER	161	1	
27235	11KU	PK	69.0	27265	11PINEVI	85.1	69.8	82	103.8		188	29348	20GRNHLJ	161	29602	20TYNER	161	1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	22.1	21.7	19	116.2		188	29348	20GRNHLJ	161	29602	20TYNER	161	1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	24.9	25	23	108.1		188	29348	20GRNHLJ	161	29602	20TYNER	161	1	
27023	11DELVIN	161	27045	11WI	TAP	145.2	143.5	142	102.3		189	29350	20HARGTJ69.0	29598	20TRAPP	69.0	1		1
27044	11W	IRVI	161	27045	11WI	TAP	82.1	74	110.9		189	29350	20HARGTJ69.0	29598	20TRAPP	69.0	1		1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		189	29350	20HARGTJ69.0	29598	20TRAPP	69.0	1		1
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	21.7	21.7	19	114.2		189	29350	20HARGTJ69.0	29598	20TRAPP	69.0	1		1
29411	20LILYJ69.0	29634	20WOODLN	23	25	24.6	25	23	107		189	29350	20HARGTJ69.0	29598	20TRAPP	69.0	1		1
27023	11DELVIN	161	27045	11WI	TAP	143.5	143.5	142	101.1		190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1		1	
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111		190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1		1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	21.7	21.7	19	114.1		190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1		1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	143.6	143.5	142	108.8		190	29351	20HDQTRS69.0	29443	20MIL-CJ69.0	1		1	
27023	11DELVIN	161	27045	11WI	TAP	82.2	82.2	74	101.2		191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1		1	
27044	11W	IRVI	161	27045	11WI	TAP	144	144	111		191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1		1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	21.7	21.7	19	114.2		191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1		1	
29411	20LILYJ69.0	29634	20WOODLN	23	25	25	25	23	108.8		191	29351	20HDQTRS69.0	29458	20MURPHY69.0	1		1	
27023	11DELVIN	161	27045	11WI	TAP	142.7	143.5	142	100.5		192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1		1	
27044	11W	IRVI	161	27045	11WI	TAP	82.6	74	111.7		192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1		1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	144	143	100.7		192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1		1	
29359	20HODGEN69.0	29419	20MAGNOL	19	21.7	21.7	21.7	19	114.1		192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1		1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	192	29352	20HELCHW69.0	29579	20SUBLTJ69.0	1			
27023	11DELVIN	161	27045	11WI TAP	143.9	143.5	142	101.4	193	29354	20HICK	69.0	29504	20PPG	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	193	29354	20HICK	69.0	29504	20PPG	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	193	29354	20HICK	69.0	29504	20PPG	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	193	29354	20HICK	69.0	29504	20PPG	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1		
27023	11DELVIN	161	27045	11WI TAP	142.5	143.5	142	100.3	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.9	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.6	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.4	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.4	194	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	101.1	195	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	195	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.4	195	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	195	29355	20HIGHLD69.0	29450	20MT	OLJ69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.2	196	29356	20HILDA	69.0	29519	20ROWAN	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	196	29356	20HILDA	69.0	29519	20ROWAN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	196	29356	20HILDA	69.0	29519	20ROWAN	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	196	29356	20HILDA	69.0	29519	20ROWAN	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	196	29356	20HILDA	69.0	29519	20ROWAN	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.4	143.5	142	101.7	196	29356	20HILDA	69.0	29519	20ROWAN	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.9	197	29358	20HILLSB69.0	29636	20WYOMNG	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	197	29358	20HILLSB69.0	29636	20WYOMNG	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	197	29358	20HILLSB69.0	29636	20WYOMNG	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.4	197	29358	20HILLSB69.0	29636	20WYOMNG	69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.2	198	29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	198	29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	198	29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	25.4	25	23	110.3	198	29359	20HODGEN	69.0	29419	20MAGNOL	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	143.4	143.5	142	101	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	82.2	82.2	74	111	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1
27044	11W IRVI	161	27045	11WI TAP	144	144	143	100.7	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	23.7	19	19	103.2	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	23.9	21.7	19	125.7	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	29.8	25	23	129.7	199	29359	20HODGEN	69.0	29580	20SULPHR	69.0	1
27044	11W IRVI	161	27045	11WI TAP	143.7	143.5	142	101.2	200	29360	20HOLLWJ69.0	29470	20NCHLSV	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	82.2	82.2	74	111	200	29360	20HOLLWJ69.0	29470	20NCHLSV	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	144	144	143	100.7	200	29360	20HOLLWJ69.0	29470	20NCHLSV	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	21.7	21.7	19	114.1	200	29360	20HOLLWJ69.0	29470	20NCHLSV	69.0	1		
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	108.7	200	29360	20HOLLWJ69.0	29470	20NCHLSV	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	143.4	143.5	142	101	201	29362	20HOPE	69.0	29376	20JEFFVL	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	82.2	82.2	74	111.1	201	29362	20HOPE	69.0	29376	20JEFFVL	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	144	144	143	100.7	201	29362	20HOPE	69.0	29376	20JEFFVL	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	21.7	21.7	19	114.1	201	29362	20HOPE	69.0	29376	20JEFFVL	69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN	25	25	108.7	23	108.7	201	29362 20HOPE
27023	11DELVIN	161 27045	11WI TAP	143.7	143.5	101.2	142	101.2	202	29362 20HOPE
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	111	74	111	202	29362 20HOPE
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	100.7	143	100.7	202	29362 20HOPE
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	114.1	19	114.1	202	29362 20HOPE
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	108.9	23	108.9	202	29362 20HOPE
27023	11DELVIN	161 27045	11WI TAP	143.7	143.5	101.2	142	101.2	203	29363 20HCAVKU69.0
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	111	74	111	203	29363 20HCAVKU69.0
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	100.7	143	100.7	203	29363 20HCAVKU69.0
29359	20HODGEN	69.0 29419	20MAGNOL	22.4	21.7	117.7	19	117.7	203	29363 20HCAVKU69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	108.6	23	108.6	203	29363 20HCAVKU69.0
27023	11DELVIN	161 27045	11WI TAP	143.7	143.5	101.2	142	101.2	204	29364 20HTADMS69.0
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	111.1	74	111.1	204	29364 20HTADMS69.0
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	100.7	143	100.7	204	29364 20HTADMS69.0
29359	20HODGEN	69.0 29419	20MAGNOL	21.8	21.7	114.7	19	114.7	204	29364 20HTADMS69.0
29411	20LILYJ69.0	29634	20WOODLN	23.4	25	101.6	23	101.6	204	29364 20HTADMS69.0
27023	11DELVIN	161 27045	11WI TAP	143.8	143.5	101.3	142	101.3	205	29366 20HTADMS69.0
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	111.1	74	111.1	205	29366 20HTADMS69.0
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	100.7	143	100.7	205	29366 20HTADMS69.0
29359	20HODGEN	69.0 29419	20MAGNOL	21.8	21.7	113.6	19	113.6	205	29366 20HTADMS69.0
29411	20LILYJ69.0	29634	20WOODLN	26	25	113	23	113	206	29367 20HTADMT69.0
27023	11DELVIN	161 27045	11WI TAP	144.4	143.5	101.7	142	101.7	207	29368 20HUNT1 69.0
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	111.1	74	111.1	207	29368 20HUNT1 69.0
27161	11AIKEN	69.0 27253	11MIDDLT	143.9	144	100.6	143	100.6	207	29368 20HUNT1 69.0
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	114.4	19	114.4	207	29368 20HUNT1 69.0
29411	20LILYJ69.0	29634	20WOODLN	24.6	25	107.1	23	107.1	207	29368 20HUNT1 69.0
27023	11DELVIN	161 27045	11WI TAP	145.4	143.5	102.4	142	102.4	208	29370 20HUNT2 69.0
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	110.9	74	110.9	208	29370 20HUNT2 69.0
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	100.7	143	100.7	208	29370 20HUNT2 69.0
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	114.2	19	114.2	208	29370 20HUNT2 69.0
29411	20LILYJ69.0	29634	20WOODLN	24.6	25	106.9	23	106.9	208	29370 20HUNT2 69.0
27023	11DELVIN	161 27045	11WI TAP	143.5	143.5	101	142	101	209	29371 20INDEX 69.0
27044	11W IRVI	161 27045	11WI TAP	82.2	82.2	111.1	74	111.1	209	29371 20INDEX 69.0
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	100.7	143	100.7	209	29371 20INDEX 69.0
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	114.2	19	114.2	209	29371 20INDEX 69.0
29411	20LILYJ69.0	29634	20WOODLN	25	25	108.6	23	108.6	209	29371 20INDEX 69.0
27023	11DELVIN	161 27045	11WI TAP	142.7	143.5	100.5	142	100.5	210	29372 20INDEXJ69.0
27044	11W IRVI	161 27045	11WI TAP	82.1	82.2	110.9	74	110.9	210	29372 20INDEXJ69.0
27161	11AIKEN	69.0 27253	11MIDDLT	144	144	100.7	143	100.7	210	29372 20INDEXJ69.0
29359	20HODGEN	69.0 29419	20MAGNOL	21.7	21.7	114.1	19	114.1	210	29372 20INDEXJ69.0

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.3	210	29372	20INDEXJ69.0	29435	20MAYTNJ69.0	1			
27023	11DELVIN	161	27045	11WI TAP	143.1	143.5	142	100.7	211	29372	20INDEXJ69.0	29619	20W LIB	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	211	29372	20INDEXJ69.0	29619	20W LIB	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	211	29372	20INDEXJ69.0	29619	20W LIB	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	211	29372	20INDEXJ69.0	29619	20W LIB	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	211	29372	20INDEXJ69.0	29619	20W LIB	69.0	1		
27023	11DELVIN	161	27045	11WI TAP	142.5	143.5	142	100.4	212	29374	20JACKVJ	138	29512	20RENAKR	138	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	212	29374	20JACKVJ	138	29512	20RENAKR	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	212	29374	20JACKVJ	138	29512	20RENAKR	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	212	29374	20JACKVJ	138	29512	20RENAKR	138	1
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.3	212	29374	20JACKVJ	138	29512	20RENAKR	138	1	
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	212	29374	20JACKVJ	138	29512	20RENAKR	138	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	213	29375	20JBGALJ69.0	29394	20KNOBLK69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	213	29375	20JBGALJ69.0	29394	20KNOBLK69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	22.9	21.7	19	120.3	213	29375	20JBGALJ69.0	29394	20KNOBLK69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.5	213	29375	20JBGALJ69.0	29394	20KNOBLK69.0	1			
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	142	101	214	29375	20JBGALJ69.0	29584	20SSHADE69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	214	29375	20JBGALJ69.0	29584	20SSHADE69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	214	29375	20JBGALJ69.0	29584	20SSHADE69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	23.8	21.7	19	125.2	214	29375	20JBGALJ69.0	29584	20SSHADE69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	109.9	214	29375	20JBGALJ69.0	29584	20SSHADE69.0	1			
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	215	29376	20JEFFVL69.0	29503	20POWELL69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	215	29376	20JEFFVL69.0	29503	20POWELL69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	215	29376	20JEFFVL69.0	29503	20POWELL69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	82.2	82.2	74	111.1	215	29376	20JEFFVL69.0	29503	20POWELL69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	21.7	21.7	19	114.1	215	29376	20JEFFVL69.0	29503	20POWELL69.0	1			
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	23	108.6	215	29376	20JEFFVL69.0	29503	20POWELL69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	216	29378	20JELLCR69.0	29379	20JELLCJ69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	216	29378	20JELLCR69.0	29379	20JELLCJ69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.8	216	29378	20JELLCR69.0	29379	20JELLCJ69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.6	216	29378	20JELLCR69.0	29379	20JELLCJ69.0	1			
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	217	29379	20JELLCJ69.0	29438	20MCCRE	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	217	29379	20JELLCJ69.0	29438	20MCCRE	69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	217	29379	20JELLCJ69.0	29438	20MCCRE	69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.6	217	29379	20JELLCJ69.0	29438	20MCCRE	69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	217	29379	20JELLCJ69.0	29438	20MCCRE	69.0	1		
27023	11DELVIN	161	27045	11WI TAP	144.1	143.5	142	101.5	218	29380	20JNYWLJ69.0	29592	20THELMA69.0	1		
27044	11W IRVI	161	27045	11WI TAP	81.9	82.2	74	110.6	218	29380	20JNYWLJ69.0	29592	20THELMA69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	218	29380	20JNYWLJ69.0	29592	20THELMA69.0	1		
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	218	29380	20JNYWLJ69.0	29592	20THELMA69.0	1		
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.1	218	29380	20JNYWLJ69.0	29592	20THELMA69.0	1			
27023	11DELVIN	161	27045	11WI TAP	191.4	143.5	142	134.8	219	29387	20JKSMIT	138	29501	20POWELL	138	1
27044	11W IRVI	161	27045	11WI TAP	88.4	82.2	74	119.4	219	29387	20JKSMIT	138	29501	20POWELL	138	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.7	219	29387	20JKSMIT	138	29501	20POWELL	138	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.8	219	29387	20JKSMIT	138	29501	20POWELL	138	1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency						
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109.3	219	29387	20JKSMIT	138	29501	20POWELL	138	1	
27023	11DELVIN	161	27045	11WI TAP	145.4	143.5	142	102.4	220	29388	20JKSMIT	69.0	29598	20TRAPP	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	110.9	220	29388	20JKSMIT	69.0	29598	20TRAPP	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	220	29388	20JKSMIT	69.0	29598	20TRAPP	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	220	29388	20JKSMIT	69.0	29598	20TRAPP	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.6	25	23	106.9	220	29388	20JKSMIT	69.0	29598	20TRAPP	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	142	101.1	221	29390	20KARGLE	69.0	29571	20STEPHN	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	221	29390	20KARGLE	69.0	29571	20STEPHN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	221	29390	20KARGLE	69.0	29571	20STEPHN	69.0	1
27229	11HODGEN	69.0	29359	20HODGEN	44.2	35.9	40	110.5	221	29390	20KARGLE	69.0	29571	20STEPHN	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	20.8	21.7	19	109.5	221	29390	20KARGLE	69.0	29571	20STEPHN	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25.9	25	23	112.5	221	29390	20KARGLE	69.0	29571	20STEPHN	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.9	143.5	142	102.1	222	29391	20KEAVY	69.0	29399	20LAURLC	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.4	222	29391	20KEAVY	69.0	29399	20LAURLC	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	222	29391	20KEAVY	69.0	29399	20LAURLC	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.9	222	29391	20KEAVY	69.0	29399	20LAURLC	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	222	29391	20KEAVY	69.0	29399	20LAURLC	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	144.5	143.5	142	101.7	223	29391	20KEAVY	69.0	29491	20PINEGJ	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	223	29391	20KEAVY	69.0	29491	20PINEGJ	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	223	29391	20KEAVY	69.0	29491	20PINEGJ	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114	223	29391	20KEAVY	69.0	29491	20PINEGJ	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	223	29391	20KEAVY	69.0	29491	20PINEGJ	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	224	29392	20KEITH	69.0	29486	20PENN	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	224	29392	20KEITH	69.0	29486	20PENN	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	224	29392	20KEITH	69.0	29486	20PENN	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	224	29392	20KEITH	69.0	29486	20PENN	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	224	29392	20KEITH	69.0	29486	20PENN	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	225	29394	20KNOBLK	69.0	29440	20MCKNYJ	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	225	29394	20KNOBLK	69.0	29440	20MCKNYJ	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	225	29394	20KNOBLK	69.0	29440	20MCKNYJ	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.2	21.7	19	111.7	225	29394	20KNOBLK	69.0	29440	20MCKNYJ	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.5	225	29394	20KNOBLK	69.0	29440	20MCKNYJ	69.0	1	
27023	11DELVIN	161	27045	11WI TAP	146.1	143.5	142	102.9	226	29395	20LNCSTR	69.0	29463	20NEWBY	169.0	1
27044	11W IRVI	161	27045	11WI TAP	82.5	82.2	74	111.5	226	29395	20LNCSTR	69.0	29463	20NEWBY	169.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	226	29395	20LNCSTR	69.0	29463	20NEWBY	169.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22.2	21.7	19	116.7	226	29395	20LNCSTR	69.0	29463	20NEWBY	169.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.6	25	23	107	226	29395	20LNCSTR	69.0	29463	20NEWBY	169.0	1	
27023	11DELVIN	161	27045	11WI TAP	145.2	143.5	142	102.3	226	29395	20LNCSTR	69.0	29463	20NEWBY	169.0	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.4	227	29395	20LNCSTR	69.0	29604	20TGOOCH	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	227	29395	20LNCSTR	69.0	29604	20TGOOCH	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	22	21.7	19	115.7	227	29395	20LNCSTR	69.0	29604	20TGOOCH	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	23	107.6	227	29395	20LNCSTR	69.0	29604	20TGOOCH	69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.8	228	29398	20LAURLC	161	29399	20LAURLC	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	228	29398	20LAURLC	161	29399	20LAURLC	69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.5	21.7	19	113.4	228	29398	20LAURLC	161	29399	20LAURLC	69.0	1

LF: Th_North.sav
 Sys: estill.sub

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

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJ69.0	29634	20WOODLN		24.9	25	23	108.1	228	29398 20LAURLC 161 29399 20LAURLC69.0 1
27023	11DELVIN 161	27045	11WI TAP		162.4	143.5	142	114.4	229	29398 20LAURLC 161 29400 20LAURLD 161 1
27044	11W IRVI 161	27045	11WI TAP		86.6	82.2	74	117	229	29398 20LAURLC 161 29400 20LAURLD 161 1
27161	11AIKEN 69.0	27253	11MIDDLT		144.1	144	143	100.7	229	29398 20LAURLC 161 29400 20LAURLD 161 1
29359	20HODGEN69.0	29419	20MAGNOL		21.1	21.7	19	110.9	229	29398 20LAURLC 161 29400 20LAURLD 161 1
29411	20LILYJ69.0	29634	20WOODLN		24.9	25	23	108.1	229	29398 20LAURLC 161 29400 20LAURLD 161 1
27023	11DELVIN 161	27045	11WI TAP		146.6	143.5	142	103.2	230	29398 20LAURLC 161 29496 20PITTSB 161 1
27044	11W IRVI 161	27045	11WI TAP		82.8	82.2	74	111.9	230	29398 20LAURLC 161 29496 20PITTSB 161 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	230	29398 20LAURLC 161 29496 20PITTSB 161 1
29359	20HODGEN69.0	29419	20MAGNOL		21.6	21.7	19	113.9	230	29398 20LAURLC 161 29496 20PITTSB 161 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	230	29398 20LAURLC 161 29496 20PITTSB 161 1
27023	11DELVIN 161	27045	11WI TAP		143.4	143.5	142	101	231	29399 20LAURLC69.0 29528 20SCORBN69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	111	231	29399 20LAURLC69.0 29528 20SCORBN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	231	29399 20LAURLC69.0 29528 20SCORBN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	231	29399 20LAURLC69.0 29528 20SCORBN69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	231	29399 20LAURLC69.0 29528 20SCORBN69.0 1
27023	11DELVIN 161	27045	11WI TAP		143.6	143.5	142	101.1	232	29402 20LAURIJ69.0 29620 20W LOND69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	232	29402 20LAURIJ69.0 29620 20W LOND69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	232	29402 20LAURIJ69.0 29620 20W LOND69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	232	29402 20LAURIJ69.0 29620 20W LOND69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	232	29402 20LAURIJ69.0 29620 20W LOND69.0 1
27023	11DELVIN 161	27045	11WI TAP		143.3	143.5	142	100.9	233	29403 20LEBANJ69.0 29542 20SHEPVJ69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	233	29403 20LEBANJ69.0 29542 20SHEPVJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144.2	144	143	100.8	233	29403 20LEBANJ69.0 29542 20SHEPVJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.1	21.7	19	111.3	233	29403 20LEBANJ69.0 29542 20SHEPVJ69.0 1
29411	20LILYJ69.0	29634	20WOODLN		23.5	25	23	102.1	234	29404 20LEESLK69.0 29486 20PENN 69.0 1
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	101.1	234	29404 20LEESLK69.0 29486 20PENN 69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	234	29404 20LEESLK69.0 29486 20PENN 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	234	29404 20LEESLK69.0 29486 20PENN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	234	29404 20LEESLK69.0 29486 20PENN 69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	234	29404 20LEESLK69.0 29486 20PENN 69.0 1
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	101.1	235	29404 20LEESLK69.0 29514 20RENAKR69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	235	29404 20LEESLK69.0 29514 20RENAKR69.0 1
27161	11AIKEN 138	27148	11TYRONE		99.1	95.8	97	102.1	235	29404 20LEESLK69.0 29514 20RENAKR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		144.1	144	143	100.7	235	29404 20LEESLK69.0 29514 20RENAKR69.0 1
29411	20LILYJ69.0	29634	20WOODLN		21.7	21.7	19	114	235	29404 20LEESLK69.0 29514 20RENAKR69.0 1
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	108.8	235	29404 20LEESLK69.0 29514 20RENAKR69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.1	82.2	74	101	236	29406 20LEON 69.0 29467 20NEWEND69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	236	29406 20LEON 69.0 29467 20NEWEND69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	236	29406 20LEON 69.0 29467 20NEWEND69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	236	29406 20LEON 69.0 29467 20NEWEND69.0 1
27023	11DELVIN 161	27045	11WI TAP		143.5	143.5	142	101.1	237	29407 20LIBTKU69.0 29410 20LIBERT69.0 1
27044	11W IRVI 161	27045	11WI TAP		82.2	82.2	74	111	237	29407 20LIBTKU69.0 29410 20LIBERT69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT		144	144	143	100.7	237	29407 20LIBTKU69.0 29410 20LIBERT69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	237	29407	20LIBTKU69.0	29410	20LIBERT69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	237	29407	20LIBTKU69.0	29410	20LIBERT69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	101.1	238	29407	20LIBTKU69.0	29488	20PEYTON69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	111	238	29407	20LIBTKU69.0	29488	20PEYTON69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	238	29407	20LIBTKU69.0	29488	20PEYTON69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	238	29407	20LIBTKU69.0	29488	20PEYTON69.0	1	
27023	11DELVIN	161	27045	11WI TAP	25	25	108.7	238	29407	20LIBTKU69.0	29488	20PEYTON69.0	1	
27044	11W IRVI	161	27045	11WI TAP	143	143.5	100.7	239	29408	20LIBERT	161	29410	20LIBERT69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	111	239	29408	20LIBERT	161	29410	20LIBERT69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.6	239	29408	20LIBERT	161	29410	20LIBERT69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	239	29408	20LIBERT	161	29410	20LIBERT69.0	1
27023	11DELVIN	161	27045	11WI TAP	142.1	143.5	100.1	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82	82.2	110.8	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.2	143.5	23	109.5	240	29410	20LIBERT69.0	29450	20MT OLJ69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.6	143.5	101.1	241	29410	20LIBERT69.0	29490	20PHIL	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	111	241	29410	20LIBERT69.0	29490	20PHIL	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	241	29410	20LIBERT69.0	29490	20PHIL	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	241	29410	20LIBERT69.0	29490	20PHIL	69.0	1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.4	241	29410	20LIBERT69.0	29490	20PHIL	69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	101	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	111	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	100.7	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22	21.7	19	115.5	242	29411	20LILYJ69.0	29634	20WOODLN69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	101	243	29412	20LORETT69.0	29532	20S SPRF69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	111	243	29412	20LORETT69.0	29532	20S SPRF69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	243	29412	20LORETT69.0	29532	20S SPRF69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.7	243	29412	20LORETT69.0	29532	20S SPRF69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	25.1	25	23	109	243	29412	20LORETT69.0	29532	20S SPRF69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.4	143.5	101	244	29412	20LORETT69.0	29580	20SULPHR69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	111	244	29412	20LORETT69.0	29580	20SULPHR69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	244	29412	20LORETT69.0	29580	20SULPHR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	23.3	21.7	19	122.4	244	29412	20LORETT69.0	29580	20SULPHR69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	28.8	25	23	125.1	244	29412	20LORETT69.0	29580	20SULPHR69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	101	244	29412	20LORETT69.0	29580	20SULPHR69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	111	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	111	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	24.7	25	23	107.6	245	29415	20LYMANJ69.0	29599	20TUNHLJ69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	100.9	246	29416	20MCKVKU69.0	29459	20N SPR	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	111	246	29416	20MCKVKU69.0	29459	20N SPR	69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	100.7	246	29416	20MCKVKU69.0	29459	20N SPR	69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.4	246	29416	20MCKVKU69.0	29459	20N SPR	69.0	1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27023	11DELVIN	161	27045	11WI	TAP	143.7	143.5	142	101.2	256	29428 20MARION	161 29430 20MAR	IJ	161	1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	256	29428 20MARION	161 29430 20MAR	IJ	161	1
27161	11AIKEN	69.0	27253	11MIDDLT		143.9	144	143	100.6	256	29428 20MARION	161 29430 20MAR	IJ	161	1
29359	20HODGEN	69.0	29419	20MAGNOL		25.4	21.7	19	133.8	256	29428 20MARION	161 29430 20MAR	IJ	161	1
29411	20LILYTJ	69.0	29634	20WOODLN		24.4	25	23	106	256	29428 20MARION	161 29430 20MAR	IJ	161	1
27023	11DELVIN	161	27045	11WI	TAP	143.7	143.5	142	101.2	257	29431 20MRTNCJ69.0	29592 20THELMA69.0	1		1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111.1	257	29431 20MRTNCJ69.0	29592 20THELMA69.0	1		1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	257	29431 20MRTNCJ69.0	29592 20THELMA69.0	1		1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.1	257	29431 20MRTNCJ69.0	29592 20THELMA69.0	1		1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.7	257	29431 20MRTNCJ69.0	29592 20THELMA69.0	1		1
27023	11DELVIN	161	27045	11WI	TAP	143.8	143.5	142	101.3	258	29431 20MRTNCJ69.0	29608 20VOLGA	69.0	1	1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111.1	258	29431 20MRTNCJ69.0	29608 20VOLGA	69.0	1	1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	258	29431 20MRTNCJ69.0	29608 20VOLGA	69.0	1	1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.2	258	29431 20MRTNCJ69.0	29608 20VOLGA	69.0	1	1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.6	258	29431 20MRTNCJ69.0	29608 20VOLGA	69.0	1	1
27044	11W	IRVI	161	27045	11WI	TAP	81.9	74	110.7	259	29432 20MAYSJV	138 29498 20PLUMV	138	1	1
27090	11FLEMING	138	27093	11GODDRD		199.3	129.1	158	126.1	259	29432 20MAYSJV	138 29498 20PLUMV	138	1	1
27105	11FLEMING	138	27157	11WEDONI		205.1	134.7	179	114.6	259	29432 20MAYSJV	138 29498 20PLUMV	138	1	1
27161	11AIKEN	69.0	27253	11MIDDLT		144.1	144	143	100.8	259	29432 20MAYSJV	138 29498 20PLUMV	138	1	1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.2	259	29432 20MAYSJV	138 29498 20PLUMV	138	1	1
29411	20LILYTJ	69.0	29634	20WOODLN		25.3	25	23	110.1	259	29432 20MAYSJV	138 29498 20PLUMV	138	1	1
27044	11W	IRVI	161	27045	11WI	TAP	81.9	74	110.7	260	29432 20MAYSJV	138 29566 20SPURLK	138	1	1
27090	11FLEMING	138	27093	11GODDRD		201.9	129.1	158	127.8	260	29432 20MAYSJV	138 29566 20SPURLK	138	1	1
27105	11FLEMING	138	27157	11WEDONI		207.7	134.7	179	116	260	29432 20MAYSJV	138 29566 20SPURLK	138	1	1
27161	11AIKEN	69.0	27253	11MIDDLT		144.1	144	143	100.8	260	29432 20MAYSJV	138 29566 20SPURLK	138	1	1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.2	260	29432 20MAYSJV	138 29566 20SPURLK	138	1	1
29411	20LILYTJ	69.0	29634	20WOODLN		25.3	25	23	110.1	260	29432 20MAYSJV	138 29566 20SPURLK	138	1	1
27023	11DELVIN	161	27045	11WI	TAP	142.4	143.5	142	100.3	261	29433 20MAYTNJ	138 29435 20MAYTNJ69.0	1		1
27044	11W	IRVI	161	27045	11WI	TAP	81.9	74	110.7	261	29433 20MAYTNJ	138 29435 20MAYTNJ69.0	1		1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	261	29433 20MAYTNJ	138 29435 20MAYTNJ69.0	1		1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114	261	29433 20MAYTNJ	138 29435 20MAYTNJ69.0	1		1
29411	20LILYTJ	69.0	29634	20WOODLN		24.9	25	23	108.4	261	29433 20MAYTNJ	138 29435 20MAYTNJ69.0	1		1
27023	11DELVIN	161	27045	11WI	TAP	142.5	143.5	142	100.3	262	29433 20MAYTNJ	138 29501 20POWELL	138	1	1
27044	11W	IRVI	161	27045	11WI	TAP	82	74	110.7	262	29433 20MAYTNJ	138 29501 20POWELL	138	1	1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	262	29433 20MAYTNJ	138 29501 20POWELL	138	1	1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114	262	29433 20MAYTNJ	138 29501 20POWELL	138	1	1
29411	20LILYTJ	69.0	29634	20WOODLN		24.9	25	23	108.4	262	29433 20MAYTNJ	138 29501 20POWELL	138	1	1
27023	11DELVIN	161	27045	11WI	TAP	143.4	143.5	142	101	263	29434 20MAYTNW69.0	29435 20MAYTNJ69.0	1		1
27044	11W	IRVI	161	27045	11WI	TAP	82.2	74	111	263	29434 20MAYTNW69.0	29435 20MAYTNJ69.0	1		1
27161	11AIKEN	69.0	27253	11MIDDLT		144	144	143	100.7	263	29434 20MAYTNW69.0	29435 20MAYTNJ69.0	1		1
29359	20HODGEN	69.0	29419	20MAGNOL		21.7	21.7	19	114.1	263	29434 20MAYTNW69.0	29435 20MAYTNJ69.0	1		1
29411	20LILYTJ	69.0	29634	20WOODLN		25	25	23	108.7	263	29434 20MAYTNW69.0	29435 20MAYTNJ69.0	1		1
27023	11DELVIN	161	27045	11WI	TAP	143.3	143.5	142	100.9	264	29436 20MAZIE	69.0 29467 20NEWFN69.0	1		1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency				
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	264	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	264	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	264	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.7	264	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	265	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	265	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	265	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	265	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.7	265	29436 20MAZIE	69.0	29467	20NEWFND69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.8	143.5	142	101.3	266	29438 20MCCRE	69.0	29467	20NEWFND69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.2	266	29438 20MCCRE	69.0	29467	20NEWFND69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	266	29438 20MCCRE	69.0	29467	20NEWFND69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	266	29438 20MCCRE	69.0	29467	20NEWFND69.0	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	266	29438 20MCCRE	69.0	29467	20NEWFND69.0	1
27023	11DELVIN	161	27045	11WI TAP	146.5	143.5	142	103.2	267	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.4	82.2	74	111.3	267	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	267	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	267	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	267	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	268	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	268	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	268	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	268	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	268	29439 20MCKEE	69.0	29467	20NEWFND69.0	1
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	269	29443 20MIL-CJ69.0	29444	20MILBRG69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	269	29443 20MIL-CJ69.0	29444	20MILBRG69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	269	29443 20MIL-CJ69.0	29444	20MILBRG69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	269	29443 20MIL-CJ69.0	29444	20MILBRG69.0	1	
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	269	29443 20MIL-CJ69.0	29444	20MILBRG69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.9	143.5	142	100.7	270	29446 20MONTVA69.0	29447	20MONTIC69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.8	270	29446 20MONTVA69.0	29447	20MONTIC69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.7	270	29446 20MONTVA69.0	29447	20MONTIC69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.4	270	29446 20MONTVA69.0	29447	20MONTIC69.0	1	
29411	20LILY	TJ69.0	29634	20WOODLN	24.9	25	23	108.5	270	29446 20MONTVA69.0	29447	20MONTIC69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.8	143.5	142	101.3	271	29447 20MONTIC69.0	29551	20SLAT 69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	271	29447 20MONTIC69.0	29551	20SLAT 69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	271	29447 20MONTIC69.0	29551	20SLAT 69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.6	271	29447 20MONTIC69.0	29551	20SLAT 69.0	1	
29411	20LILY	TJ69.0	29634	20WOODLN	25	25	23	108.8	271	29447 20MONTIC69.0	29551	20SLAT 69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	272	29448 20MT OLV69.0	29450	20MT OLV69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	272	29448 20MT OLV69.0	29450	20MT OLV69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	272	29448 20MT OLV69.0	29450	20MT OLV69.0	1	
29359	20HODGEN	69.0	29419	20MAGNOL	21.6	21.7	19	113.7	272	29448 20MT OLV69.0	29450	20MT OLV69.0	1	
29411	20LILY	TJ69.0	29634	20WOODLN	24.9	25	23	108.3	272	29448 20MT OLV69.0	29450	20MT OLV69.0	1	
27023	11DELVIN	161	27045	11WI TAP	143.9	143.5	142	101.4	273	29451 20MSTER69.0	29511	20REID V69.0	1	

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	273	29451 20MTSTER69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	273	29451 20MTSTER69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	273	29451 20MTSTER69.0
29411	20LILY	J69.0	29634	20WOODLN	24.9	25	23	108.1	273	29451 20MTSTER69.0
27023	11DELVIN	161	27045	11WI TAP	143.8	143.5	142	101.3	274	29452 20MUNFVL69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	274	29452 20MUNFVL69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	274	29452 20MUNFVL69.0
29359	20HODGEN	69.0	29419	20MAGNOL	22.7	21.7	19	119.6	274	29452 20MUNFVL69.0
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.6	274	29452 20MUNFVL69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	275	29455 20MUNK
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	275	29455 20MUNK
27161	11AIKEN	69.0	27253	11MIDDLT	143.9	144	143	100.6	275	29455 20MUNK
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.2	275	29455 20MUNK
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.8	275	29455 20MUNK
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	276	29456 20MUNK
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	276	29456 20MUNK
27161	11AIKEN	69.0	27253	11MIDDLT	143.7	144	143	100.5	276	29456 20MUNK
29359	20HODGEN	69.0	29419	20MAGNOL	43.1	6.1	42	102.6	276	29456 20MUNK
29411	20LILY	J69.0	29634	20WOODLN	21.7	21.7	19	114.2	276	29456 20MUNK
29572	20SERKJ	169.0	29576	20S PARK	75.3	63.6	72	104.6	276	29456 20MUNK
27023	11DELVIN	161	27045	11WI TAP	143.8	143.5	142	101.3	277	29456 20MUNK
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	277	29456 20MUNK
27161	11AIKEN	69.0	27253	11MIDDLT	143.8	144	143	100.6	277	29456 20MUNK
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.5	277	29456 20MUNK
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.9	277	29456 20MUNK
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	278	29458 20MURPHY69.0
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	278	29458 20MURPHY69.0
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	278	29458 20MURPHY69.0
29359	20HODGEN	69.0	29419	20MAGNOL	21.7	21.7	19	114.1	278	29458 20MURPHY69.0
29411	20LILY	J69.0	29634	20WOODLN	25	25	23	108.8	278	29458 20MURPHY69.0
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	279	29459 20N SPR
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	279	29459 20N SPR
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	279	29459 20N SPR
29359	20HODGEN	69.0	29419	20MAGNOL	21.5	21.7	19	113	279	29459 20N SPR
29411	20LILY	J69.0	29634	20WOODLN	24.4	25	23	106	279	29459 20N SPR
27023	11DELVIN	161	27045	11WI TAP	143.3	143.5	142	100.9	280	29460 20NANCY
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	280	29460 20NANCY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	280	29460 20NANCY
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.8	280	29460 20NANCY
29411	20LILY	J69.0	29634	20WOODLN	25.1	25	23	109.3	280	29460 20NANCY
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	281	29460 20NANCY
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	281	29460 20NANCY
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	281	29460 20NANCY
29359	20HODGEN	69.0	29419	20MAGNOL	21.8	21.7	19	114.5	281	29460 20NANCY

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109.1	281	29460	20NANCY 69.0 29631 20WINDSR69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.5	144	143	101	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
27168	11BARD 169.0	27169	11BARDST	89.5	48.7	73	122.6	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
27168	11BARD 169.0	29303	20E BARD	66.1	27.3	54	122.5	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
27229	11HODGEN69.0	29359	20HODGEN	40.1	35.9	40	100.2	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21	21.7	19	110.8	282	29462	20NELSON69.0 29610 20WARDJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101	283	29462	20NELSON69.0 29635 20WOOSLY69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	283	29462	20NELSON69.0 29635 20WOOSLY69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	283	29462	20NELSON69.0 29635 20WOOSLY69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.5	283	29462	20NELSON69.0 29635 20WOOSLY69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	24.7	25	23	107.2	283	29462	20NELSON69.0 29635 20WOOSLY69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.5	143.5	142	101.1	284	29466	20NCASTL69.0 29476 20OWEN C69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	284	29466	20NCASTL69.0 29476 20OWEN C69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144.8	144	143	101.3	284	29466	20NCASTL69.0 29476 20OWEN C69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.9	284	29466	20NCASTL69.0 29476 20OWEN C69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	24.9	25	23	108.4	284	29466	20NCASTL69.0 29476 20OWEN C69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.7	143.5	142	101.2	285	29468	20NEWLIB69.0 29476 20OWEN C69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	285	29468	20NEWLIB69.0 29476 20OWEN C69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.8	144	143	100.6	285	29468	20NEWLIB69.0 29476 20OWEN C69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	285	29468	20NEWLIB69.0 29476 20OWEN C69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	285	29468	20NEWLIB69.0 29476 20OWEN C69.0 1
27023	11DELVIN 161	27045	11WI TAP	142.8	143.5	142	100.5	286	29471	20NORWDJ69.0 29544 20SHOPVL69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	110.9	286	29471	20NORWDJ69.0 29544 20SHOPVL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	286	29471	20NORWDJ69.0 29544 20SHOPVL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	286	29471	20NORWDJ69.0 29544 20SHOPVL69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25	25	23	108.8	286	29471	20NORWDJ69.0 29544 20SHOPVL69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.2	143.5	142	100.8	287	29474	20OAKH J69.0 29554 20SOMKJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	287	29474	20OAKH J69.0 29554 20SOMKJ69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	287	29474	20OAKH J69.0 29554 20SOMKJ69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.1	287	29474	20OAKH J69.0 29554 20SOMKJ69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25	23	109.5	287	29474	20OAKH J69.0 29554 20SOMKJ69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.2	143.5	142	100.9	288	29474	20OAKH J69.0 29622 20W SOM 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	288	29474	20OAKH J69.0 29622 20W SOM 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	288	29474	20OAKH J69.0 29622 20W SOM 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	115	288	29474	20OAKH J69.0 29622 20W SOM 69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.2	25	23	109.4	288	29474	20OAKH J69.0 29622 20W SOM 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.3	143.5	142	101.6	289	29478	20OVLKJ69.0 29483 20PEASTK69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	289	29478	20OVLKJ69.0 29483 20PEASTK69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	289	29478	20OVLKJ69.0 29483 20PEASTK69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	289	29478	20OVLKJ69.0 29483 20PEASTK69.0 1
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109.2	289	29478	20OVLKJ69.0 29483 20PEASTK69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.8	143.5	142	101.2	290	29478	20OVLKJ69.0 29507 20PRSTNJ69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	290	29478	20OVLKJ69.0 29507 20PRSTNJ69.0 1

**	From bus	**	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Noon	Contingency					
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	290	29478	20WVLUK69.0	29507	20PRSTNJ69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	290	29478	20WVLUK69.0	29507	20PRSTNJ69.0	1	1		
29411	20LILY TJ69.0	29634	20WOODLN	25.1	25	23	109	290	29478	20WVLUK69.0	29507	20PRSTNJ69.0	1	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	291	29482	20PATRJ69.0	29568	20SSPJTH69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	291	29482	20PATRJ69.0	29568	20SSPJTH69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	291	29482	20PATRJ69.0	29568	20SSPJTH69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.5	21.7	19	113.3	291	29482	20PATRJ69.0	29568	20SSPJTH69.0	1	1		
29411	20LILY TJ69.0	29634	20WOODLN	25	25	23	108.7	291	29482	20PATRJ69.0	29568	20SSPJTH69.0	1	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.7	292	29482	20PATRJ69.0	29590	20TMPLHL69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.9	293	29483	20PEASTK69.0	29636	20WYOMNG69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	293	29483	20PEASTK69.0	29636	20WYOMNG69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	293	29483	20PEASTK69.0	29636	20WYOMNG69.0	1	1		
29411	20LILY TJ69.0	29634	20WOODLN	25.2	25	23	109.4	293	29483	20PEASTK69.0	29636	20WYOMNG69.0	1	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	294	29490	20PHIL	69.0	29631	20WINDSR69.0	1	
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	294	29490	20PHIL	69.0	29631	20WINDSR69.0	1	
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	294	29490	20PHIL	69.0	29631	20WINDSR69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.6	21.7	19	113.8	294	29490	20PHIL	69.0	29631	20WINDSR69.0	1	1	
29411	20LILY TJ69.0	29634	20WOODLN	24.8	25	23	107.8	294	29490	20PHIL	69.0	29631	20WINDSR69.0	1	1	
27023	11DELVIN	161	27045	11WI TAP	144.3	143.5	142	101.6	295	29491	20PINEGJ69.0	29620	20W LOND69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.3	82.2	74	111.3	295	29491	20PINEGJ69.0	29620	20W LOND69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	295	29491	20PINEGJ69.0	29620	20W LOND69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	295	29491	20PINEGJ69.0	29620	20W LOND69.0	1	1		
29411	20LILY TJ69.0	29634	20WOODLN	25	25	23	108.8	295	29491	20PINEGJ69.0	29620	20W LOND69.0	1	1		
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	296	29492	20PNKNOT69.0	29515	20REVLUK69.0	1	1		
29411	20LILY TJ69.0	29634	20WOODLN	25	25	23	108.8	297	29492	20PNKNOT69.0	29628	20WHITLY69.0	1	1		
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101.1	297	29492	20PNKNOT69.0	29628	20WHITLY69.0	1		
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111.1	297	29492	20PNKNOT69.0	29628	20WHITLY69.0	1		
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	297	29492	20PNKNOT69.0	29628	20WHITLY69.0	1		
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	297	29492	20PNKNOT69.0	29628	20WHITLY69.0	1	1		
29411	20LILY TJ69.0	29634	20WOODLN	25	25	23	108.8	297	29492	20PNKNOT69.0	29628	20WHITLY69.0	1	1		
27044	11W IRVI	161	27045	11WI TAP	80.5	82.2	74	108.7	298	29496	20PITTSB	161	29602	20TYNER	161	1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	298	29496	20PITTSB	161	29602	20TYNER	161	1
29195	20ANNV LJ69.0	29307	20EBERLJ	34.7	19.8	32	108.5	298	29496	20PITTSB	161	29602	20TYNER	161	1	
29359	20HODGEN69.0	29419	20MAGNOL	21.9	21.7	19	115.3	298	29496	20PITTSB	161	29602	20TYNER	161	1	
29411	20LILY TJ69.0	29634	20WOODLN	24.9	25	23	108.5	298	29496	20PITTSB	161	29602	20TYNER	161	1	
27023	11DELVIN	161	27045	11WI TAP	143.5	143.5	142	101	299	29498	20PLUMV	138	29499	20PLUMV	69.0	1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	299	29498	20PLUMV	138	29499	20PLUMV	69.0	1

**	From bus	** ** *	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	299	29498 20PLUMV 138 29499 20PLUMV 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	299	29498 20PLUMV 138 29499 20PLUMV 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	299	29498 20PLUMV 138 29499 20PLUMV 69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.4	143.5	142	101	300	29499 20PLUMV 69.0 29508 20RECTVL69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.1	82.2	74	111	300	29499 20PLUMV 69.0 29508 20RECTVL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	300	29499 20PLUMV 69.0 29508 20RECTVL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	300	29499 20PLUMV 69.0 29508 20RECTVL69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.8	300	29499 20PLUMV 69.0 29508 20RECTVL69.0 1
27023	11DELVIN 161	27045	11WI TAP	142.4	143.5	142	100.3	302	29501 20POWELL 138 29503 20POWELL69.0 1
27044	11W IRVI 161	27045	11WI TAP	80.7	82.2	74	109	302	29501 20POWELL 138 29503 20POWELL69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	302	29501 20POWELL 138 29503 20POWELL69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	302	29501 20POWELL 138 29503 20POWELL69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.3	25	23	109.9	302	29501 20POWELL 138 29503 20POWELL69.0 1
27023	11DELVIN 161	27045	11WI TAP	142	143.5	142	100	303	29503 20POWELL69.0 29570 20STANTN69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	303	29503 20POWELL69.0 29570 20STANTN69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	303	29503 20POWELL69.0 29570 20STANTN69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114	303	29503 20POWELL69.0 29570 20STANTN69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25.2	25	23	109.4	303	29503 20POWELL69.0 29570 20STANTN69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.6	143.5	142	101.2	304	29504 20PPG 69.0 29506 20PPG J 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	304	29504 20PPG 69.0 29506 20PPG J 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	304	29504 20PPG 69.0 29506 20PPG J 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	304	29504 20PPG 69.0 29506 20PPG J 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.8	304	29504 20PPG 69.0 29506 20PPG J 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144	143.5	142	101.4	305	29510 20REDBSH69.0 29550 20SKAGGS69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	305	29510 20REDBSH69.0 29550 20SKAGGS69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	305	29510 20REDBSH69.0 29550 20SKAGGS69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	305	29510 20REDBSH69.0 29550 20SKAGGS69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.9	25	23	108.5	305	29510 20REDBSH69.0 29550 20SKAGGS69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.9	143.5	142	101.4	306	29510 20REDBSH69.0 29608 20VOLGA 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	306	29510 20REDBSH69.0 29608 20VOLGA 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	306	29510 20REDBSH69.0 29608 20VOLGA 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.2	306	29510 20REDBSH69.0 29608 20VOLGA 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.5	306	29510 20REDBSH69.0 29608 20VOLGA 69.0 1
27023	11DELVIN 161	27045	11WI TAP	144.1	143.5	142	101.5	307	29511 20REID V69.0 29546 20SIDEV 69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	307	29511 20REID V69.0 29546 20SIDEV 69.0 1
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.7	307	29511 20REID V69.0 29546 20SIDEV 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.3	307	29511 20REID V69.0 29546 20SIDEV 69.0 1
29411	20LILYJ69.0	29634	20WOODLN	24.8	25	23	107.7	307	29511 20REID V69.0 29546 20SIDEV 69.0 1
27023	11DELVIN 161	27045	11WI TAP	143.3	143.5	142	100.9	308	29512 20RENKR 138 29514 20RENKR69.0 1
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111	308	29512 20RENKR 138 29514 20RENKR69.0 1

**	From bus	**	**	To bus	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency
27051	11ADAMS	138	27148	11TYRONE	100.1	95.8	97	103.2	308	29512 20RENAKR 138 29514 20RENAKR69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	144	143	100.8	308	29512 20RENAKR 138 29514 20RENAKR69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.6	21.7	19	113.9	308	29512 20RENAKR 138 29514 20RENAKR69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	308	29512 20RENAKR 138 29514 20RENAKR69.0 1
27023	11DELVIN	161	27045	11WI TAP	142.2	143.5	142	100.2	309	29512 20RENAKR 138 29566 20SPURLK 138 1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	309	29512 20RENAKR 138 29566 20SPURLK 138 1
27051	11ADAMS	138	27148	11TYRONE	98.5	95.8	97	101.5	309	29512 20RENAKR 138 29566 20SPURLK 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144.2	144	143	100.8	309	29512 20RENAKR 138 29566 20SPURLK 138 1
29359	20HODGEN69.0	29419	20MAGNOL		21.6	21.7	19	113.9	309	29512 20RENAKR 138 29566 20SPURLK 138 1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25	23	109.2	309	29512 20RENAKR 138 29566 20SPURLK 138 1
27023	11DELVIN	161	27045	11WI TAP	143.7	143.5	142	101.2	310	29518 20ROWAN 138 29519 20ROWAN 69.0 1
27044	11W IRVI	161	27045	11WI TAP	82.2	82.2	74	111	310	29518 20ROWAN 138 29519 20ROWAN 69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	310	29518 20ROWAN 138 29519 20ROWAN 69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	310	29518 20ROWAN 138 29519 20ROWAN 69.0 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	310	29518 20ROWAN 138 29519 20ROWAN 69.0 1
27023	11DELVIN	161	27045	11WI TAP	147.2	143.5	142	103.7	311	29518 20ROWAN 138 29548 20SKAGGS 138 1
27044	11W IRVI	161	27045	11WI TAP	82	82.2	74	110.7	311	29518 20ROWAN 138 29548 20SKAGGS 138 1
27137	11RODBRN	138	27273	11RODBRN	43.2	35.1	40	108	311	29518 20ROWAN 138 29548 20SKAGGS 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	311	29518 20ROWAN 138 29548 20SKAGGS 138 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.3	311	29518 20ROWAN 138 29548 20SKAGGS 138 1
29411	20LILYJ69.0	29634	20WOODLN		25	25	23	108.8	311	29518 20ROWAN 138 29548 20SKAGGS 138 1
27023	11DELVIN	161	27045	11WI TAP	142.8	143.5	142	100.6	312	29518 20ROWAN 138 29640 20CRANST 138 1
27044	11W IRVI	161	27045	11WI TAP	82.1	82.2	74	111	312	29518 20ROWAN 138 29640 20CRANST 138 1
27161	11AIKEN	69.0	27253	11MIDDLT	144	144	143	100.7	312	29518 20ROWAN 138 29640 20CRANST 138 1
29359	20HODGEN69.0	29419	20MAGNOL		21.7	21.7	19	114.1	312	29518 20ROWAN 138 29640 20CRANST 138 1
29411	20LILYJ69.0	29634	20WOODLN		25.1	25	23	109.1	312	29518 20ROWAN 138 29640 20CRANST 138 1
27044	11W IRVI	161	27045	11WI TAP	143.8	143.5	142	101.3	313	29520 20RUSSSEL 161 29522 20RUSSCO 161 1
27161	11AIKEN	69.0	27253	11MIDDLT	82.2	82.2	74	111.1	313	29520 20RUSSSEL 161 29522 20RUSSCO 161 1
29359	20HODGEN69.0	29419	20MAGNOL		144.1	144	143	100.8	313	29520 20RUSSSEL 161 29522 20RUSSCO 161 1
29411	20LILYJ69.0	29634	20WOODLN		21.7	21.7	19	114	313	29520 20RUSSSEL 161 29522 20RUSSCO 161 1
27023	11DELVIN	161	27045	11WI TAP	25.2	25	23	109.7	313	29520 20RUSSSEL 161 29522 20RUSSCO 161 1
27044	11W IRVI	161	27045	11WI TAP	144	143.5	142	101.4	314	29520 20RUSSSEL 161 29531 20S OAKH 161 1
27161	11AIKEN	69.0	27253	11MIDDLT	82.3	82.2	74	111.2	314	29520 20RUSSSEL 161 29531 20S OAKH 161 1
29359	20HODGEN69.0	29419	20MAGNOL		144	144	143	100.7	314	29520 20RUSSSEL 161 29531 20S OAKH 161 1
29411	20LILYJ69.0	29634	20WOODLN		21.6	21.7	19	113.6	314	29520 20RUSSSEL 161 29531 20S OAKH 161 1
27023	11DELVIN	161	27045	11WI TAP	25	25	23	108.8	314	29520 20RUSSSEL 161 29531 20S OAKH 161 1
27044	11W IRVI	161	27045	11WI TAP	143.8	143.5	142	101.3	315	29522 20RUSSCO 161 29523 20RUSSCO69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	82.2	82.2	74	111.1	315	29522 20RUSSCO 161 29523 20RUSSCO69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		144.1	144	143	100.8	315	29522 20RUSSCO 161 29523 20RUSSCO69.0 1
29411	20LILYJ69.0	29634	20WOODLN		21.7	21.7	19	114	315	29522 20RUSSCO 161 29523 20RUSSCO69.0 1
27023	11DELVIN	161	27045	11WI TAP	25.2	25	23	109.7	315	29522 20RUSSCO 161 29523 20RUSSCO69.0 1
27044	11W IRVI	161	27045	11WI TAP	143.4	143.5	142	101	316	29523 20RUSSCO69.0 29527 20RSPRKH69.0 1
27161	11AIKEN	69.0	27253	11MIDDLT	82.2	82.2	74	111.1	316	29523 20RUSSCO69.0 29527 20RSPRKH69.0 1
29359	20HODGEN69.0	29419	20MAGNOL		144	144	143	100.7	316	29523 20RUSSCO69.0 29527 20RSPRKH69.0 1
29411	20LILYJ69.0	29634	20WOODLN		21.8	21.7	19	114.9	316	29523 20RUSSCO69.0 29527 20RSPRKH69.0 1

**	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	100.8	323	29536	20SANDLK69.0	29638	20ZACHAR69.0	1	
27044	11W	IRVI	161	27045	82.2	74	111.1	324	29539	20SHLBYC	161	29540	20SHLBYC69.0	1
27161	11AIKEN	69.0	27253	11MIDDLT	144.1	143	100.8	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	20HODGEN69.0	29634	20WOODLN	27.9	19	23	121.5	326	29547	20SINAI	69.0	29607	20VANARJ69.0	1
29359	20HODGEN69.0	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	20HODGEN69.0	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	20HODGEN69.0	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	20HODGEN69.0	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	20HODGEN69.0	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	20HODGEN69.0	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	2
27044	11W IRVI	161	27045	82.1	82.2	74	111	332	29564	20SPURLK	345	29566	20SPURLK 138 2	2
27161	11AIKEN	69.0	27253	144	144	143	100.7	332	29564	20SPURLK	345	29566	20SPURLK 138 2	2
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	332	29564	20SPURLK	345	29566	20SPURLK 138 2	2
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	108.9	332	29564	20SPURLK	345	29566	20SPURLK 138 2	2
27023	11DELVIN	161	27045	143.2	143.5	142	100.8	333	29564	20SPURLK	345	29566	20SPURLK 138 3	3
27044	11W IRVI	161	27045	82.1	82.2	74	111	333	29564	20SPURLK	345	29566	20SPURLK 138 3	3
27161	11AIKEN	69.0	27253	144	144	143	100.7	333	29564	20SPURLK	345	29566	20SPURLK 138 3	3
29359	20HODGEN69.0	29419	20MAGNOL	21.7	21.7	19	114.1	333	29564	20SPURLK	345	29566	20SPURLK 138 3	3
29411	20LILYJTJ69.0	29634	20WOODLN	25.1	25	23	109	333	29564	20SPURLK	345	29566	20SPURLK 138 3	3
27023	11DELVIN	161	27045	143.6	143.5	142	101.1	334	29566	20SPURLK	138	29575	20S PARK 138 1	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	20SSPURLK 138	29584	20SSHADE69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	336	29568	20SSPURLK 138	29584	20SSHADE69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	336	29568	20SSPURLK 138	29584	20SSHADE69.0 1
29210	20BARREN69.0 29335 20GOODNT	74.9	20.1	72	104	336	29568	20SSPURLK 138	29584	20SSHADE69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	20.7	21.7	19	109	336	29568	20SSPURLK 138	29584	20SSHADE69.0 1
29411	20LILYJ69.0 29634 20WOODLN	24.9	25	23	108.2	336	29568	20SSPURLK 138	29584	20SSHADE69.0 1
27023	11DELVIN 161 27045 11WI TAP	143.5	143.5	142	101	337	29568	20SSPURLK 138	29590	20TMPLHL69.0 1
27044	11W IRVI 161 27045 11WI TAP	82.2	82.2	74	111	337	29568	20SSPURLK 138	29590	20TMPLHL69.0 1
27161	11AIKEN 69.0 27253 11MIDDLT	144	144	143	100.7	337	29568	20SSPURLK 138	29590	20TMPLHL69.0 1
29359	20HODGEN69.0 29419 20MAGNOL	21.6	21.7	19	113.5	337	29568	20SSPURLK 138	29590	20TMPLHL69.0 1
29411	20LILYJ69.0 29634 20WOODLN	25	25	23	108.7	337	29568	20SSPURLK 138	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	20WBARDJ69.0	29611	20W BARD69.0	1	
27044	11W IRVI 161	27045	11WI TAP	82.2	82.2	74	111.1	349	29610	20WBARDJ69.0	29611	20W BARD69.0	1	
27161	11AIKEN 69.0	27253	11MIDDLT	143.9	144	143	100.6	349	29610	20WBARDJ69.0	29611	20W BARD69.0	1	
29359	20HODGEN69.0	29419	20MAGNOL	22.2	21.7	19	117	349	29610	20WBARDJ69.0	29611	20W BARD69.0	1	
29411	20LILYJ69.0	29634	20WOODLN	27.8	25	23	120.7	349	29610	20WBARDJ69.0	29611	20W BARD69.0	1	
27023	11DELVIN 161	27045	11WI TAP	148.3	143.5	142	104.4	350	29612	20WBBERA	138	29614	20WBBEREA69.0	1
27044	11W IRVI 161	27045	11WI TAP	81.8	82.2	74	110.5	350	29612	20WBBERA	138	29614	20WBBEREA69.0	1
27161	11AIKEN 69.0	27253	11MIDDLT	144	144	143	100.7	350	29612	20WBBERA	138	29614	20WBBEREA69.0	1
27209	11FAWES69.0	29283	20CROOKJ	62	21.7	54	114.8	350	29612	20WBBERA	138	29614	20WBBEREA69.0	1
29359	20HODGEN69.0	29419	20MAGNOL	21.8	21.7	19	114.6	350	29612	20WBBERA	138	29614	20WBBEREA69.0	1
29411	20LILYJ69.0	29634	20WOODLN	25	25	23	108.7	350	29612	20WBBERA	138	29614	20WBBEREA69.0	1
27023	11DELVIN 161	27045	11WI TAP	153	143.5	142	107.7	351	29614	20WBBEREA69.0	29615	20WBBER J69.0	1	