



Party: BB,CR	Width: 3,390 ft	Processed by: BB
Boat/Motor: wooldridge	Area: 58,700 ft²	Mean Velocity: 1.73 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 102,000 ft³/s

Area Method: Avg. Course	ADCP Depth: 2.200 ft	Index Vel.: 0.00 ft/s	Rating No.: 1
Nav. Method: Bottom Track	Shore Ens.:10	Adj.Mean Vel: 0.00 ft/s	Qm Rating: P
MagVar Method: None (-1.6°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft²	Diff.: 0.000%
Depth Sounder: Not Used	Top Est: Power (0.1667)	Control1: Unspecified	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:		ADCP:
BT 3-Beam Solution: YES	Max. Vel.: 8.08 ft/s	Type/Freq.: Rio Grande/600 kHz
WT 3-Beam Solution: NO	Max. Depth: 34.6 ft	Serial #:                      Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 17.3 ft	Bin Size: 50 cm              Blank: 25 cm
WT Error Vel.: 32.81 ft/s	% Meas.: 54.82	BT Mode: 5                      BT Pings: 1
BT Up Vel.: 32.81 ft/s	Water Temp.: None	WT Mode: 12                      WT Pings: 1
WT Up Vel.: 32.81 ft/s	ADCP Temp.: 18.9 °C	WV : 170                        WO : 1, 4
Use Weighted Mean Depth: NO		

Performed Diag. Test: NO

Performed Moving Bed Test: NO

Performed Compass Test: NO

Meas. Location: 50' ds of east 62 bridge

Project Name: ohiooverflowbelowtracks

Software: 2.07

Tr.#	Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad		
	L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins	
003	L	76	95	1109	26167	55568	16088	3767	-270	101321	3389	58464	11:00	11:08	6.93	1.73	0	1
004	R	88	90	895	26458	55825	15550	4314	-269	101878	3395	58854	11:08	11:14	8.80	1.73	0	1
Mean		82	93	1002	26313	55697	15819	4040	-270	101599	3392	58659	Total	00:14	7.86	1.73	0	1
SDev		8	4	151	205	182	381	387	0.724	394	4.5	275.9			1.32	0.00		
SD/M		0.10	0.04	0.15	0.01	0.00	0.02	0.10	0.00	0.00	0.00	0.00			0.17	0.00		

Remarks:

#1 102,000

#2 18,790

#3 34,550

Qm TOTAL 155,340

LC Version 3.20, July 8, 2010

Processed on: 16-May-2011

Loop File: ohiooverflowbelowtracksRtoL00011-05-16\_ASC.TXT

Distance Made Good (ft)	Loop Time (sec)	Moving Bed Velocity (ft/s)	Moving Bed Direction (degrees)	Flow Direction (degrees)	Estimated Percent Correction (percent)
83.59	844.66	0.10	226.52	183.82	4.29

Percent Bad Bottom Track: 0.3

Difference in flow direction between out and back sections: 2.0 deg

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Loop Closure Error not in Upstream Direction -- No Correction Recommended

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Station Number:

Meas. No: 5-1

Station Name: Ohio River Overflow near Cairo below rr bridge (2 of 3 overflow sections)

Date: 05/16/2011

Party: BB,CR

Width: 514 ft

Processed by: BB

Boat/Motor: wooldridge

Area: 9,590 ft<sup>2</sup>Mean Velocity: ~~1.89 ft/s~~ 1.96

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: ~~18,100 ft<sup>3</sup>/s~~ 18790

Area Method: Avg. Course

ADCP Depth: 2.200 ft

Index Vel.: 0.00 ft/s

Rating No.: 1

Nav. Method: Bottom Track

Shore Ens.:10

Adj.Mean Vel: 0.00 ft/s

Qm Rating: P

MagVar Method: None (-1.6°)

Bottom Est: Power (0.1667)

Rated Area: 0.000 ft<sup>2</sup>

Diff.: 0.000%

Depth Sounder: Not Used

Top Est: Power (0.1667)

Control1: Unspecified

Control2: Unspecified

Control3: Unspecified

Screening Thresholds:

BT 3-Beam Solution: YES

Max. Vel.: 5.99 ft/s

ADCP:

WT 3-Beam Solution: NO

Max. Depth: 28.4 ft

Type/Freq.: Rio Grande/600 kHz

BT Error Vel.: 0.33 ft/s

Mean Depth: 18.6 ft

Serial #:

Firmware: 10.16

WT Error Vel.: 32.81 ft/s

% Meas.: 57.37

Bin Size: 50 cm

Blank: 25 cm

BT Up Vel.: 32.81 ft/s

Water Temp.: None

BT Mode: 5

BT Pings: 1

WT Up Vel.: 32.81 ft/s

ADCP Temp.: 18.9 °C

WT Mode: 12

WT Pings: 1

Use Weighted Mean Depth: NO

WV : 170

WO : 1, 4

Performed Diag. Test: NO

Project Name: ohiooverflowbelowtracks

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: NO

Meas. Location: below rr bridge

Tr.#		Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad	
		L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins
005	R	30	42	288	4590	11020	2820	438	-31.4	18838	515	9615	11:26	11:28	4.14	1.96	1	1
006	L	30	26	278	4346	9790	2842	434	22.8	17434	513	9565	11:28	11:30	4.49	1.82	2	2
<b>Mean</b>		30	34	283	4468	10405	2831	436	-4.33	18136	514	9590	<b>Total</b>	00:03	4.32	1.89	2	1
<b>SDev</b>		0	11	7	173	870	15.3	3.10	38.3	992	1.5	35.2			0.25	0.10		
<b>SD/M</b>		0.00	0.33	0.02	0.04	0.08	0.01	0.01	8.86	0.05	0.00	0.00			0.06	0.05		

Remarks:

LC Version 3.20, July 8, 2010

Processed on: 16-May-2011

Loop File: ohiooverflowbelowtracksRtoL00111-05-16\_ASC.TXT

Distance Made Good (ft)	Loop Time (sec)	Moving Bed Velocity (ft/s)	Moving Bed Direction (degrees)	Flow Direction (degrees)	Estimated Percent Correction (percent)
16.14	228.25	0.07	320.25	175.37	3.63

Percent Bad Bottom Track: 1.6

Difference in flow direction between out and back sections: 0.1 deg

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Loop Indicates a Moving Bed -- Select transects to be corrected

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File Name	Original Discharge cfs	Adjusted Discharge cfs
owtracksRtoL00511-05-16_ASC.TXT	18837.70	19554.83
owtracksRtoL00611-05-16_ASC.TXT	17434.40	18026.47
Average	18136.05	18790.65

Party: BB,CR	Width: 626 ft	Processed by: BB
Boat/Motor: wooldridge	Area: 9,240 ft²	Mean Velocity: <del>3.63</del> ft/s 3.74
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: <del>33,600</del> ft³/s 34,550

Area Method: Avg. Course	ADCP Depth: 2.200 ft	Index Vel.: 0.00 ft/s	Rating No.: 1
Nav. Method: Bottom Track Loop	Shore Ens.:10	Adj.Mean Vel: 0.00 ft/s	Qm Rating: P
MagVar Method: None (-1.6°) CORRECTED	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft²	Diff.: 0.000%
Depth Sounder: Not Used	Top Est: Power (0.1667)	Control1: Unspecified	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:		ADCP:
BT 3-Beam Solution: YES	Max. Vel.: 8.17 ft/s	Type/Freq.: Rio Grande/600 kHz
WT 3-Beam Solution: NO	Max. Depth: 19.1 ft	Serial #: Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 14.8 ft	Bin Size: 50 cm Blank: 25 cm
WT Error Vel.: 32.81 ft/s	% Meas.: 51.60	BT Mode: 5 BT Pings: 1
BT Up Vel.: 32.81 ft/s	Water Temp.: None	WT Mode: 12 WT Pings: 1
WT Up Vel.: 32.81 ft/s	ADCP Temp.: 19.0 °C	WV : 170 WO : 1, 4
Use Weighted Mean Depth: NO		

Performed Diag. Test: NO  
Performed Moving Bed Test: NO  
Performed Compass Test: NO  
Meas. Location: below upper rr bridge

Project Name: ohiooverflowbelowtracks  
Software: 2.07

Tr.#	Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad	
	L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins
007 L	37	36	254	10719	17414	5456	-82.4	300	33807	633	9178	11:36	11:38	5.19	3.68	1	0
008 R	23	36	252	10157	17212	5606	126	194	33294	619	9295	11:38	11:40	5.57	3.58	1	1
Mean	30	36	253	10438	17313	5531	21.8	247	33551	626	9236	Total	00:03	5.38	3.63	1	1
SDev	10	0	1	397	143	106	147	75.1	362	9.5	82.3			0.27	0.07		
SD/M	0.33	0.00	0.01	0.04	0.01	0.02	6.76	0.30	0.01	0.02	0.01			0.05	0.02		

Remarks:

LC Version 3.20, July 8, 2010

Processed on: 16-May-2011

Loop File: ohiooverflowbelowtracksRtoL00211-05-16\_ASC.TXT

Distance Made Good (ft)	Loop Time (sec)	Moving Bed Velocity (ft/s)	Moving Bed Direction (degrees)	Flow Direction (degrees)	Estimated Percent Correction (percent)
20.78	229.81	0.09	11.38	185.33	3.00

Percent Bad Bottom Track: 0.8

Difference in flow direction between out and back sections: 5.7 deg

WARNING: Difference in flow direction between out and back sections of loop exceeds 5 degrees. This may indicated an inaccurate compass and the loop may not be accurate. Please review data.

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Loop Indicates a Moving Bed -- Select transects to be corrected

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File Name	Original Discharge cfs	Adjusted Discharge cfs
owtracksRtoL00711-05-16_ASC.TXT	33806.70	34727.95
owtracksRtoL00811-05-16_ASC.TXT	33294.20	34372.07
Average	33550.45	34550.01