United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215-7210
www.co.blm.gov

In Reply Refer To:
7250 (CO-932)

Ms. Linda Bassi
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Dear Ms. Bassi:

The Bureau of Land Management (BLM) is writing this letter to formally communicate its recommendation for an increase of an existing instream flow water right on a portion of the Little Cimarron River, located in Water Division 4.

Location and Land Status. The Little Cimarron River originates near Silver Mountain within the Uncompahgre Wilderness Area, approximately 23 miles south of Morrow Point Reservoir. The subject of this recommendation is a reach that begins at confluence with Firebox Creek and extends to the confluence with Van Boxel Creek, a distance of approximately 7.5 miles. The BLM manages approximately 1.5 miles of this reach, the U.S. Forest Service manages 2.5 miles, and 3.5 miles are in private ownership.

Existing Instream Flow Water Rights. The Colorado Water Conservation Board appropriated an instream flow water right on the Little Cimarron River in 1984. The water right extends from the headwaters to the headgate of the Butte Ditch, a distance of approximately 16.4 miles. The instream flow water right is for 2.0 cfs (cubic feet per second), year round.

Biological Summary. The Little Cimarron River is a cold-water, high gradient stream. It flows through a canyon with a valley floor approximately one-fourth mile in width. The stream cuts through alluvial deposits in the narrow valley and is confined by bedrock in many locations. The stream generally has large substrate, consisting of mostly of small cobbles and boulders of up to three feet in size. The stream has a good mix of large pools in meander bends, riffles and runs with some large woody debris.

Fisheries surveys have revealed a self-sustaining population of brook trout, with small numbers of lake trout. Intensive macro-invertebrate surveys have not been conducted, but spot samples have revealed various species of mayfly, caddisfly and stonefly.

The riparian community is generally comprised of blue spruce and willow species. The riparian community is in very good condition, and provides abundant shading and cover for fish habitat.

R2Cross Analysis. The BLM collected the following R2Cross data from Little Cimarron River:

Cross Section Date	Discharge Rate	Top Width	Winter Flow Recommendation (meets 2 of 3 hydraulic criteria)	Summer Flow Recommendation (meets 3 of 3 hydraulic criteria)
07/24/2014 #1	20.7 cfs	37.7 feet	9.64 cfs	10.26 cfs
07/24/2014 #2	22.38 cfs	35.8 feet	Out of range	12.34 cfs
07/27/2015 #1	17.89 cfs	35.9 feet	8.35 cfs	11.53 cfs
07/27/2015 #2	17.52 cfs	40.9 feet	11.69 cfs	18.20 cfs
		Averages:	9.89 cfs	13.08 cfs

BLM's analysis of this data, coordinated with Colorado Parks and Wildlife, indicates that the following flows are needed to protect the fishery and natural environment to a reasonable degree.

> 13.00 cubic feet per second is recommended during warm weather period from April 15 to September 30. Protecting this flow rate would require an increase of 11.0 cfs to the existing instream flow water right. This recommendation is driven by the average depth criteria and wetted perimeter. This portion of the river is at high altitude and within a dark canyon, it therefore experiences significant icing during the winter months. It is important to protect a flow rate that makes a majority of this habitat available to the fish population while they are completing critical life history functions during the warm weather months.
>
> 9.0 cubic feet per second is recommended from October 1 to October 31. This recommendation is driven by limited water availability. Protecting this flow rate would erquire an increase of 7.0 cfs to the existing instream flow water rights. This flow rate will provide a transitional flow rate for the fish community between the higher flows during the warmer part of the year and low base flows during winter, allowing the population to adjust to gradually reduced physical habitat.
>
> 6.6 cubic feet per second is recommended during cold weather period from November 1 to April 14. Protecting this flow rate would require an increase of 4.6 cfs to the existing instream flow water right. This recommendation is driven by limited water availability. This flow rate should prevent pools from freezing, allowing the fish population to successfully overwinter.

Rationale for Instream Flow Increase. BLM believes an instream flow increase for Little Cimarron River is warranted because of physical habitat characteristics. The R2Cross data summarized below clearly indicates that the current instream flow water right does not provide sufficient physical habitat during the warm weather portions of the year when the fish populations are feeding, growing and spawning. When the existing instream flow rights are applied to the cross sections that were collected, the stream would exhibit between 20 percent and 45 percent wetted perimeter, so a significant portion of the potential habitat is not available.

The available habitat is further reduced when the existing instream flow rates are applied to the cross sections collected, because 2.0 cfs produces average depths ranging from 0.16 to 0.28 feet. These depths occur in a stream that averages 35 feet in width. While 0.28 feet is sufficient for fish passage, 0.16 feet is not. In many portions of the channel, depths may not be usable by the fish population. During the warm weather season, the fish population needs to have access to as much of the stream channel as possible for feeding, resting and spawning if it is to survive the pronounced cold winters in this location.

Water Availability. The BLM recommends relying upon three sources of data for water availability analysis. A basin apportionment analysis could be performed on United States Geological Survey (USGS) Gage 09126000 (Cimarron River near Cimarron, CO) to derive flow rates for this stream reach. In addition, Streamstats should be consulted since it provides similar estimates of flows. Finally, diversion records for downstream diversions can be consulted to help confirm the duration of the snowmelt runoff period.

The BLM is not aware of any water rights upstream from or within the proposed instream flow reach.

Relationship to Land Management Plans. The BLM's land use plan calls for the Little Cimarron River to be managed to maintain, restore or improve riparian conditions, such that proper functioning conditions are achieved. It also specifies that instream flow appropriations are pursued on fishery streams to ensure sufficient flows rates for fisheries protection. Appropriation of an instream flow water right would assist BLM in long-term management of outstanding riparian values and important fishery values.

Data sheets, R2Cross output, fishery survey information and photographs of the cross section were included with BLM's draft recommendation in February 2015. We thank both Colorado Parks and Wildlife and the Colorado Water Conservation Board for their cooperation in this effort.

If you have any questions regarding our instream flow recommendation, please contact Roy Smith at 303-239-3940.

Sincerely,

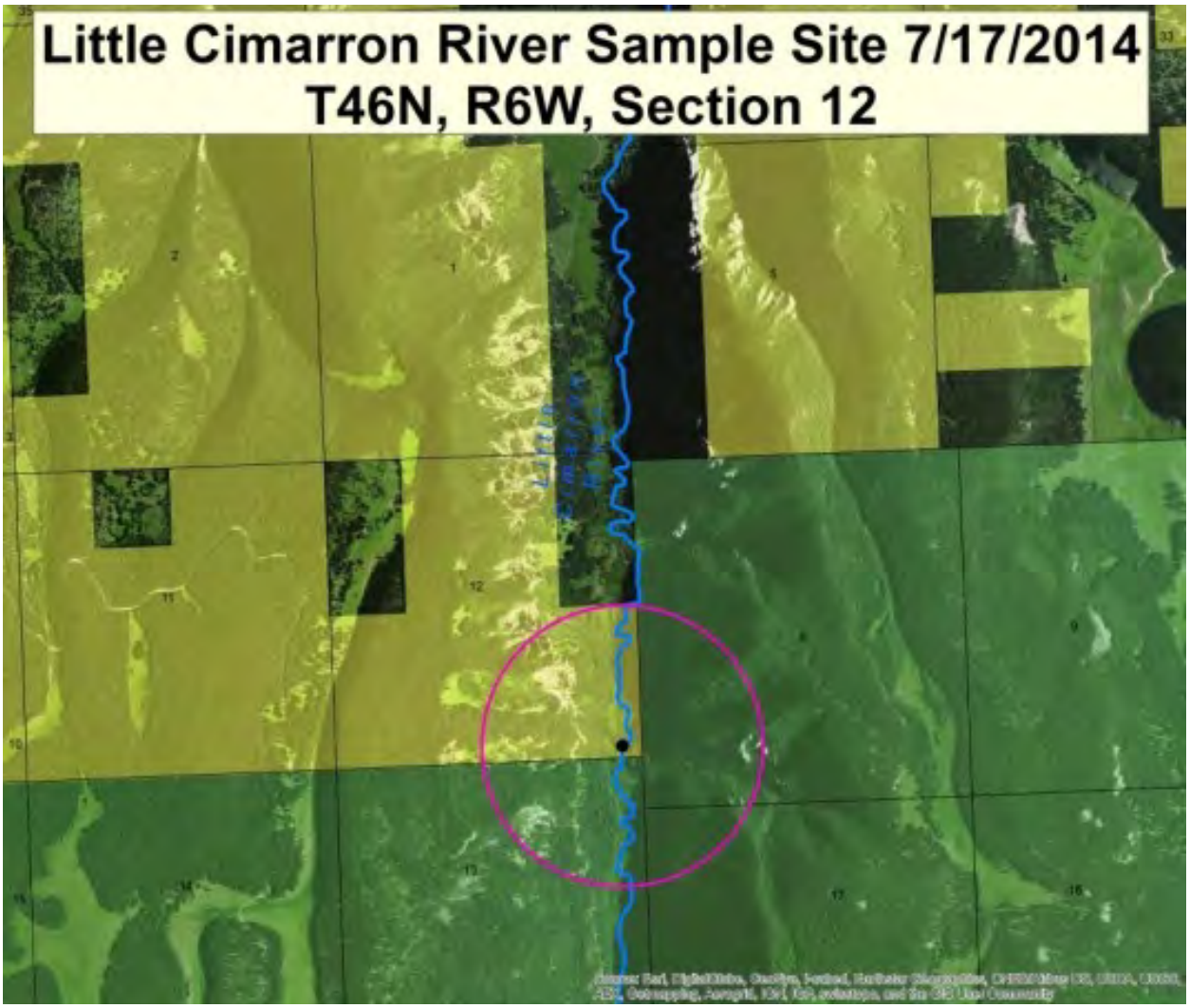
Brian St. George
Deputy State Director
Resources and Fire

Cc: Elijah Waters, Gunnison Field Office
Lori Armstrong, Southwest District Office
Andrew Breibart, Gunnison Field Office

Gunnison Field Office Stream Surveys
July, 2014

Little Cimarron River: Water Code – 39051

The Little Cimarron River, located on BLM lands managed by the Gunnison Field Office, was sampled on July 17, 2014. The Little Cimarron River is tributary to the Cimarron River, which leads to the Gunnison River. The stream was sampled using one backpack electroshocker to determine species presence. The stream was too wide to effectively complete a two-pass population estimate with one shocker. Brook trout (*Salvelinus fontinalis*) and lake trout (*Salvelinus namaycush*) were the only species seen or collected. Personnel present included Tom Fresques, Gregor Dekleva, and Kristen Doyle BLM.



Little Cimarron River

Lake Trout on Left Brook Trout on Right

STREAM SURVEY FISH SAMPLING FORM 2014									
WATER: Little Cimarron River			**DATE: 7/17/14**		**GEAR: BPE-1**				
Crew: Fresques, Dekleva, Doyle					**Location: Upper BLM at USFS boundary**				
#	**Pass**	**Species**	**Length**	**Weight**	**#**	**Pass**	**Species**	**Length**	**Weight**
1		BRK	157	37	26				
2		BRK	143	27	27				
3		BRK	200	88	28				
4		BRK	191	72	29				
5		BRK	221	110	30				
6		BRK	151	36	31				
7		BRK	126	20	32				
8		BRK	178	58	33				
9		BRK	137	21	34				
10		BRK	135	22	35				
11		BRK	124	18	36				
12		BRK	142	30	37				
13		BRK	153	39	38				
14		BRK	128	21	39				
15		BRK	155	41	40				
16		MAC	142	30	41				
17		BRK	87	8	42				
18		BRK	146	30	43				
19		BRK	122	19	44				
20		BRK	136	23	45				
21		BRK	89	6	46				
22		BRK	29	19	47				
23		BRK	101	12	48				
24		BRK	84	7	49				
25					50				
GPS Coordinates: 13S 0284037, 4236071									
H2O Temp:			**Reach Length**: 241’		**Stream Widths**:		1. 27.4		
Conductivity:			**Shocker Settings**:				2. 29.2		
Habitat (Riparian): Dense willow, spruce, fir, sedge, indian paint brush, elephant’s nose, mayflie, caddisfly, solidago, blue bells, clover, mare’s tail, geranium							3. 23.2		
							4. 20.3		
							5. 31.2		
							Avg: 26.26		
Habitat (Stream): B/C Rosgen type, good sinuosity, mostly gravel and cobble, dense riparian, several age classes of brook trout, not much sediment, large woody debris, undercut banks									

Discussion:

The river was sampled to determine species composition on the BLM reach. The river is in good condition and is comprised of a good mix of large meander bend pools, riffles, and runs. Stream substrate is primarily gravels and cobbles with some large woody debris. Riparian vegetation is

dense and consists of willow, blue spruce, sedge, clover, marestail, geranium, and elephant's nose. Brook trout and lake trout were the only species collected or seen. It is interesting that a lake trout was collected in the sample as there is no obvious lake or reservoir habitat in the Little Cimarron River watershed.

Recommendations:

- Consider sampling the site with CPW with additional shockers to effectively determine population status.

- Periodically sample and monitor stream and riparian habitats

COLORADO WATER CONSERVATION BOARD
INSTREAM FLOW / NATURAL LAKE LEVEL PROGRAM
STREAM CROSS-SECTION AND FLOW ANALYSIS

LOCATION INFORMATION

STREAM NAME:	Little Cimarron River
XS LOCATION:	Approx 0.7 mi upst fr conf w Van Boxel Cr
XS NUMBER:	2
DATE:	22-Jul-14
OBSERVERS:	R. Smith, A. Breibart
1/4 SEC:	NW
SECTION:	29
TWP:	47N
RANGE:	5W
PM:	NM
COUNTY:	Gunnison
WATERSHED:	Gunnison River
DIVISION:	4
DOW CODE:	39051
USGS MAP:	0
USFS MAP:	0

SUPPLEMENTAL DATA

		*** NOTE ***
		Leave TAPE WT and TENSION
		at defaults for data collected
TAPE WT:	0.0106	with a survey level and rod
TENSION:	99999	

CHANNEL PROFILE DATA

SLOPE:	0.028

INPUT DATA CHECKED BY: .....DATE.....

ASSIGNED TO: ….....……..…….....DATE.....

STREAM NAME: Little Cimarron River
XS LOCATION: Approx 0.7 mi upst fr conf w Van Boxel Cr
XS NUMBER: 2

DATA POINTS= 37

VALUES COMPUTED FROM RAW FIELD DATA

	FEATURE	DIST	VERT DEPTH	WATER DEPTH	VEL	WETTED PERIM.	WATER DEPTH	AREA (Am)	Q (Qm)	% Q CELL
	LS	0.00	3.00			0.00		0.00	0.00	0.0%
1	G	2.70	3.85			0.00		0.00	0.00	0.0%
	W	3.10	5.05	0.00	0.00	0.00		0.00	0.00	0.0%
		4.00	5.25	0.20	0.10	0.92	0.20	0.19	0.02	0.1%
		5.00	5.45	0.40	0.48	1.02	0.40	0.40	0.19	0.9%
		6.00	5.80	0.75	1.25	1.06	0.75	0.75	0.94	4.2%
		7.00	5.60	0.55	1.31	1.02	0.55	0.55	0.72	3.2%
		8.00	5.85	0.80	1.40	1.03	0.80	0.80	1.12	5.0%
		9.00	5.75	0.70	0.36	1.00	0.70	0.70	0.25	1.1%
		10.00	5.35	0.30	1.95	1.08	0.30	0.30	0.59	2.6%
		11.00	5.80	0.75	1.53	1.10	0.75	0.75	1.15	5.1%
		12.00	5.25	0.20	1.84	1.14	0.20	0.20	0.37	1.6%
		13.00	5.85	0.80	2.61	1.17	0.80	0.80	2.09	9.3%
		14.00	5.85	0.80	1.98	1.00	0.80	0.80	1.58	7.1%
		15.00	5.80	0.75	1.63	1.00	0.75	0.75	1.22	5.5%
		16.00	5.85	0.80	1.48	1.00	0.80	0.80	1.18	5.3%
		17.00	5.70	0.65	2.08	1.01	0.65	0.65	1.35	6.0%
		18.00	5.50	0.45	2.23	1.02	0.45	0.45	1.00	4.5%
		19.00	5.60	0.55	2.60	1.00	0.55	0.55	1.43	6.4%
		20.00	5.15	0.10	0.00	1.10	0.10	0.10	0.00	0.0%
		21.00	5.60	0.50	0.00	1.10	0.50	0.50	0.00	0.0%
		22.00	5.65	0.55	0.05	1.00	0.55	0.55	0.03	0.1%
		23.00	5.85	0.75	0.00	1.02	0.75	0.75	0.00	0.0%
		24.00	5.80	0.70	2.63	1.00	0.70	0.70	1.84	8.2%
		25.00	5.50	0.40	2.90	1.04	0.40	0.40	1.16	5.2%
		26.00	5.60	0.50	1.10	1.00	0.50	0.50	0.55	2.5%
		27.00	5.65	0.55	2.95	1.00	0.55	0.55	1.62	7.2%
		28.00	5.45	0.35	2.47	1.02	0.35	0.35	0.86	3.9%
		29.00	5.45	0.35	1.69	1.00	0.35	0.35	0.59	2.6%
		30.00	5.45	0.35	1.34	1.00	0.35	0.35	0.47	2.1%
		31.00	5.30	0.20	0.26	1.01	0.20	0.20	0.05	0.2%
		32.00	5.10	0.00	0.00	1.02		0.00	0.00	0.0%
		33.00	5.15	0.05	0.00	1.00	0.05	0.06	0.00	0.0%
	W	34.50	5.10	0.00	0.00	1.50		0.00	0.00	0.0%
		36.20	4.52			0.00		0.00	0.00	0.0%
1	G	38.50	3.85			0.00		0.00	0.00	0.0%
	RS	43.00	3.75			0.00		0.00	0.00	0.0%
	TOTALS ----------					32.39	0.8 (Max.)	14.80	22.38	100.0%

Manning's n = 0.0976
Hydraulic Radius= 0.45693804

STREAM NAME: Little Cimarron River
XS LOCATION: Approx 0.7 mi upst fr conf w Van Boxel Cr
XS NUMBER: 2

WATER LINE COMPARISON TABLE

WATER LINE	MEAS AREA	COMP AREA	AREA ERROR
	14.80	13.94	-5.8%
4.85	14.80	21.88	47.8%
4.87	14.80	21.24	43.5%
4.89	14.80	20.60	39.1%
4.91	14.80	19.95	34.8%
4.93	14.80	19.32	30.5%
4.95	14.80	18.68	26.2%
4.97	14.80	18.04	21.9%
4.99	14.80	17.40	17.6%
5.01	14.80	16.77	13.3%
5.03	14.80	16.14	9.0%
5.05	14.80	15.51	4.8%
5.06	14.80	15.19	2.6%
5.07	14.80	14.88	0.5%
5.08	14.80	14.56	-1.6%
5.09	14.80	14.25	-3.7%
5.10	14.80	13.94	-5.8%
5.11	14.80	13.63	-7.9%
5.12	14.80	13.33	-10.0%
5.13	14.80	13.03	-12.0%
5.14	14.80	12.74	-13.9%
5.15	14.80	12.45	-15.9%
5.17	14.80	11.89	-19.7%
5.19	14.80	11.34	-23.4%
5.21	14.80	10.79	-27.1%
5.23	14.80	10.24	-30.8%
5.25	14.80	9.70	-34.4%
5.27	14.80	9.17	-38.0%
5.29	14.80	8.65	-41.6%
5.31	14.80	8.13	-45.1%
5.33	14.80	7.62	-48.5%
5.35	14.80	7.11	-51.9%

WATERLINE AT ZERO
AREA ERROR = 5.072

STREAM NAME: Little Cimarron River
XS LOCATION: Approx 0.7 mi upst fr conf w Van Boxel Cr
XS NUMBER: 2 Constant Manning's n

GL = lowest Grassline elevation corrected for sag
STAGING TABLE *WL* = Waterline corrected for variations in field measured water surface elevations and sag

	DIST TO WATER (FT)	TOP WIDTH (FT)	AVG. DEPTH (FT)	MAX. DEPTH (FT)	AREA (SQ FT)	WETTED PERIM. (FT)	PERCENT WET PERIM (%)	HYDR RADIUS (FT)	FLOW (CFS)	AVG. VELOCITY (FT/SEC)
GL	3.85	35.80	1.56	2.00	55.83	37.85	100.0%	1.47	184.37	3.30
	4.07	34.96	1.37	1.78	47.96	36.82	97.3%	1.30	145.79	3.04
	4.12	34.77	1.33	1.73	46.21	36.59	96.7%	1.26	137.64	2.98
	4.17	34.59	1.29	1.68	44.48	36.36	96.1%	1.22	129.69	2.92
	4.22	34.40	1.24	1.63	42.76	36.13	95.4%	1.18	121.93	2.85
	4.27	34.21	1.20	1.58	41.04	35.90	94.8%	1.14	114.38	2.79
	4.32	34.02	1.16	1.53	39.33	35.66	94.2%	1.10	107.03	2.72
	4.37	33.83	1.11	1.48	37.64	35.43	93.6%	1.06	99.88	2.65
	4.42	33.64	1.07	1.43	35.95	35.20	93.0%	1.02	92.93	2.59
	4.47	33.46	1.02	1.38	34.27	34.97	92.4%	0.98	86.20	2.52
	4.52	33.27	0.98	1.33	32.61	34.74	91.8%	0.94	79.67	2.44
	4.57	33.11	0.93	1.28	30.95	34.53	91.2%	0.90	73.32	2.37
	4.62	32.94	0.89	1.23	29.29	34.32	90.7%	0.85	67.19	2.29
	4.67	32.78	0.84	1.18	27.65	34.12	90.1%	0.81	61.27	2.22
	4.72	32.62	0.80	1.13	26.02	33.91	89.6%	0.77	55.58	2.14
	4.77	32.45	0.75	1.08	24.39	33.70	89.0%	0.72	50.11	2.05
	4.82	32.29	0.71	1.03	22.77	33.49	88.5%	0.68	44.88	1.97
	4.87	32.13	0.66	0.98	21.16	33.29	87.9%	0.64	39.88	1.88
	4.92	31.96	0.61	0.93	19.56	33.08	87.4%	0.59	35.12	1.80
	4.97	31.80	0.56	0.88	17.97	32.87	86.8%	0.55	30.61	1.70
	5.02	31.64	0.52	0.83	16.38	32.66	86.3%	0.50	26.35	1.61
WL	5.07	31.38	0.47	0.78	14.80	32.38	85.5%	0.46	22.39	1.51
	5.12	29.84	0.44	0.73	13.26	30.83	81.4%	0.43	19.25	1.45
	5.17	27.89	0.42	0.68	11.83	28.85	76.2%	0.41	16.63	1.41
	5.22	27.19	0.38	0.63	10.45	28.12	74.3%	0.37	13.77	1.32
	5.27	26.40	0.34	0.58	9.11	27.29	72.1%	0.33	11.17	1.23
	5.32	25.47	0.31	0.53	7.81	26.30	69.5%	0.30	8.86	1.13
	5.37	24.39	0.27	0.48	6.56	25.15	66.4%	0.26	6.83	1.04
	5.42	23.17	0.23	0.43	5.37	23.86	63.0%	0.23	5.07	0.94
	5.47	20.04	0.21	0.38	4.29	20.65	54.5%	0.21	3.84	0.89
	5.52	18.38	0.18	0.33	3.32	18.90	49.9%	0.18	2.66	0.80
	5.57	15.94	0.15	0.28	2.46	16.36	43.2%	0.15	1.78	0.72
	5.62	12.95	0.13	0.23	1.73	13.27	35.1%	0.13	1.14	0.66
	5.67	10.17	0.11	0.18	1.17	10.41	27.5%	0.11	0.69	0.59
	5.72	8.46	0.08	0.13	0.70	8.62	22.8%	0.08	0.34	0.48
	5.77	6.54	0.05	0.08	0.32	6.62	17.5%	0.05	0.11	0.34
	5.82	3.41	0.02	0.03	0.06	3.43	9.1%	0.02	0.01	0.17

STREAM NAME:	Little Cimarron River
XS LOCATION:	Approx 0.7 mi upst fr conf w Van Boxel Cr
XS NUMBER:	2

SUMMARY SHEET

MEASURED FLOW (Qm)=	22.38	cfs
CALCULATED FLOW (Qc)=	22.39	cfs
(Qm-Qc)/Qm * 100 =	0.0	%
MEASURED WATERLINE (WLm)=	5.10	ft
CALCULATED WATERLINE (WLc)=	5.07	ft
(WLm-WLc)/WLm * 100 =	0.5	%
MAX MEASURED DEPTH (Dm)=	0.80	ft
MAX CALCULATED DEPTH (Dc)=	0.78	ft
(Dm-Dc)/Dm * 100	2.8	%
MEAN VELOCITY=	1.51	ft/sec
MANNING'S N=	0.098	
SLOPE=	0.028	ft/ft
.4 * Qm =	9.0	cfs
2.5 * Qm=	56.0	cfs

RECOMMENDED INSTREAM FLOW:
=============================

FLOW (CFS)	PERIOD
===========	========
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________

RATIONALE FOR RECOMMENDATION:
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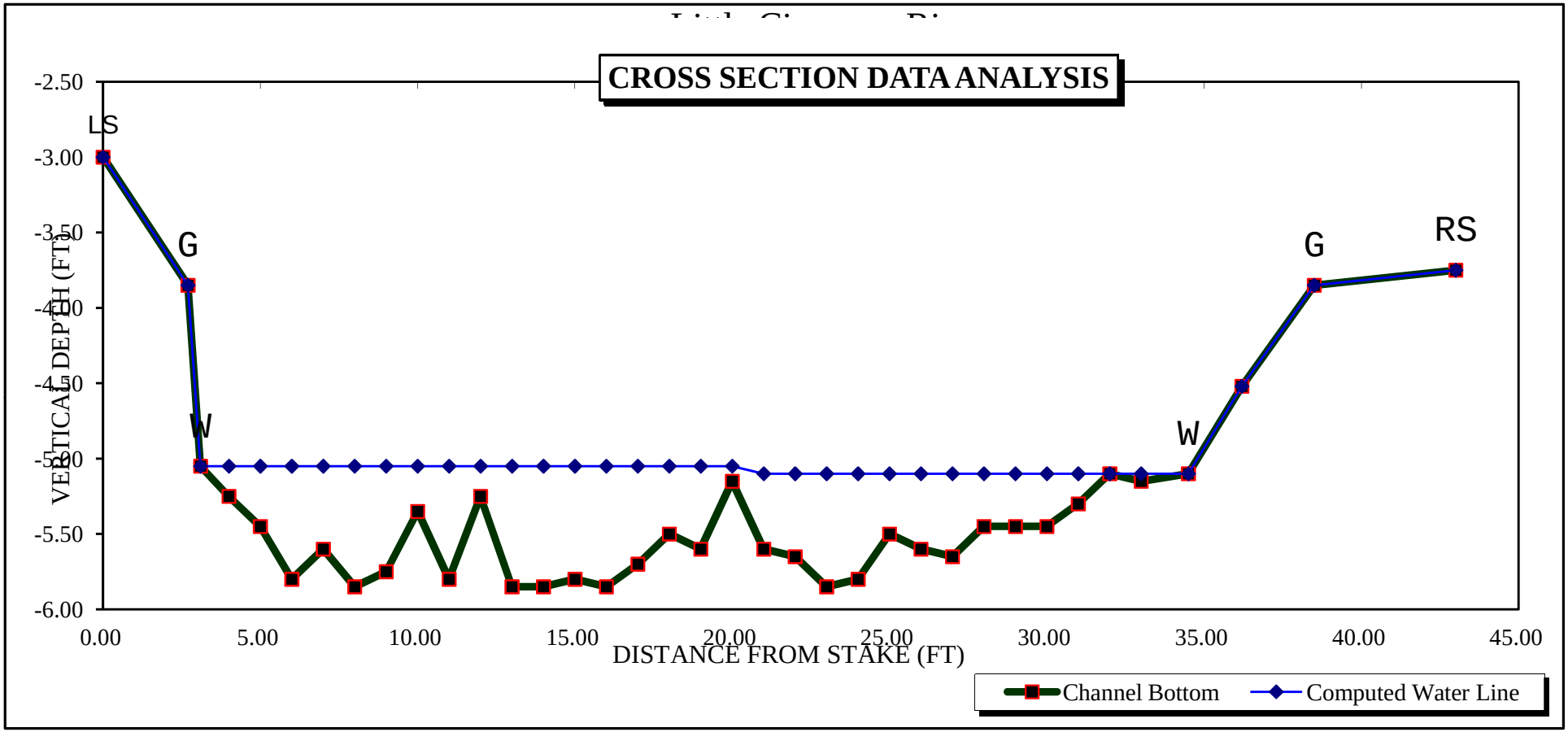
RECOMMENDATION BY: ………………...………..……............................... AGENCY..………………………......……...…...…….…...... DATE:......…...…......……………

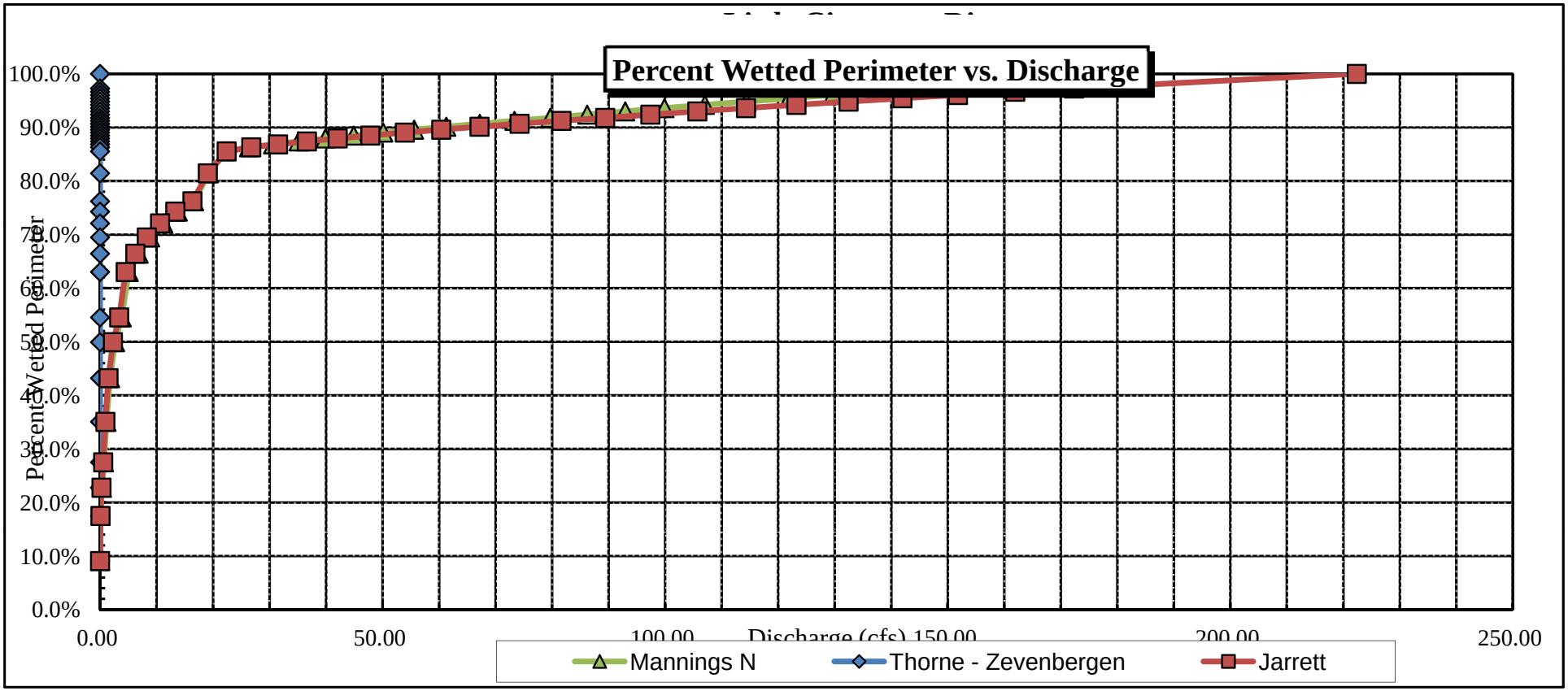
CWCB REVIEW BY: ..…………………………....………………………………………………...…............. DATE:.................…………….....

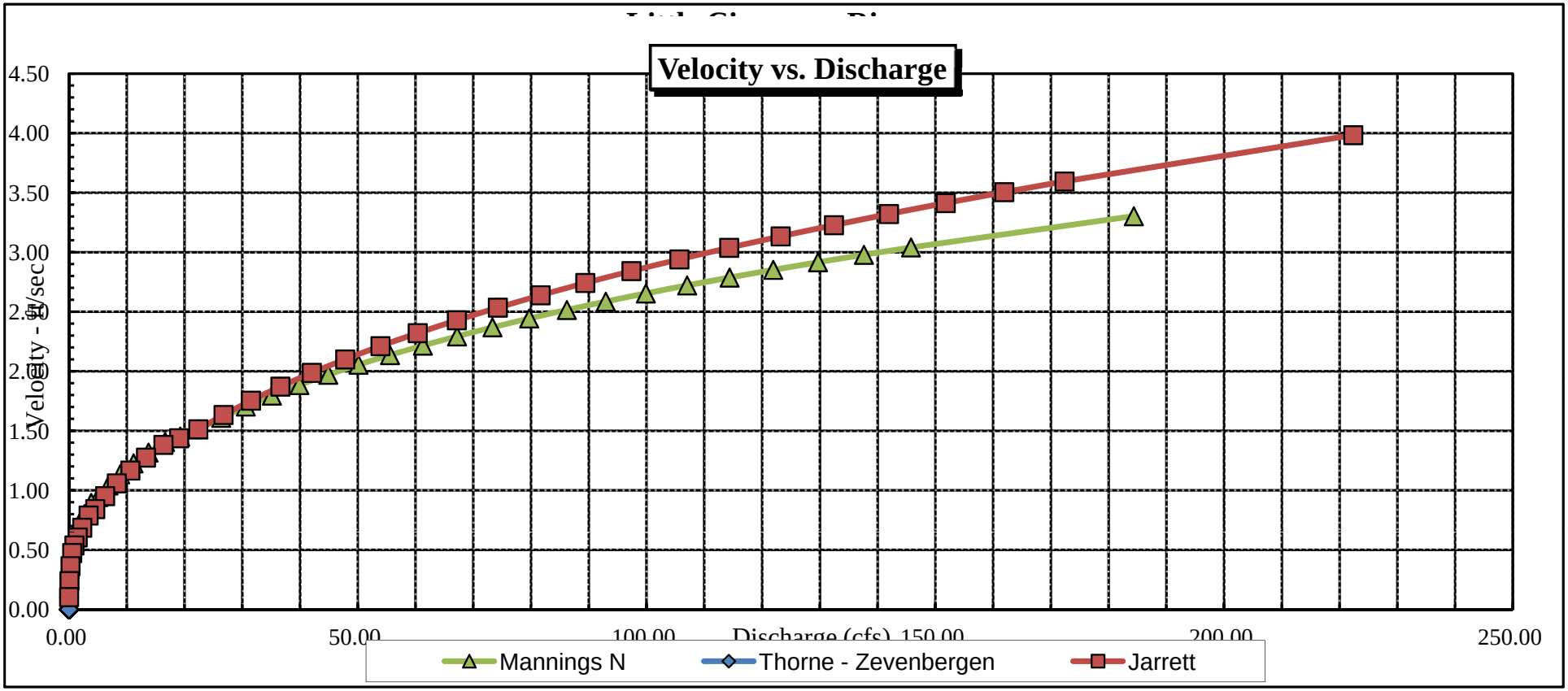
STREAM NAME: Little Cimarron River
XS LOCATION: Approx 0.7 mi upst fr conf w Van Boxel Cr
XS NUMBER: 2 Jarrett Variable Manning's n Correction Applied

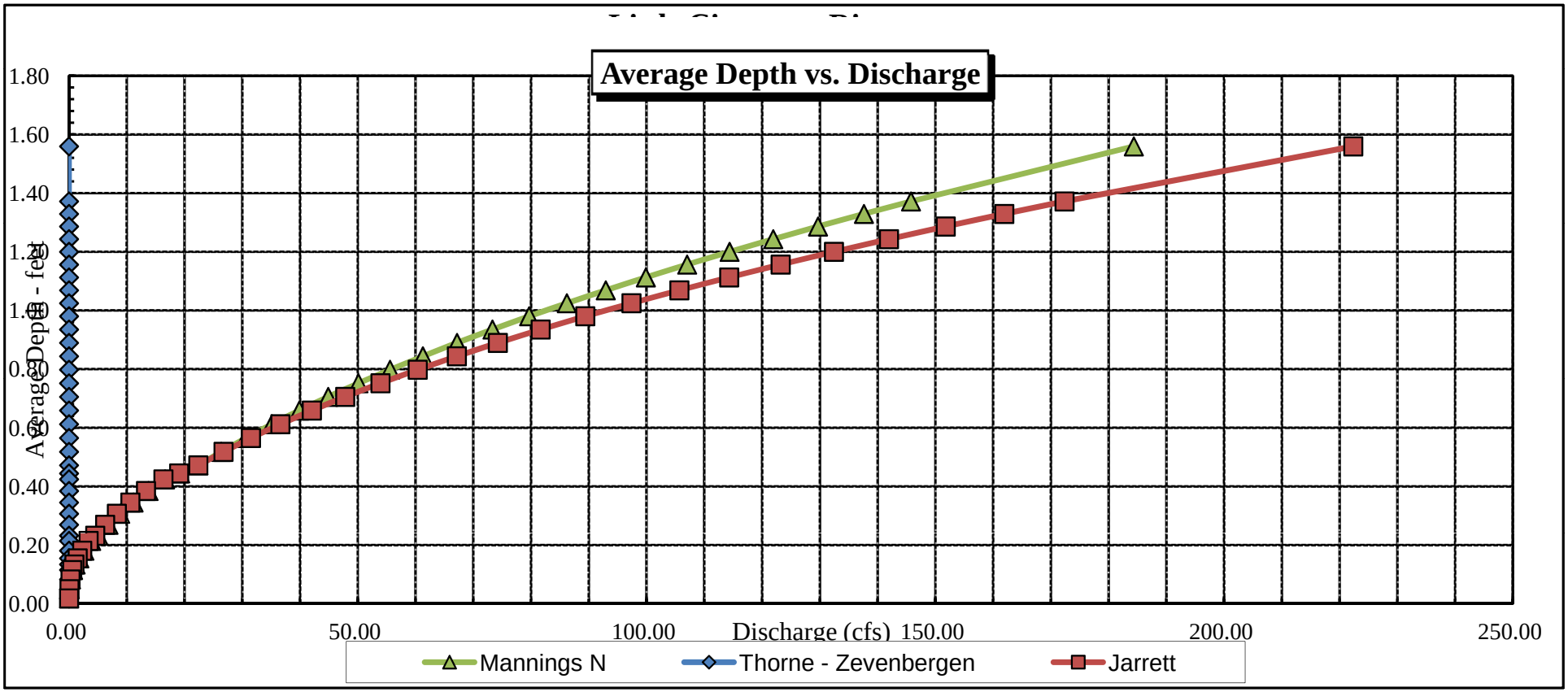
GL = lowest Grassline elevation corrected for sag
STAGING TABLE *WL* = Waterline corrected for variations in field measured water surface elevations and sag

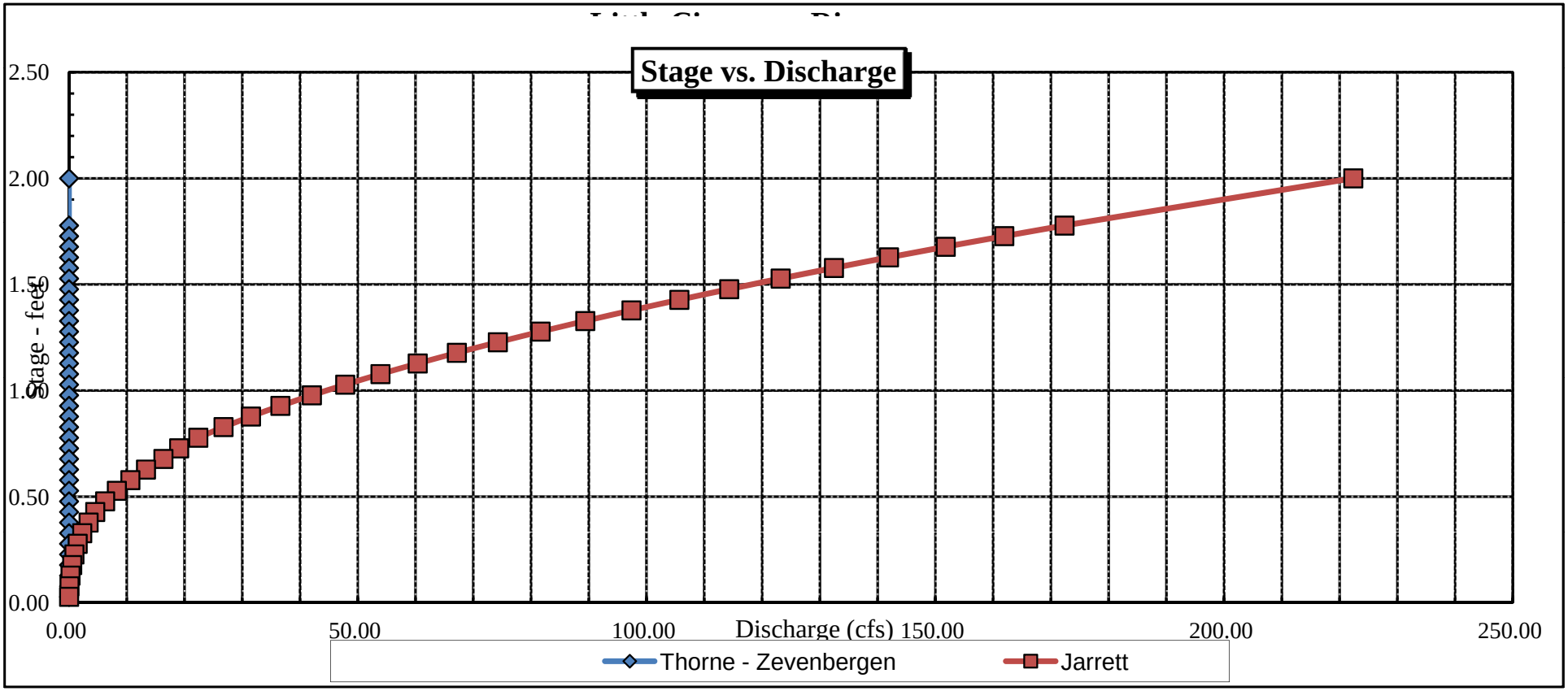
	DIST TO WATER (FT)	TOP WIDTH (FT)	AVG. DEPTH (FT)	MAX. DEPTH (FT)	AREA (SQ FT)	WETTED PERIM. (FT)	PERCENT WET PERIM (%)	HYDR RADIUS (FT)	FLOW (CFS)	AVG. VELOCITY (FT/SEC)
GL	3.85	35.80	1.56	2.00	55.83	37.85	100.0%	1.47	222.37	3.98
	4.07	34.96	1.37	1.78	47.96	36.82	97.3%	1.30	172.37	3.59
	4.12	34.77	1.33	1.73	46.21	36.59	96.7%	1.26	161.94	3.50
	4.17	34.59	1.29	1.68	44.48	36.36	96.1%	1.22	151.81	3.41
	4.22	34.40	1.24	1.63	42.76	36.13	95.4%	1.18	141.98	3.32
	4.27	34.21	1.20	1.58	41.04	35.90	94.8%	1.14	132.45	3.23
	4.32	34.02	1.16	1.53	39.33	35.66	94.2%	1.10	123.22	3.13
	4.37	33.83	1.11	1.48	37.64	35.43	93.6%	1.06	114.30	3.04
	4.42	33.64	1.07	1.43	35.95	35.20	93.0%	1.02	105.69	2.94
	4.47	33.46	1.02	1.38	34.27	34.97	92.4%	0.98	97.38	2.84
	4.52	33.27	0.98	1.33	32.61	34.74	91.8%	0.94	89.39	2.74
	4.57	33.11	0.93	1.28	30.95	34.53	91.2%	0.90	81.66	2.64
	4.62	32.94	0.89	1.23	29.29	34.32	90.7%	0.85	74.24	2.53
	4.67	32.78	0.84	1.18	27.65	34.12	90.1%	0.81	67.15	2.43
	4.72	32.62	0.80	1.13	26.02	33.91	89.6%	0.77	60.38	2.32
	4.77	32.45	0.75	1.08	24.39	33.70	89.0%	0.72	53.93	2.21
	4.82	32.29	0.71	1.03	22.77	33.49	88.5%	0.68	47.82	2.10
	4.87	32.13	0.66	0.98	21.16	33.29	87.9%	0.64	42.04	1.99
	4.92	31.96	0.61	0.93	19.56	33.08	87.4%	0.59	36.60	1.87
	4.97	31.80	0.56	0.88	17.97	32.87	86.8%	0.55	31.50	1.75
	5.02	31.64	0.52	0.83	16.38	32.66	86.3%	0.50	26.74	1.63
WL	5.07	31.38	0.47	0.78	14.80	32.38	85.5%	0.46	22.39	1.51
	5.12	29.84	0.44	0.73	13.26	30.83	81.4%	0.43	19.06	1.44
	5.17	27.89	0.42	0.68	11.83	28.85	76.2%	0.41	16.35	1.38
	5.22	27.19	0.38	0.63	10.45	28.12	74.3%	0.37	13.32	1.27
	5.27	26.40	0.34	0.58	9.11	27.29	72.1%	0.33	10.62	1.17
	5.32	25.47	0.31	0.53	7.81	26.30	69.5%	0.30	8.27	1.06
	5.37	24.39	0.27	0.48	6.56	25.15	66.4%	0.26	6.25	0.95
	5.42	23.17	0.23	0.43	5.37	23.86	63.0%	0.23	4.53	0.84
	5.47	20.04	0.21	0.38	4.29	20.65	54.5%	0.21	3.38	0.79
	5.52	18.38	0.18	0.33	3.32	18.90	49.9%	0.18	2.28	0.69
	5.57	15.94	0.15	0.28	2.46	16.36	43.2%	0.15	1.49	0.60
	5.62	12.95	0.13	0.23	1.73	13.27	35.1%	0.13	0.93	0.54
	5.67	10.17	0.11	0.18	1.17	10.41	27.5%	0.11	0.55	0.47
	5.72	8.46	0.08	0.13	0.70	8.62	22.8%	0.08	0.25	0.36
	5.77	6.54	0.05	0.08	0.32	6.62	17.5%	0.05	0.08	0.24
	5.82	3.41	0.02	0.03	0.06	3.43	9.1%	0.02	0.01	0.10


CROSS SECTION DATA ANALYSIS
LS
G
W
W
G
RS
-2.50
-3.00
-3.50
-4.00
-4.50
-5.00
-5.50
-6.00
VERTICAL DEPTH (FT)
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
DISTANCE FROM STAKE (FT)
Channel Bottom
Computed Water Line


Percent Wetted Perimeter vs. Discharge
Percent Wetted Perimeter
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
0.00
50.00
100.00
Discharge (cfs)
150.00
200.00
250.00
Mannings N
Thorne - Zevenbergen
Jarrett


Velocity vs. Discharge
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.00
50.00
100.00
150.00
200.00
250.00
Mannings N
Thorne - Zevenbergen
Jarrett


Average Depth vs. Discharge
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.00
50.00
100.00
150.00
200.00
250.00
Discharge (cfs)
Mannings N
Thorne - Zevenbergen
Jarrett


Stage vs. Discharge
2.50
2.00
1.50
1.00
0.50
0.00
Stage - feet
0.00
50.00
100.00
150.00
200.00
250.00
Discharge (cfs)
Thorne - Zevenbergen
Jarrett

COLORADO WATER CONSERVATION BOARD
INSTREAM FLOW / NATURAL LAKE LEVEL PROGRAM
STREAM CROSS-SECTION AND FLOW ANALYSIS

LOCATION INFORMATION

STREAM NAME:	Little Cimarron River
XS LOCATION:	Approx. 1 mi upst from conf Van Boxel Cr
XS NUMBER:	1
DATE:	24-Jul-14
OBSERVERS:	R. Smith, A. Breibart
1/4 SEC:	SW
SECTION:	29
TWP:	47N
RANGE:	5W
PM:	NM
COUNTY:	Gunnison
WATERSHED:	Gunnison River
DIVISION:	4
DOW CODE:	39051
USGS MAP:	0
USFS MAP:	0

SUPPLEMENTAL DATA

TAPE WT:	0.0106	*** NOTE *** Leave TAPE WT and TENSION at defaults for data collected with a survey level and rod
TENSION:	99999	

CHANNEL PROFILE DATA

SLOPE:	0.058

INPUT DATA CHECKED BY: .....DATE.....

ASSIGNED TO: ….....…….....DATE.....

STREAM NAME: Little Cimarron River
XS LOCATION: Approx. 1 mi upst from conf Van Boxel Cr
XS NUMBER: 1

DATA POINTS= 39

VALUES COMPUTED FROM RAW FIELD DATA

	FEATURE	DIST	VERT DEPTH	WATER DEPTH	VEL	WETTED PERIM.	WATER DEPTH	AREA (Am)	Q (Qm)	% Q CELL
	LS	0.00	0.00			0.00		0.00	0.00	0.0%
		3.00	0.72			0.00		0.00	0.00	0.0%
1	G	3.20	2.25			0.00		0.00	0.00	0.0%
	W	3.25	4.25	0.00	0.00	0.00		0.00	0.00	0.0%
		4.00	4.35	0.10	0.78	0.76	0.10	0.09	0.07	0.3%
		5.00	4.55	0.30	0.00	1.02	0.30	0.30	0.00	0.0%
		6.00	4.65	0.40	0.79	1.00	0.40	0.40	0.32	1.5%
		7.00	4.45	0.20	0.00	1.02	0.20	0.20	0.00	0.0%
		8.00	4.70	0.45	0.13	1.03	0.45	0.45	0.06	0.3%
		9.00	4.85	0.60	0.43	1.01	0.60	0.60	0.26	1.2%
		10.00	4.65	0.40	1.76	1.02	0.40	0.40	0.70	3.4%
		11.00	4.60	0.35	1.79	1.00	0.35	0.35	0.63	3.0%
		12.00	5.05	0.80	0.98	1.10	0.80	0.80	0.78	3.8%
		13.00	4.65	0.40	2.26	1.08	0.40	0.40	0.90	4.4%
		14.00	5.05	0.80	2.80	1.08	0.80	0.80	2.24	10.8%
		15.00	5.05	0.80	2.72	1.00	0.80	0.80	2.18	10.5%
		16.00	4.85	0.60	3.33	1.02	0.60	0.60	2.00	9.7%
		17.00	4.95	0.70	1.76	1.00	0.70	0.70	1.23	6.0%
		18.00	5.60	1.35	1.45	1.19	1.35	1.35	1.96	9.5%
		19.00	5.75	1.50	1.73	1.01	1.50	1.50	2.60	12.5%
		20.00	5.35	1.10	1.07	1.08	1.10	1.10	1.18	5.7%
		21.00	5.00	0.75	1.23	1.06	0.75	0.75	0.92	4.5%
		22.00	4.70	0.45	1.80	1.04	0.45	0.45	0.81	3.9%
		23.00	4.75	0.50	1.65	1.00	0.50	0.50	0.83	4.0%
		24.00	4.65	0.40	0.81	1.00	0.40	0.40	0.32	1.6%
		25.00	4.55	0.30	0.14	1.00	0.30	0.30	0.04	0.2%
		26.00	4.60	0.35	0.18	1.00	0.35	0.35	0.06	0.3%
		27.00	4.65	0.40	0.25	1.00	0.40	0.40	0.10	0.5%
		28.00	4.85	0.60	0.03	1.02	0.60	0.60	0.02	0.1%
		29.00	5.20	0.95	0.30	1.06	0.95	0.95	0.29	1.4%
		30.00	5.00	0.75	0.00	1.02	0.75	0.75	0.00	0.0%
		31.00	4.30	0.05	0.00	1.22	0.05	0.04	0.00	0.0%
		31.50	4.55	0.30	1.43	0.56	0.30	0.15	0.21	1.0%
		32.00	4.30	0.05	0.00	0.56	0.05	0.04	0.00	0.0%
		33.00	4.45	0.20	0.00	1.01	0.20	0.20	0.00	0.0%
	W	34.00	4.25	0.00	0.00	1.02		0.00	0.00	0.0%
		39.00	3.45			0.00		0.00	0.00	0.0%
1	G	40.90	2.40			0.00		0.00	0.00	0.0%
	RS	43.50	1.71			0.00		0.00	0.00	0.0%
	TOTALS ----------					32.01	1.5 (Max.)	16.71	20.70	100.0%

Manning's n = 0.1874
Hydraulic Radius= 0.52215788

STREAM NAME: Little Cimarron River
XS LOCATION: Approx. 1 mi upst from conf Van Boxel Cr
XS NUMBER: 1

WATER LINE COMPARISON TABLE

WATER LINE	MEAS AREA	COMP AREA	AREA ERROR
	16.71	16.71	0.0%
4.00	16.71	24.60	47.2%
4.02	16.71	23.95	43.3%
4.04	16.71	23.31	39.5%
4.06	16.71	22.67	35.6%
4.08	16.71	22.03	31.8%
4.10	16.71	21.40	28.0%
4.12	16.71	20.76	24.2%
4.14	16.71	20.13	20.5%
4.16	16.71	19.51	16.7%
4.18	16.71	18.88	13.0%
4.20	16.71	18.26	9.2%
4.21	16.71	17.95	7.4%
4.22	16.71	17.64	5.5%
4.23	16.71	17.33	3.7%
4.24	16.71	17.02	1.8%
4.25	16.71	16.71	0.0%
4.26	16.71	16.41	-1.8%
4.27	16.71	16.10	-3.7%
4.28	16.71	15.80	-5.5%
4.29	16.71	15.49	-7.3%
4.30	16.71	15.19	-9.1%
4.32	16.71	14.59	-12.7%
4.34	16.71	14.01	-16.2%
4.36	16.71	13.43	-19.7%
4.38	16.71	12.86	-23.1%
4.40	16.71	12.30	-26.4%
4.42	16.71	11.75	-29.7%
4.44	16.71	11.20	-33.0%
4.46	16.71	10.67	-36.2%
4.48	16.71	10.14	-39.3%
4.50	16.71	9.63	-42.4%

WATERLINE AT ZERO
AREA ERROR = 4.250

STREAM NAME: Little Cimarron River
XS LOCATION: Approx. 1 mi upst from conf Van Boxel Cr
XS NUMBER: 1 Constant Manning's n

GL = lowest Grassline elevation corrected for sag
STAGING TABLE *WL* = Waterline corrected for variations in field measured water surface elevations and sag

	DIST TO WATER (FT)	TOP WIDTH (FT)	AVG. DEPTH (FT)	MAX. DEPTH (FT)	AREA (SQ FT)	WETTED PERIM. (FT)	PERCENT WET PERIM (%)	HYDR RADIUS (FT)	FLOW (CFS)	AVG. VELOCITY (FT/SEC)
GL	2.40	37.70	2.17	3.35	81.89	41.09	100.0%	1.99	247.71	3.02
	3.25	36.14	1.40	2.50	50.51	38.48	93.7%	1.31	115.66	2.29
	3.30	36.05	1.35	2.45	48.71	38.33	93.3%	1.27	109.14	2.24
	3.35	35.95	1.30	2.40	46.91	38.18	92.9%	1.23	102.78	2.19
	3.40	35.86	1.26	2.35	45.11	38.02	92.5%	1.19	96.56	2.14
	3.45	35.77	1.21	2.30	43.32	37.87	92.2%	1.14	90.50	2.09
	3.50	35.46	1.17	2.25	41.54	37.50	91.3%	1.11	84.94	2.04
	3.55	35.14	1.13	2.20	39.77	37.14	90.4%	1.07	79.53	2.00
	3.60	34.83	1.09	2.15	38.03	36.77	89.5%	1.03	74.27	1.95
	3.65	34.51	1.05	2.10	36.29	36.40	88.6%	1.00	69.18	1.91
	3.70	34.20	1.01	2.05	34.57	36.04	87.7%	0.96	64.24	1.86
	3.75	33.89	0.97	2.00	32.87	35.67	86.8%	0.92	59.46	1.81
	3.80	33.57	0.93	1.95	31.19	35.30	85.9%	0.88	54.84	1.76
	3.85	33.26	0.89	1.90	29.51	34.94	85.0%	0.84	50.38	1.71
	3.90	32.95	0.85	1.85	27.86	34.57	84.1%	0.81	46.08	1.65
	3.95	32.63	0.80	1.80	26.22	34.21	83.2%	0.77	41.95	1.60
	4.00	32.32	0.76	1.75	24.60	33.84	82.4%	0.73	37.98	1.54
	4.05	32.00	0.72	1.70	22.99	33.47	81.5%	0.69	34.18	1.49
	4.10	31.69	0.68	1.65	21.40	33.11	80.6%	0.65	30.55	1.43
	4.15	31.38	0.63	1.60	19.82	32.74	79.7%	0.61	27.09	1.37
	4.20	31.06	0.59	1.55	18.26	32.37	78.8%	0.56	23.80	1.30
WL	4.25	30.75	0.54	1.50	16.71	32.01	77.9%	0.52	20.70	1.24
	4.30	30.12	0.50	1.45	15.19	31.37	76.3%	0.48	17.89	1.18
	4.35	28.90	0.47	1.40	13.72	30.09	73.2%	0.46	15.51	1.13
	4.40	27.79	0.44	1.35	12.30	28.93	70.4%	0.43	13.28	1.08
	4.45	26.69	0.41	1.30	10.94	27.78	67.6%	0.39	11.22	1.03
	4.50	25.71	0.37	1.25	9.63	26.75	65.1%	0.36	9.30	0.97
	4.55	24.74	0.34	1.20	8.36	25.72	62.6%	0.33	7.55	0.90
	4.60	22.22	0.32	1.15	7.19	23.17	56.4%	0.31	6.30	0.88
	4.65	18.59	0.33	1.10	6.17	19.49	47.4%	0.32	5.47	0.89
	4.70	16.96	0.31	1.05	5.28	17.79	43.3%	0.30	4.49	0.85
	4.75	14.02	0.32	1.00	4.51	14.79	36.0%	0.30	3.90	0.86
	4.80	12.59	0.31	0.95	3.84	13.29	32.3%	0.29	3.21	0.83
	4.85	11.16	0.29	0.90	3.25	11.79	28.7%	0.28	2.63	0.81
	4.90	9.67	0.28	0.85	2.73	10.23	24.9%	0.27	2.16	0.79
	4.95	8.17	0.28	0.80	2.28	8.67	21.1%	0.26	1.79	0.78
	5.00	7.11	0.27	0.75	1.90	7.52	18.3%	0.25	1.45	0.76
	5.05	4.88	0.32	0.70	1.57	5.22	12.7%	0.30	1.35	0.86
	5.10	4.27	0.32	0.65	1.35	4.58	11.1%	0.29	1.14	0.84
	5.15	3.66	0.31	0.60	1.15	3.93	9.6%	0.29	0.97	0.84
	5.20	3.04	0.32	0.55	0.98	3.28	8.0%	0.30	0.84	0.85
	5.25	2.82	0.30	0.50	0.83	3.03	7.4%	0.27	0.67	0.81
	5.30	2.60	0.27	0.45	0.70	2.79	6.8%	0.25	0.53	0.76
	5.35	2.38	0.24	0.40	0.57	2.55	6.2%	0.23	0.40	0.71
	5.40	2.18	0.21	0.35	0.46	2.32	5.6%	0.20	0.30	0.65
	5.45	1.98	0.18	0.30	0.35	2.09	5.1%	0.17	0.21	0.58
	5.50	1.78	0.15	0.25	0.26	1.87	4.5%	0.14	0.13	0.51
	5.55	1.58	0.11	0.20	0.18	1.64	4.0%	0.11	0.08	0.43
	5.60	1.38	0.08	0.15	0.10	1.42	3.4%	0.07	0.03	0.33
	5.65	0.92	0.05	0.10	0.05	0.94	2.3%	0.05	0.01	0.25
	5.70	0.46	0.03	0.05	0.01	0.47	1.1%	0.02	0.00	0.16
	5.75	0.00	#DIV/0!	0.00	0.00	0.00	0.0%	#DIV/0!	#DIV/0!	#DIV/0!

STREAM NAME: Little Cimarron River
XS LOCATION: Approx. 1 mi upst from conf Van Boxel Cr
XS NUMBER: 1

SUMMARY SHEET

MEASURED FLOW (Qm)=	20.70	cfs
CALCULATED FLOW (Qc)=	20.70	cfs
(Qm-Qc)/Qm * 100 =	0.0	%
MEASURED WATERLINE (WLm)=	4.25	ft
CALCULATED WATERLINE (WLc)=	4.25	ft
(WLm-WLc)/WLm * 100 =	0.0	%
MAX MEASURED DEPTH (Dm)=	1.50	ft
MAX CALCULATED DEPTH (Dc)=	1.50	ft
(Dm-Dc)/Dm * 100	0.0	%
MEAN VELOCITY=	1.24	ft/sec
MANNING'S N=	0.187	
SLOPE=	0.058	ft/ft
.4 * Qm =	8.3	cfs
2.5 * Qm=	51.7	cfs

RECOMMENDED INSTREAM FLOW:
==========

FLOW (CFS)	PERIOD
==========	========
_____	_____
_____	_____
_____	_____
_____	_____

RATIONALE FOR RECOMMENDATION:
==========

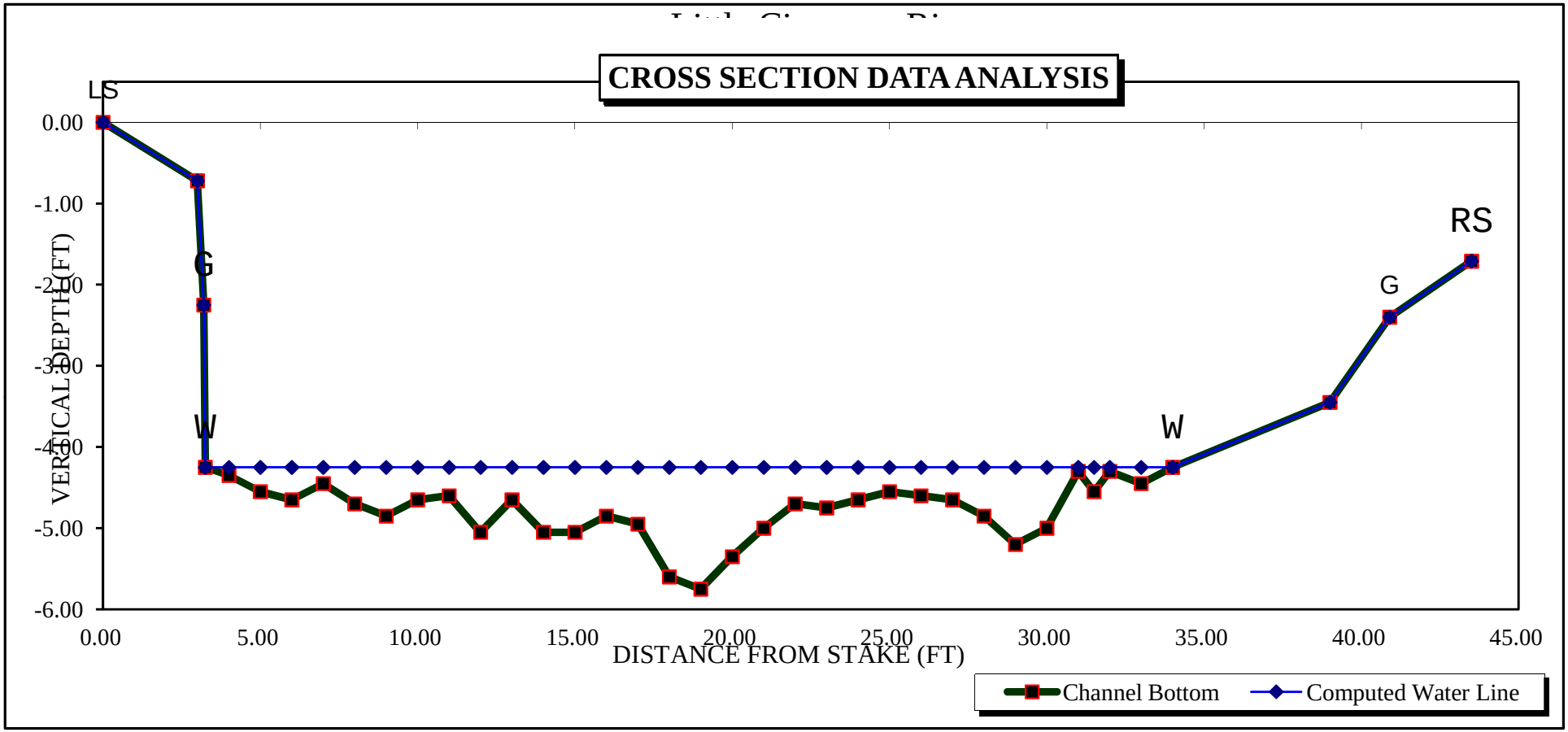
RECOMMENDATION BY: ..... AGENCY..... DATE:.....

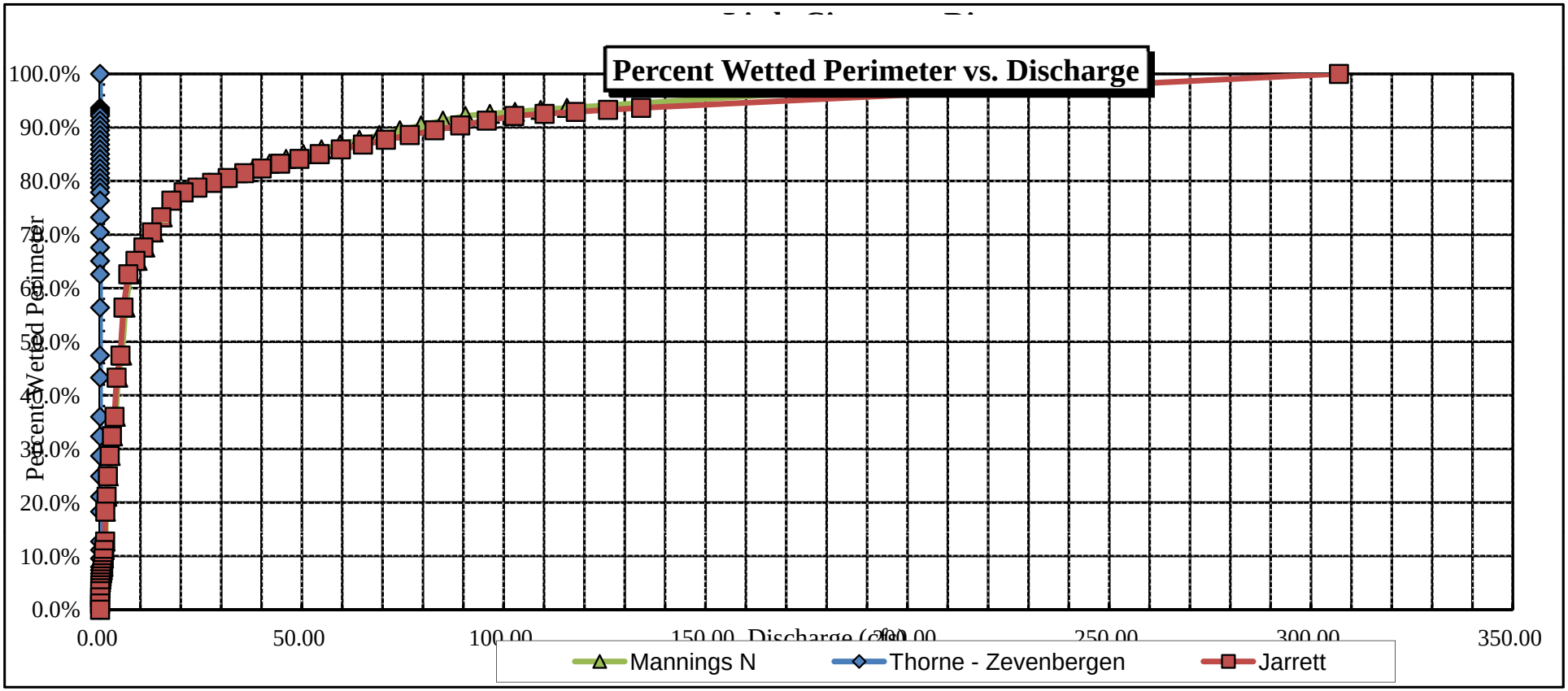
CWCB REVIEW BY: ..... DATE:.....

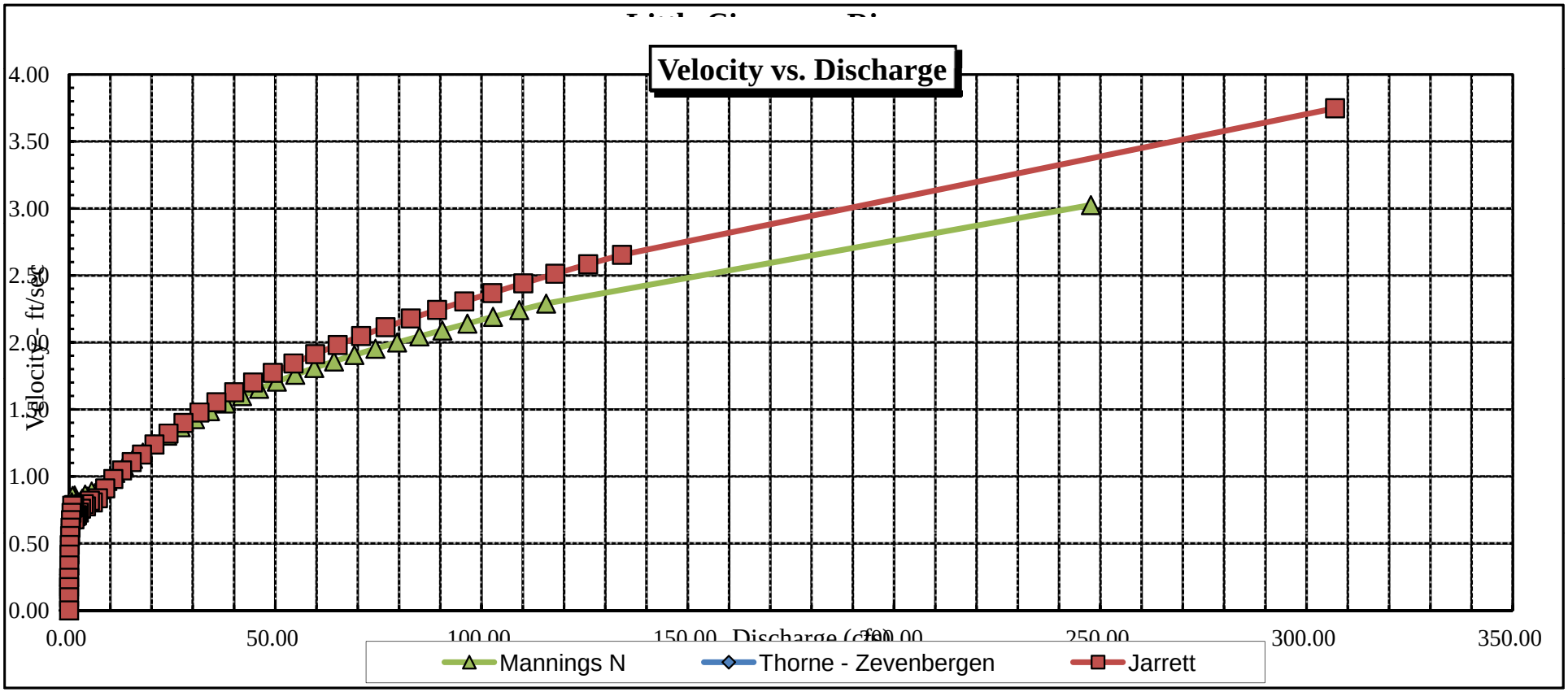
STREAM NAME: Little Cimarron River
XS LOCATION: Approx. 1 mi upst from conf Van Boxel Cr
XS NUMBER: 1 Jarrett Variable Manning's n Correction Applied

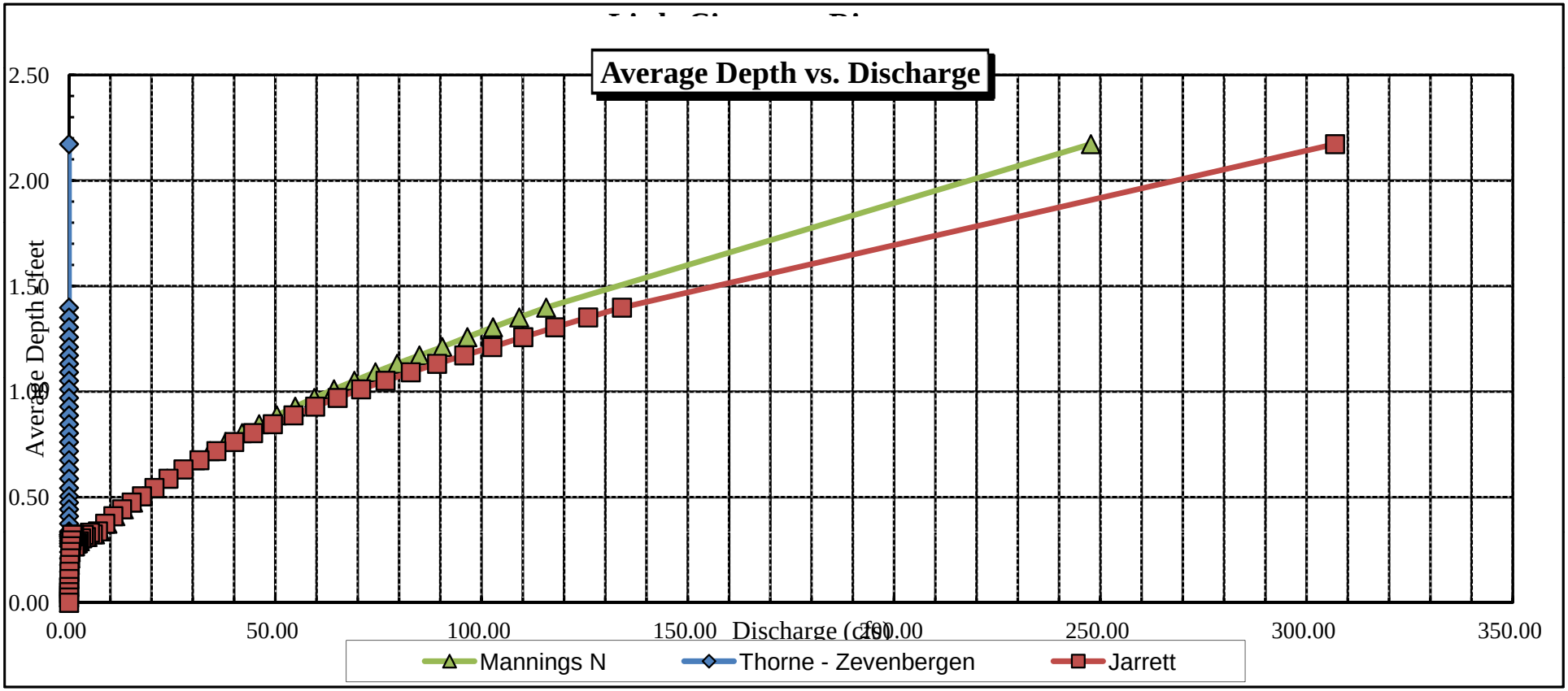
GL = lowest Grassline elevation corrected for sag
STAGING TABLE *WL* = Waterline corrected for variations in field measured water surface elevations and sag

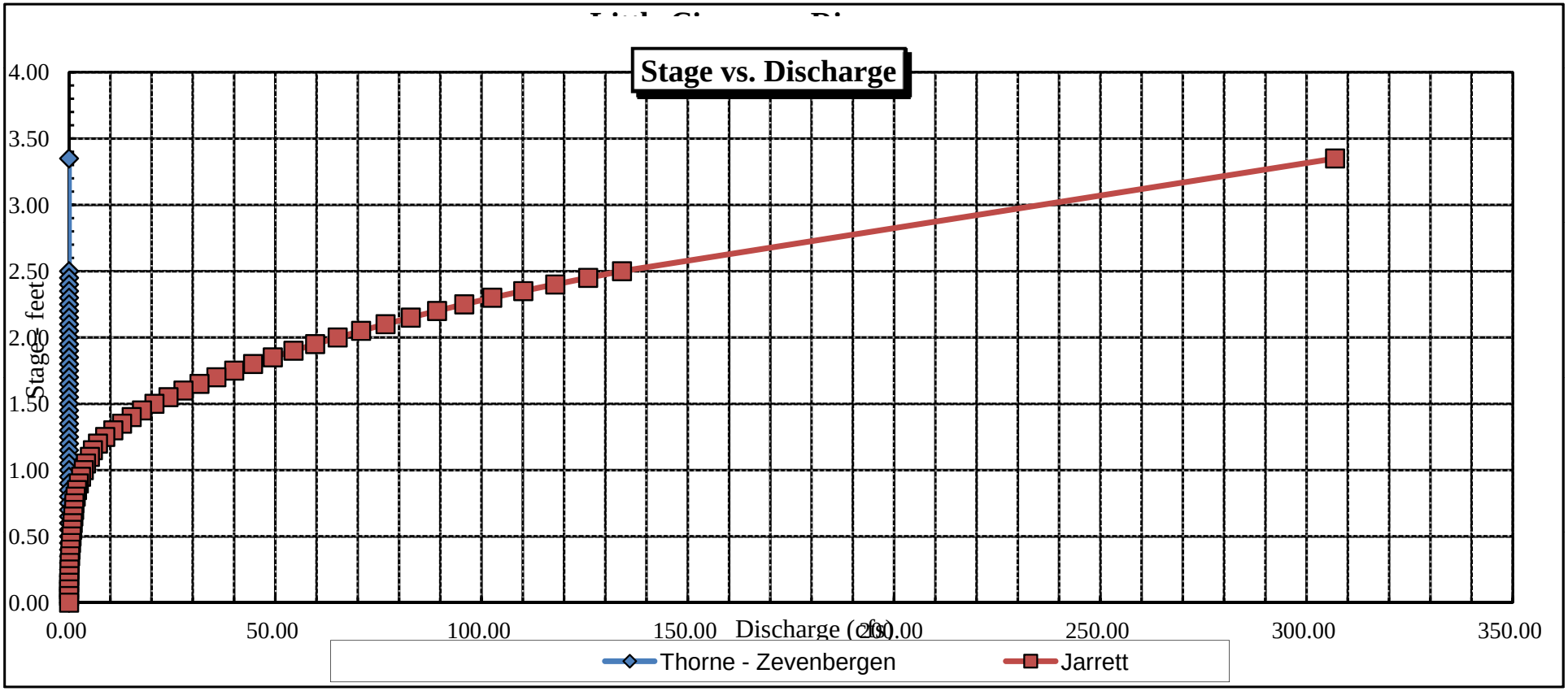
	DIST TO WATER (FT)	TOP WIDTH (FT)	AVG. DEPTH (FT)	MAX. DEPTH (FT)	AREA (SQ FT)	WETTED PERIM. (FT)	PERCENT WET PERIM (%)	HYDR RADIUS (FT)	FLOW (CFS)	AVG. VELOCITY (FT/SEC)
GL	2.40	37.70	2.17	3.35	81.89	41.09	100.0%	1.99	306.91	3.75
	3.25	36.14	1.40	2.50	50.51	38.48	93.7%	1.31	134.04	2.65
	3.30	36.05	1.35	2.45	48.71	38.33	93.3%	1.27	125.83	2.58
	3.35	35.95	1.30	2.40	46.91	38.18	92.9%	1.23	117.86	2.51
	3.40	35.86	1.26	2.35	45.11	38.02	92.5%	1.19	110.11	2.44
	3.45	35.77	1.21	2.30	43.32	37.87	92.2%	1.14	102.60	2.37
	3.50	35.46	1.17	2.25	41.54	37.50	91.3%	1.11	95.80	2.31
	3.55	35.14	1.13	2.20	39.77	37.14	90.4%	1.07	89.21	2.24
	3.60	34.83	1.09	2.15	38.03	36.77	89.5%	1.03	82.85	2.18
	3.65	34.51	1.05	2.10	36.29	36.40	88.6%	1.00	76.72	2.11
	3.70	34.20	1.01	2.05	34.57	36.04	87.7%	0.96	70.80	2.05
	3.75	33.89	0.97	2.00	32.87	35.67	86.8%	0.92	65.11	1.98
	3.80	33.57	0.93	1.95	31.19	35.30	85.9%	0.88	59.65	1.91
	3.85	33.26	0.89	1.90	29.51	34.94	85.0%	0.84	54.41	1.84
	3.90	32.95	0.85	1.85	27.86	34.57	84.1%	0.81	49.39	1.77
	3.95	32.63	0.80	1.80	26.22	34.21	83.2%	0.77	44.60	1.70
	4.00	32.32	0.76	1.75	24.60	33.84	82.4%	0.73	40.04	1.63
	4.05	32.00	0.72	1.70	22.99	33.47	81.5%	0.69	35.71	1.55
	4.10	31.69	0.68	1.65	21.40	33.11	80.6%	0.65	31.61	1.48
	4.15	31.38	0.63	1.60	19.82	32.74	79.7%	0.61	27.74	1.40
	4.20	31.06	0.59	1.55	18.26	32.37	78.8%	0.56	24.10	1.32
WL	4.25	30.75	0.54	1.50	16.71	32.01	77.9%	0.52	20.70	1.24
	4.30	30.12	0.50	1.45	15.19	31.37	76.3%	0.48	17.68	1.16
	4.35	28.90	0.47	1.40	13.72	30.09	73.2%	0.46	15.18	1.11
	4.40	27.79	0.44	1.35	12.30	28.93	70.4%	0.43	12.85	1.04
	4.45	26.69	0.41	1.30	10.94	27.78	67.6%	0.39	10.72	0.98
	4.50	25.71	0.37	1.25	9.63	26.75	65.1%	0.36	8.76	0.91
	4.55	24.74	0.34	1.20	8.36	25.72	62.6%	0.33	7.00	0.84
	4.60	22.22	0.32	1.15	7.19	23.17	56.4%	0.31	5.79	0.81
	4.65	18.59	0.33	1.10	6.17	19.49	47.4%	0.32	5.05	0.82
	4.70	16.96	0.31	1.05	5.28	17.79	43.3%	0.30	4.10	0.78
	4.75	14.02	0.32	1.00	4.51	14.79	36.0%	0.30	3.58	0.79
	4.80	12.59	0.31	0.95	3.84	13.29	32.3%	0.29	2.92	0.76
	4.85	11.16	0.29	0.90	3.25	11.79	28.7%	0.28	2.37	0.73
	4.90	9.67	0.28	0.85	2.73	10.23	24.9%	0.27	1.94	0.71
	4.95	8.17	0.28	0.80	2.28	8.67	21.1%	0.26	1.60	0.70
	5.00	7.11	0.27	0.75	1.90	7.52	18.3%	0.25	1.29	0.68
	5.05	4.88	0.32	0.70	1.57	5.22	12.7%	0.30	1.24	0.79
	5.10	4.27	0.32	0.65	1.35	4.58	11.1%	0.29	1.04	0.77
	5.15	3.66	0.31	0.60	1.15	3.93	9.6%	0.29	0.88	0.77
	5.20	3.04	0.32	0.55	0.98	3.28	8.0%	0.30	0.77	0.78
	5.25	2.82	0.30	0.50	0.83	3.03	7.4%	0.27	0.61	0.73
	5.30	2.60	0.27	0.45	0.70	2.79	6.8%	0.25	0.47	0.67
	5.35	2.38	0.24	0.40	0.57	2.55	6.2%	0.23	0.35	0.62
	5.40	2.18	0.21	0.35	0.46	2.32	5.6%	0.20	0.25	0.56
	5.45	1.98	0.18	0.30	0.35	2.09	5.1%	0.17	0.17	0.49
	5.50	1.78	0.15	0.25	0.26	1.87	4.5%	0.14	0.11	0.42
	5.55	1.58	0.11	0.20	0.18	1.64	4.0%	0.11	0.06	0.34
	5.60	1.38	0.08	0.15	0.10	1.42	3.4%	0.07	0.03	0.24
	5.65	0.92	0.05	0.10	0.05	0.94	2.3%	0.05	0.01	0.17
	5.70	0.46	0.03	0.05	0.01	0.47	1.1%	0.02	0.00	0.10
	5.75	0.00	#DIV/0!	0.00	0.00	0.00	0.0%	#DIV/0!	#DIV/0!	#DIV/0!


CROSS SECTION DATA ANALYSIS
LS
G
W
W
G
RS
0.00
-1.00
-2.00
-3.00
-4.00
-5.00
-6.00
VERTICAL DEPTH (FT)
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
DISTANCE FROM STAKE (FT)
Channel Bottom
Computed Water Line


Percent Wetted Perimeter vs. Discharge
Percent Wetted Perimeter
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
0.00
50.00
100.00
150.00
250.00
300.00
350.00
Mannings N
Thorne - Zevenbergen
Jarrett


Velocity vs. Discharge
Velocity - ft/sec
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.00
50.00
100.00
150.00
200.00
250.00
300.00
350.00
Mannings N
Thorne - Zevenbergen
Jarrett


Average Depth vs. Discharge
Average Depth (feet)
2.50
2.00
1.50
1.00
0.50
0.00
0.00
50.00
100.00
150.00
200.00
250.00
300.00
350.00
Discharge (cfs)
Mannings N
Thorne - Zevenbergen
Jarrett


Stage vs. Discharge
Stage - feet
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.00
50.00
100.00
150.00
200.00
250.00
300.00
350.00
Discharge (cfs)
Thorne - Zevenbergen
Jarrett

COLORADO WATER CONSERVATION BOARD

FIELD DATA FOR INSTREAM FLOW DETERMINATIONS

LOCATION INFORMATION

STREAM NAME: Little Gmarron River						CROSS-SECTION NO.: 2
CROSS-SECTION LOCATION: Approx. .7 mile upstream from confluence with Van Boxel Creek						
DATE: 7-24-14	OBSERVERS: R. Smith, A. Breibart					
LEGAL DESCRIPTION	¼ SECTION: NW	SECTION: 29	TOWNSHIP: 47 (N)/S	RANGE: 5 E/(W)	PM: NM	
COUNTY: Gunnison	WATERSHED: Gunnison	WATER DIVISION: 4	DOW WATER CODE: 39051			
MAP(S): USGS:	GPS Zone 13 284317					
USFS:	4241681					

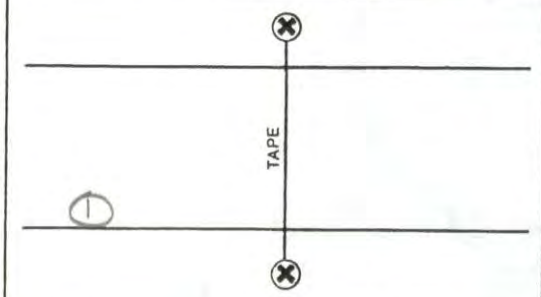
SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION: (YES)/NO	METER TYPE: M-M			
METER NUMBER:	DATE RATED:	CALIB/SPIN: _____ sec	TAPE WEIGHT: 5 _____ lbs/foot	TAPE TENSION: _____ lbs
CHANNEL BED MATERIAL SIZE RANGE: gravel - 3 foot boulders	PHOTOGRAPHS TAKEN: (YES)/NO	NUMBER OF PHOTOGRAPHS: 3		

CHANNEL PROFILE DATA

STATION	DISTANCE FROM TAPE (ft)	ROD READING (ft)
(⊗) Tape @ Stake LB	0.0	surveyed
(⊗) Tape @ Stake RB	0.0	surveyed
(1) WS @ Tape LB/RB	0.0 3.10	5.05/5.10
(2) WS Upstream	28.0	4.50
(3) WS Downstream	35.7	6.30
SLOPE	1.80 / 63.7 = 0.028	

SKETCH



LEGEND:
- Stake (⊗)
- Station (1)
- Photo (1)
- Direction of Flow

AQUATIC SAMPLING SUMMARY

STREAM ELECTROFISHED: YES/(NO)	DISTANCE ELECTROFISHED: _____ft	FISH CAUGHT: YES/NO	WATER CHEMISTRY SAMPLED: YES/(NO)

LENGTH - FREQUENCY DISTRIBUTION BY ONE-INCH SIZE GROUPS (1.0-1.9, 2.0-2.9, ETC.)

SPECIES (FILL IN)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>15	TOTAL

AQUATIC INSECTS IN STREAM SECTION BY COMMON OR SCIENTIFIC ORDER NAME:

COMMENTS

DISCHARGE/CROSS SECTION NOTES

STREAM NAME: Little Cimarron River	CROSS-SECTION NO. 3	DATE: 7-24-14	SHEET ___ OF ___
BEGINNING OF MEASUREMENT	EDGE OF WATER LOOKING DOWNSTREAM: (0.0 AT STAKE) LEFT / RIGHT	Gage Reading: _____ ft	TIME:

Features: Stake (S) Grassline (G) Waterline (W) Rock (R)	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape/Inst (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Time (sec)	Velocity (ft/sec) At Point	Velocity (ft/sec) Mean in Vertical	Area (ft^2)	Discharge (cfs)
LS	0.0		3.0								
G	2.7		3.85								
W	3.1		5.05								
	4		5.25	0.20				0.10			
	5		5.45	0.40				0.48			
	6		5.80	0.75				1.25			
	7		5.60	0.55				1.31			
	8		5.85	0.80				1.40			
	9		5.75	0.70				0.36			
	10		5.35	0.30				1.95			
	11		5.80	0.75				1.53			
	12		5.25	0.20				1.84			
	13		5.85	0.80				2.61			
	14		5.85	0.80				1.98			
	15		5.80	0.75				1.63			
	16		5.85	0.80				1.48			
	17		5.70	0.65				2.08			
	18		5.50	0.45				2.23			
	19		5.60	0.55				2.60			
	20		5.15	0.10				0.0			
	21		5.60	0.50				0.0			
	22		5.65	0.55				0.05			
	23		5.85	0.75				0.0			
	24		5.80	0.70				2.63			
	25		5.50	0.40				2.90			
	26		5.60	0.50				1.10			
	27		5.65	0.55				2.95			
	28		5.45	0.35				2.47			
	29		5.45	0.35				1.69			
	30		5.45	0.35				1.34			
	31		5.30	0.20				0.26			
	32		5.10	0.0				0.0			
	33		5.15	0.05				0			
W	34.5		5.10								
	36.2		4.57								
G	38.5		3.85								
RS	43.0		3.75								
TOTALS:											

End of Measurement	Time:	Gage Reading: ft	CALCULATIONS PERFORMED BY:	CALCULATIONS CHECKED BY:

COLORADO WATER CONSERVATION BOARD

FIELD DATA FOR INSTREAM FLOW DETERMINATIONS

COLORADO DIVISION OF WILDLIFE

LOCATION INFORMATION

STREAM NAME: Little Cimarron River						CROSS-SECTION NO.: 1
CROSS-SECTION LOCATION: Approx. 1 mile upstream from confluence with Van Boxel Creek						
DATE: 7-24-14	OBSERVERS: R. Smith, A. Breibart					
LEGAL DESCRIPTION	¼ SECTION: SW	SECTION: 29	TOWNSHIP: 47 (N)/S	RANGE: 5 E/(W)	PM: NM	
COUNTY: Gunnison	WATERSHED: Gunnison	WATER DIVISION: 4	DOW WATER CODE: 39051			
MAP(S): USGS:			UTM Z13S 284249E 4241400N			
USFS:						

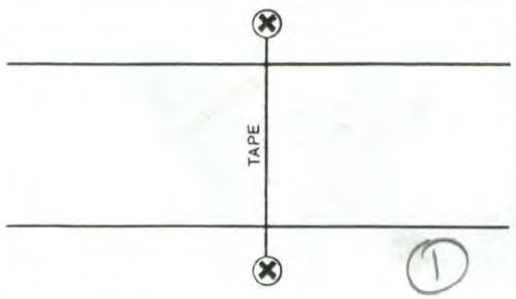
SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION: YES / NO	METER TYPE: M-M			
METER NUMBER:	DATE RATED:	CALIB/SPIN: _____ sec	TAPE WEIGHT: surveyed _____ lbs/foot	TAPE TENSION: surveyed _____ lbs
CHANNEL BED MATERIAL SIZE RANGE: gravel to 3-foot boulders	PHOTOGRAPHS TAKEN: (YES)/NO	NUMBER OF PHOTOGRAPHS: 3		

CHANNEL PROFILE DATA

STATION	DISTANCE FROM TAPE (ft)	ROD READING (ft)
(X) Tape @ Stake LB	0.0	surveyed
(X) Tape @ Stake RB	0.0	surveyed
(1) WS @ Tape LB/RB	0.0	4.23 / 4.25
(2) WS Upstream	32.5	3.00
(3) WS Downstream	20.2	6.04
SLOPE	3.04 / 52.5 = 0.058	

SKETCH



LEGEND:
Stake (X)
Station (1)
Photo (1)
Direction of Flow

AQUATIC SAMPLING SUMMARY

STREAM ELECTROFISHED: YES/(NO)	DISTANCE ELECTROFISHED: _____ ft	FISH CAUGHT: YES/NO	WATER CHEMISTRY SAMPLED: (YES)/NO

LENGTH - FREQUENCY DISTRIBUTION BY ONE-INCH SIZE GROUPS (1.0-1.9, 2.0-2.9, ETC.)

SPECIES (FILL IN)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>15	TOTAL

AQUATIC INSECTS IN STREAM SECTION BY COMMON OR SCIENTIFIC ORDER NAME:

COMMENTS

FORM #ISF FD 1-85

DISCHARGE/CROSS SECTION NOTES

STREAM NAME: Little Cimarron River	CROSS-SECTION NO.: 1	DATE: 7-24-14	SHEET ___ OF ___
BEGINNING OF MEASUREMENT	EDGE OF WATER LOOKING DOWNSTREAM: (0.0 AT STAKE) LEFT / RIGHT	Gage Reading: _____ ft	TIME:

Features: Stake (S) Grassline (G) Waterline (W) Rock (R)	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape/Inst (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Time (sec)	Velocity (ft/sec) At Point	Velocity (ft/sec) Mean in Vertical	Area (ft^2)	Discharge (cfs)
LS	0.0		0.0								
	3.0		0.72								
G	3.2		2.25								
W	3.25		4.25	ϕ							
	4		4.35	0.10				0.78			
	5		4.55	0.30				0.0			
	6		4.65	0.40				0.79			
	7		4.45	0.20				0.0			
	8		4.70	0.45				0.13			
	9		4.85	0.60				0.43			
	10		4.65	0.40				1.76			
	11		4.60	0.35				1.79			
	12		5.05	0.8				0.98			
	13		4.65	0.4				2.26			
	14		5.05	0.8				2.80			
	15		5.05	0.8				2.72			
	16		4.85	0.6				3.33			
	17		4.95	0.7				1.76			
	18		5.60	1.35				1.45			
	19		5.75	1.5				1.73			
	20		5.35	1.1				1.07			
	21		5.00	0.75				1.23			
	22		4.70	0.45				1.80			
	23		4.75	0.50				1.65			
	24		4.65	0.40				0.81			
	25		4.55	0.30				0.14			
	26		4.60	0.35				0.18			
	27		4.65	0.40				0.25			
	28		4.85	0.60				0.03			
	29		5.20	0.95				0.30			
	30		5.00	0.75				0.00			
	31		4.30	0.05				0.0			
	31.5		4.55	0.30				1.43			
	32		4.30	0.05				0			
	33		4.45	0.20				0			
W	34.0		4.25	ϕ							
W	39.0		3.45								
G	40.9		2.40								
RLS	43.5		1.71								
TOTALS:											

End of Measurement	Time:	Gage Reading: _____ ft	CALCULATIONS PERFORMED BY:	CALCULATIONS CHECKED BY:

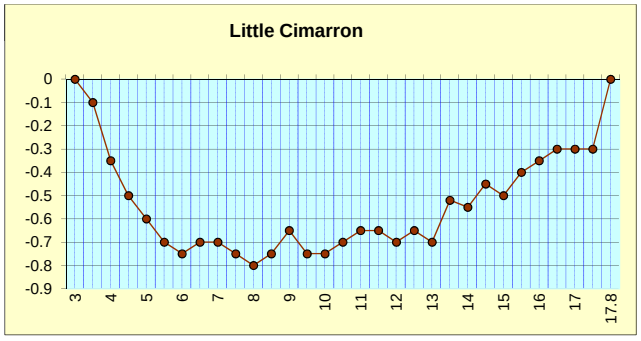
Flow Mesaurement Calculations

Little Cimarron River

Date: 8/20/2015 **Time:** 1:47 PM
Observers: Baessler / (intern) Cunningham
County: Gunnison
Water Division: 4 *Note: Photos Taken*
Location: ***Latitude:*** 38 16 34.09
Longitude: 107 27 59.83
Comments: Sunny, Warm

Distance from bank	Width	Depth	Velocity	Area	Discharge
3	water line	0	0		
3.5	0.5	0.1	0	0.05	0
4	0.5	0.35	0.6	0.175	0.105
4.5	0.5	0.5	1.03	0.25	0.2575
5	0.5	0.6	1.4	0.3	0.42
5.5	0.5	0.7	1.6	0.35	0.56
6	0.5	0.75	1.63	0.375	0.61125
6.5	0.5	0.7	1.84	0.35	0.644
7	0.5	0.7	2.05	0.35	0.7175
7.5	0.5	0.75	2.05	0.375	0.76875
8	0.5	0.8	1.71	0.4	0.684
8.5	0.5	0.75	1.64	0.375	0.615
9	0.5	0.65	1.95	0.325	0.63375
9.5	0.5	0.75	1.76	0.375	0.66
10	0.5	0.75	1.66	0.375	0.6225
10.5	0.5	0.7	1.94	0.35	0.679
11	0.5	0.65	2	0.325	0.65
11.5	0.5	0.65	1.97	0.325	0.64025
12	0.5	0.7	1.74	0.35	0.609
12.5	0.5	0.65	1.69	0.325	0.54925
13	0.5	0.7	1.71	0.35	0.5985
13.5	0.5	0.52	2.1	0.26	0.546
14	0.5	0.55	1.75	0.275	0.48125
14.5	0.5	0.45	1.28	0.225	0.288
15	0.5	0.5	0.9	0.25	0.225
15.5	0.5	0.4	1.42	0.2	0.284
16	0.5	0.35	1.1	0.175	0.1925
16.5	0.5	0.3	1.27	0.15	0.1905
17	0.5	0.3	1.1	0.15	0.165
17.5	0.4	0.3	0.91	0.12	0.1092
17.8	water line	0	0		
				FLOW =	**13.51 CFS**

0.571379



Graph Data

3	0
3.5	-0.1
4	-0.35
4.5	-0.5
5	-0.6
5.5	-0.7
6	-0.75
6.5	-0.7
7	-0.7
7.5	-0.75
8	-0.8
8.5	-0.75
9	-0.65
9.5	-0.75
10	-0.75
10.5	-0.7
11	-0.65
11.5	-0.65
12	-0.7
12.5	-0.65
13	-0.7
13.5	-0.52
14	-0.55
14.5	-0.45
15	-0.5
15.5	-0.4
16	-0.35
16.5	-0.3
17	-0.3
17.5	-0.3
17.8	0

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Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information

File Name	LCRASLTG.011.WAD
Start Date and Time	2015/10/21 17:23:54

Site Details

Site Name	LTL CMRN AT SPG LN
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.4%	3.4%
Velocity	0.9%	5.3%
Width	0.1%	0.1%
Method	1.8%	-
# Stations	1.8%	-
Overall	**2.9%**	**6.4%**

Summary

Averaging Int.	40	# Stations	28
Start Edge	REW	Total Width	15.000
Mean SNR	24.5 dB	Total Area	8.087
Mean Temp	50.38 °F	Mean Depth	0.539
Disch. Equation	Mid-Section	Mean Velocity	0.5663
		Total Discharge	**4.5796**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	17:23	2.20	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	17:23	2.50	0.6	0.530	0.6	0.212	0.1125	1.00	0.1125	0.212	0.0238	0.5
2	17:25	3.00	0.6	0.480	0.6	0.192	0.6647	1.00	0.6647	0.240	0.1595	3.5
3	17:26	3.50	0.6	0.900	0.6	0.360	0.8097	1.00	0.8097	0.450	0.3643	8.0
4	17:27	4.00	0.6	0.900	0.6	0.360	0.7552	1.00	0.7552	0.450	0.3398	7.4
5	17:29	4.50	0.6	0.750	0.6	0.300	0.7743	1.00	0.7743	0.375	0.2904	6.3
6	17:30	5.00	0.6	0.840	0.6	0.336	0.8822	1.00	0.8822	0.420	0.3705	8.1
7	17:31	5.50	0.6	0.810	0.6	0.324	0.9580	1.00	0.9580	0.405	0.3880	8.5
8	17:33	6.00	0.6	0.770	0.6	0.308	0.8038	1.00	0.8038	0.385	0.3095	6.8
9	17:35	6.50	0.6	0.860	0.6	0.344	0.7523	1.00	0.7523	0.430	0.3235	7.1
10	17:36	7.00	0.6	0.820	0.6	0.328	0.7103	1.00	0.7103	0.410	0.2912	6.4
11	17:37	7.50	0.6	0.800	0.6	0.320	0.4262	1.00	0.4262	0.400	0.1704	3.7
12	17:38	8.00	0.6	0.500	0.6	0.200	0.5751	1.00	0.5751	0.250	0.1438	3.1
13	*17:39*	*8.50*	*0.6*	*0.750*	*0.6*	*0.300*	*0.0889*	*1.00*	*0.0889*	*0.375*	*0.0333*	*0.7*
14	17:41	9.00	0.6	0.700	0.6	0.280	0.5351	1.00	0.5351	0.350	0.1873	4.1
15	*17:42*	*9.50*	*0.6*	*0.650*	*0.6*	*0.260*	*0.6033*	*1.00*	*0.6033*	*0.325*	*0.1961*	*4.3*
16	17:43	10.00	0.6	0.680	0.6	0.272	0.6033	1.00	0.6033	0.340	0.2052	4.5
17	17:44	10.50	0.6	0.700	0.6	0.280	0.8458	1.00	0.8458	0.350	0.2961	6.5
18	17:46	11.00	0.6	0.280	0.6	0.112	0.6043	1.00	0.6043	0.140	0.0846	1.8
19	17:47	11.50	0.6	0.350	0.6	0.140	0.4400	1.00	0.4400	0.175	0.0770	1.7
20	*17:48*	*12.00*	*0.6*	*0.400*	*0.6*	*0.160*	*0.4101*	*1.00*	*0.4101*	*0.200*	*0.0820*	*1.8*
21	*17:49*	*12.50*	*0.6*	*0.410*	*0.6*	*0.164*	*0.4357*	*1.00*	*0.4357*	*0.205*	*0.0893*	*2.0*
22	17:54	13.00	0.6	0.290	0.6	0.116	0.0154	1.00	0.0154	0.218	0.0034	0.1
23	*17:56*	*14.00*	*0.6*	*0.240*	*0.6*	*0.096*	*0.1532*	*1.00*	*0.1532*	*0.240*	*0.0368*	*0.8*
24	*17:58*	*15.00*	*0.6*	*0.200*	*0.6*	*0.080*	*0.1211*	*1.00*	*0.1211*	*0.200*	*0.0242*	*0.5*
25	17:59	16.00	0.6	0.350	0.6	0.140	0.2566	1.00	0.2566	0.350	0.0898	2.0
26	18:01	17.00	0.6	0.320	0.6	0.128	-0.0013	1.00	-0.0013	0.192	-0.0003	0.0
27	18:01	17.20	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

COLORADO
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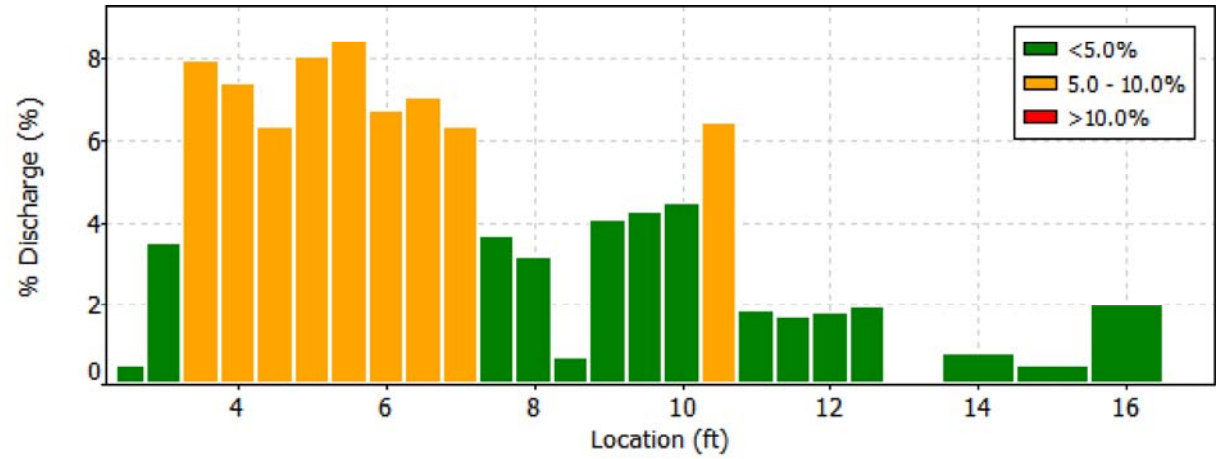
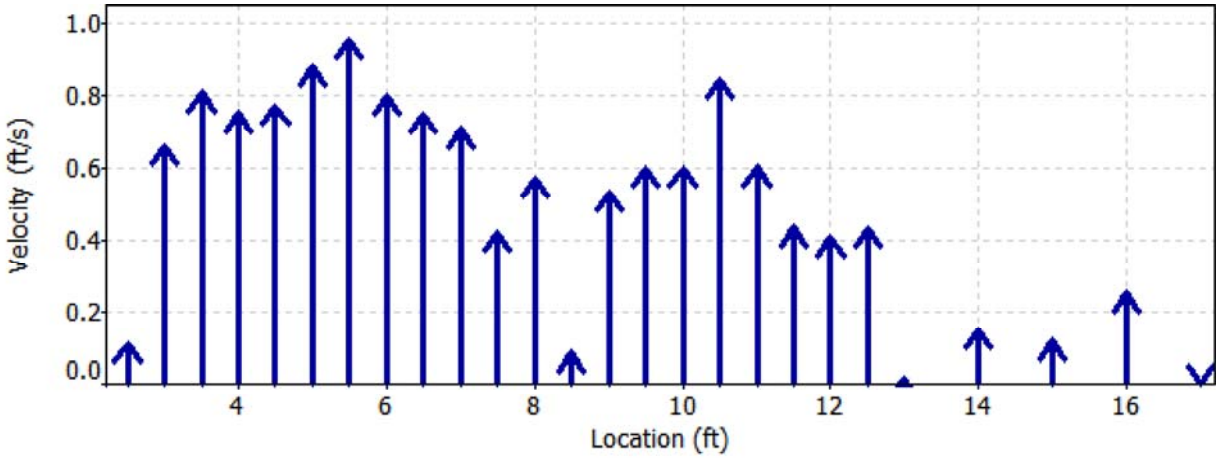
Department of Natural Resources

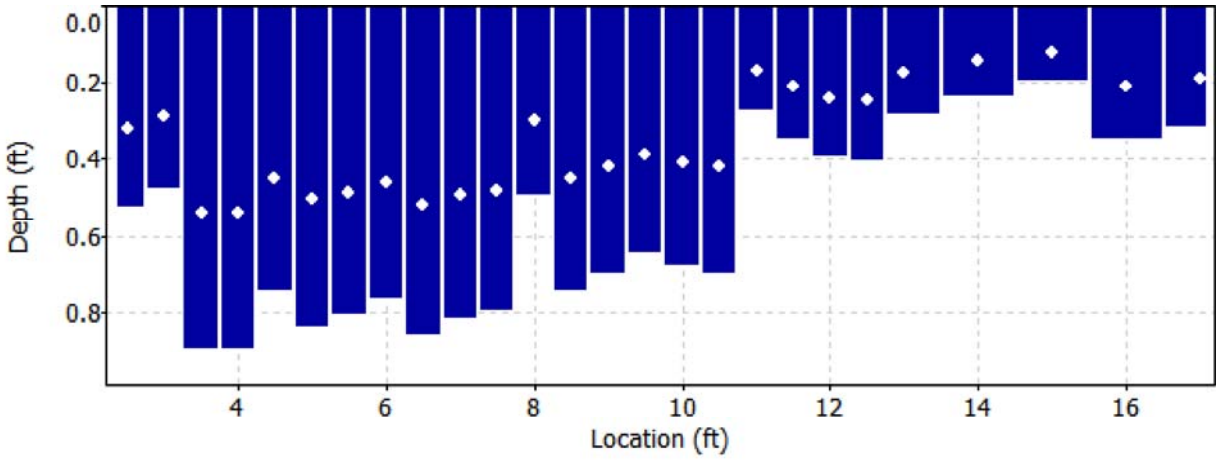
Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information		Site Details	
File Name	LCRASLTG.011.WAD	Site Name	LTL CMRN AT SPG LN
Start Date and Time	2015/10/21 17:23:54	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information

File Name	LCRASLTG.011.WAD
Start Date and Time	2015/10/21 17:23:54

Site Details

Site Name	LTL CMRN AT SPG LN
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
13	8.50	0.6	High angle: -40
15	9.50	0.6	High standard error: 0.040
20	12.00	0.6	High angle: -21
21	12.50	0.6	High angle: -22
23	14.00	0.6	High angle: -25
24	15.00	0.6	High angle: -21

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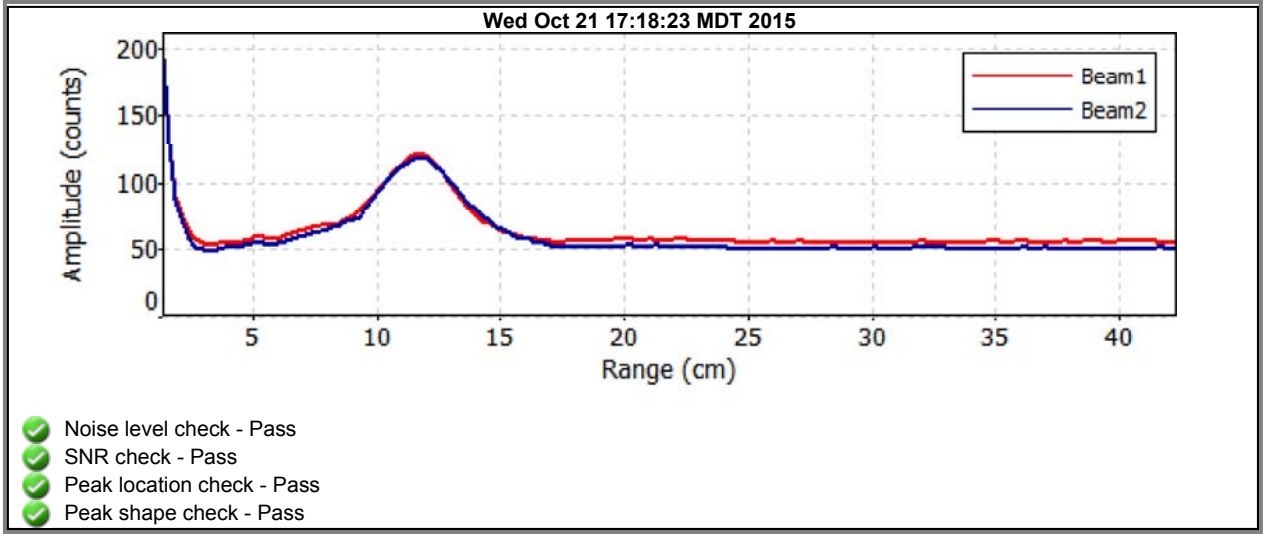
Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information		Site Details	
File Name	LCRASLTG.011.WAD	Site Name	LTL CMRN AT SPG LN
Start Date and Time	2015/10/21 17:23:54	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information

File Name	LCRASLTG.010.WAD
Start Date and Time	2015/10/20 10:34:54

Site Details

Site Name	LIL CIM AT SPG LN
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.4%	2.7%
Velocity	0.9%	4.5%
Width	0.1%	0.1%
Method	1.8%	-
# Stations	1.8%	-
Overall	**2.9%**	**5.3%**

Summary

Averaging Int.	40	# Stations	28
Start Edge	REW	Total Width	15.500
Mean SNR	27.3 dB	Total Area	8.258
Mean Temp	45.34 °F	Mean Depth	0.533
Disch. Equation	Mid-Section	Mean Velocity	0.5251
		Total Discharge	**4.3361**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	10:34	2.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	10:34	3.00	0.6	0.500	0.6	0.200	0.1614	1.00	0.1614	0.275	0.0444	1.0
2	10:36	3.50	0.6	0.480	0.6	0.192	0.6266	1.00	0.6266	0.240	0.1504	3.5
3	10:37	4.00	0.6	0.700	0.6	0.280	0.7789	1.00	0.7789	0.350	0.2727	6.3
4	10:42	4.50	0.6	0.820	0.6	0.328	0.7244	1.00	0.7244	0.410	0.2970	6.8
5	10:43	5.00	0.6	0.700	0.6	0.280	0.8789	1.00	0.8789	0.350	0.3077	7.1
6	10:44	5.50	0.6	0.850	0.6	0.340	0.7723	1.00	0.7723	0.425	0.3283	7.6
7	10:45	6.00	0.6	0.830	0.6	0.332	0.8409	1.00	0.8409	0.415	0.3490	8.0
8	10:53	6.50	0.6	0.710	0.6	0.284	0.9482	1.00	0.9482	0.355	0.3366	7.8
9	10:54	7.00	0.6	0.850	0.6	0.340	0.8406	1.00	0.8406	0.425	0.3573	8.2
10	10:55	7.50	0.6	0.700	0.6	0.280	0.6772	1.00	0.6772	0.350	0.2371	5.5
11	10:56	8.00	0.6	0.830	0.6	0.332	0.4570	1.00	0.4570	0.415	0.1897	4.4
12	10:58	8.50	0.6	0.740	0.6	0.296	0.5607	1.00	0.5607	0.370	0.2075	4.8
13	11:03	9.00	0.6	0.800	0.6	0.320	0.2044	1.00	0.2044	0.400	0.0817	1.9
14	*11:06*	*9.50*	*0.6*	*0.730*	*0.6*	*0.292*	*0.3471*	*1.00*	*0.3471*	*0.365*	*0.1267*	*2.9*
15	11:07	10.00	0.6	0.790	0.6	0.316	0.7441	1.00	0.7441	0.395	0.2939	6.8
16	11:08	10.50	0.6	0.600	0.6	0.240	0.6178	1.00	0.6178	0.300	0.1854	4.3
17	11:10	11.00	0.6	0.620	0.6	0.248	0.3091	1.00	0.3091	0.310	0.0958	2.2
18	11:11	11.50	0.6	0.550	0.6	0.220	0.3937	1.00	0.3937	0.275	0.1082	2.5
19	*11:12*	*12.00*	*0.6*	*0.490*	*0.6*	*0.196*	*0.2520*	*1.00*	*0.2520*	*0.245*	*0.0618*	*1.4*
20	11:13	12.50	0.6	0.230	0.6	0.092	0.3960	1.00	0.3960	0.115	0.0455	1.1
21	11:15	13.00	0.6	0.330	0.6	0.132	0.1457	1.00	0.1457	0.165	0.0240	0.6
22	*11:20*	*13.50*	*0.6*	*0.310*	*0.6*	*0.124*	*0.1096*	*1.00*	*0.1096*	*0.233*	*0.0255*	*0.6*
23	*11:21*	*14.50*	*0.6*	*0.230*	*0.6*	*0.092*	*0.2149*	*1.00*	*0.2149*	*0.230*	*0.0494*	*1.1*
24	*11:23*	*15.50*	*0.6*	*0.300*	*0.6*	*0.120*	*0.2152*	*1.00*	*0.2152*	*0.300*	*0.0645*	*1.5*
25	11:24	16.50	0.6	0.370	0.6	0.148	0.2703	1.00	0.2703	0.370	0.1000	2.3
26	*11:25*	*17.50*	*0.6*	*0.250*	*0.6*	*0.100*	*-0.0223*	*1.00*	*-0.0223*	*0.175*	*-0.0039*	*-0.1*
27	11:25	17.90	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

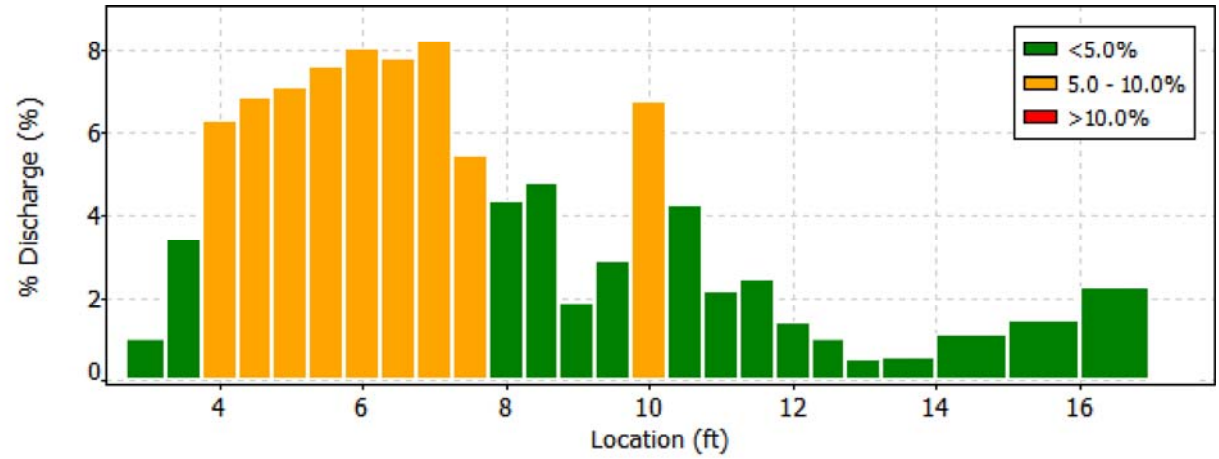
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

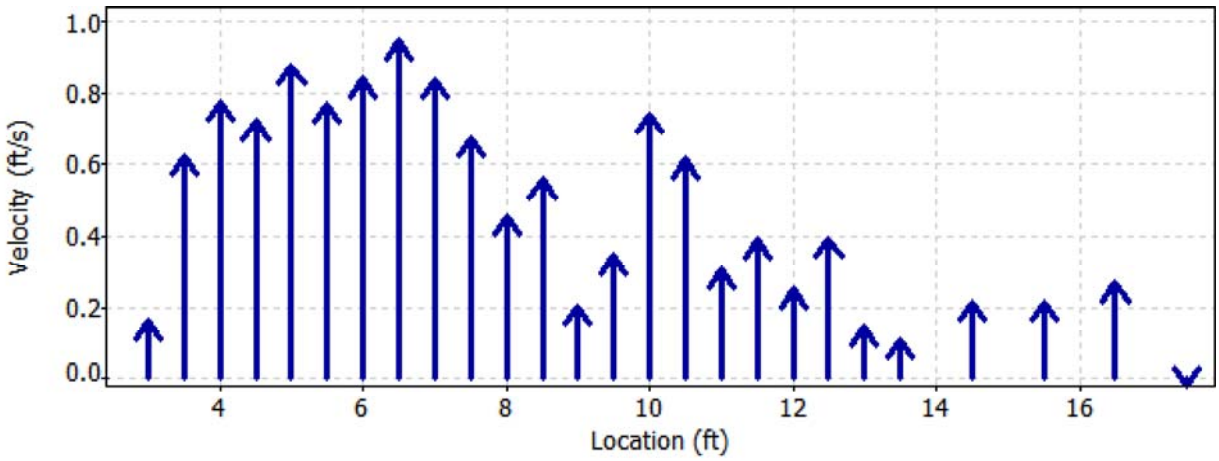
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

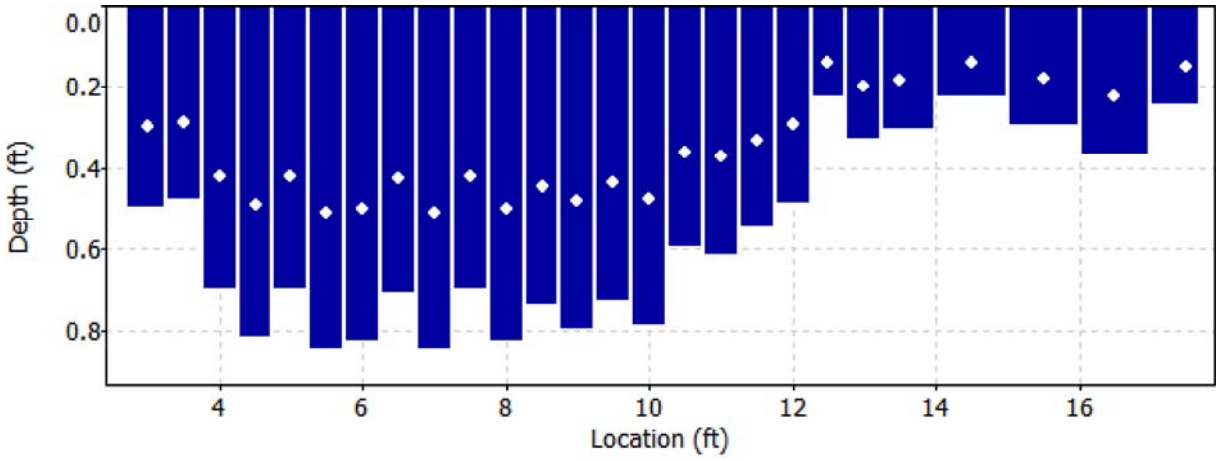
Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information		Site Details	
File Name	LCRASLTG.010.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2015/10/20 10:34:54	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information

File Name	LCRASLTG.010.WAD
Start Date and Time	2015/10/20 10:34:54

Site Details

Site Name	LIL CIM AT SPG LN
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
14	9.50	0.6	High standard error: 0.040
19	12.00	0.6	High angle: -22
22	13.50	0.6	High angle: -40
23	14.50	0.6	High angle: -32
24	15.50	0.6	High angle: -35
26	17.50	0.6	High angle: -127

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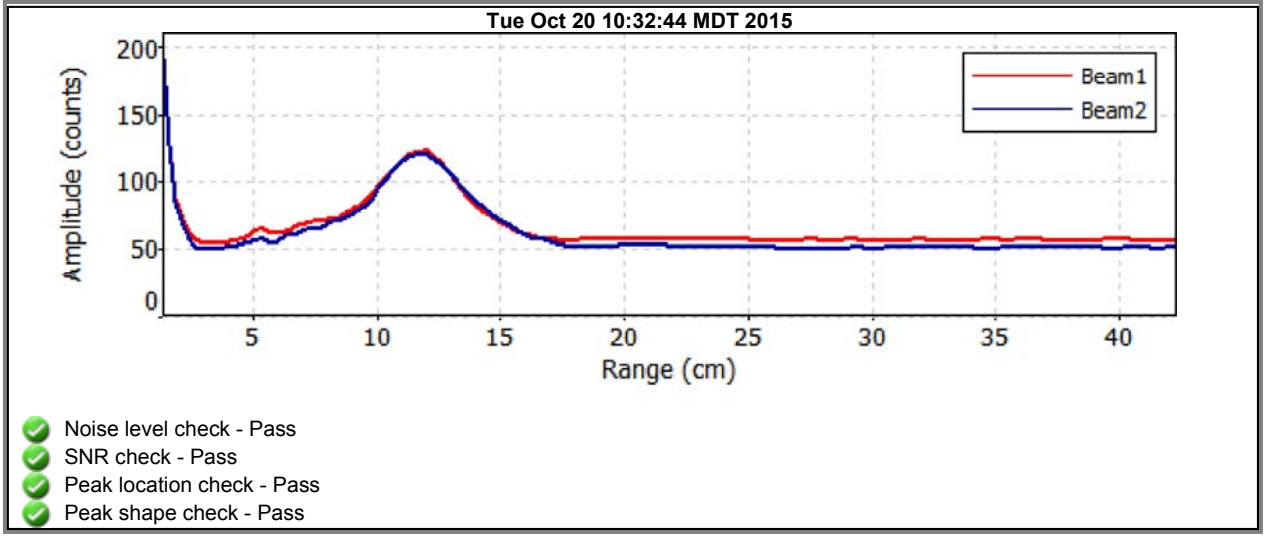
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Fri Nov 20 2015

File Information		Site Details	
File Name	LCRASLTG.010.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2015/10/20 10:34:54	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCRASLTG.009.WAD
Start Date and Time	2015/07/29 17:48:05

Site Details

Site Name	LTL CIMRN A SPG LN
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	1.5%
Velocity	0.8%	4.1%
Width	0.1%	0.1%
Method	1.7%	-
# Stations	2.0%	-
Overall	**2.9%**	**4.5%**

Summary

Averaging Int.	40	# Stations	26
Start Edge	REW	Total Width	15.600
Mean SNR	31.3 dB	Total Area	10.215
Mean Temp	65.23 °F	Mean Depth	0.655
Disch. Equation	Mid-Section	Mean Velocity	0.8515
		Total Discharge	**8.6982**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	17:48	1.10	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	17:49	1.50	0.6	0.830	0.6	0.332	0.8812	1.00	0.8812	0.373	0.3291	3.8
2	17:50	2.00	0.6	0.850	0.6	0.340	1.1522	1.00	1.1522	0.425	0.4897	5.6
3	17:52	2.50	0.6	0.900	0.6	0.360	1.2316	1.00	1.2316	0.450	0.5542	6.4
4	17:53	3.00	0.6	0.930	0.6	0.372	1.3261	1.00	1.3261	0.465	0.6167	7.1
5	17:54	3.50	0.6	0.900	0.6	0.360	1.4826	1.00	1.4826	0.450	0.6671	7.7
6	17:55	4.00	0.6	1.000	0.6	0.400	1.3396	1.00	1.3396	0.500	0.6698	7.7
7	17:59	4.50	0.6	1.030	0.6	0.412	1.1886	1.00	1.1886	0.515	0.6121	7.0
8	18:00	5.00	0.6	0.880	0.6	0.352	1.3461	1.00	1.3461	0.440	0.5922	6.8
9	18:04	5.50	0.6	0.900	0.6	0.360	1.2927	1.00	1.2927	0.450	0.5817	6.7
10	18:06	6.00	0.6	0.900	0.6	0.360	0.9199	1.00	0.9199	0.450	0.4139	4.8
11	18:07	6.50	0.6	0.930	0.6	0.372	0.7546	1.00	0.7546	0.465	0.3509	4.0
12	*18:09*	*7.00*	*0.6*	*0.790*	*0.6*	*0.316*	*0.6001*	*1.00*	*0.6001*	*0.395*	*0.2370*	*2.7*
13	*18:11*	*7.50*	*0.6*	*0.850*	*0.6*	*0.340*	*0.2546*	*1.00*	*0.2546*	*0.425*	*0.1082*	*1.2*
14	18:12	8.00	0.6	1.000	0.6	0.400	0.9678	1.00	0.9678	0.500	0.4839	5.6
15	*18:13*	*8.50*	*0.6*	*0.780*	*0.6*	*0.312*	*0.8484*	*1.00*	*0.8484*	*0.390*	*0.3308*	*3.8*
16	18:14	9.00	0.6	0.720	0.6	0.288	0.8068	1.00	0.8068	0.360	0.2905	3.3
17	*18:16*	*9.50*	*0.6*	*0.680*	*0.6*	*0.272*	*0.3281*	*1.00*	*0.3281*	*0.510*	*0.1674*	*1.9*
18	18:17	10.50	0.6	0.500	0.6	0.200	0.6417	1.00	0.6417	0.500	0.3209	3.7
19	18:19	11.50	0.6	0.340	0.6	0.136	0.4058	1.00	0.4058	0.340	0.1379	1.6
20	18:22	12.50	0.6	0.300	0.6	0.120	0.2628	1.00	0.2628	0.300	0.0788	0.9
21	18:23	13.50	0.6	0.420	0.6	0.168	0.4475	1.00	0.4475	0.420	0.1879	2.2
22	18:24	14.50	0.6	0.420	0.6	0.168	0.6437	1.00	0.6437	0.420	0.2703	3.1
23	18:25	15.50	0.6	0.420	0.6	0.168	0.4872	1.00	0.4872	0.420	0.2046	2.4
24	18:26	16.50	0.6	0.420	0.6	0.168	0.0092	1.00	0.0092	0.252	0.0023	0.0
25	18:26	16.70	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

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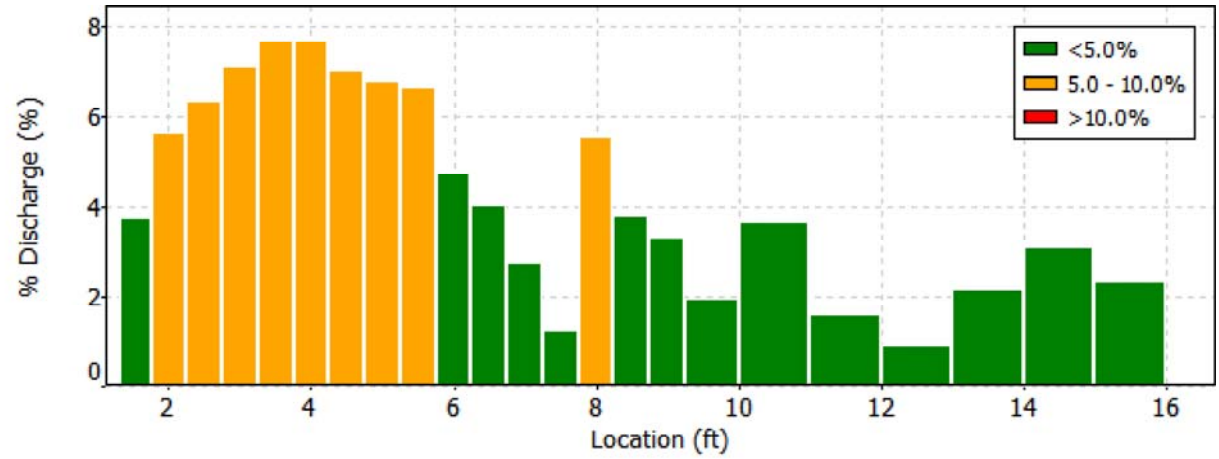
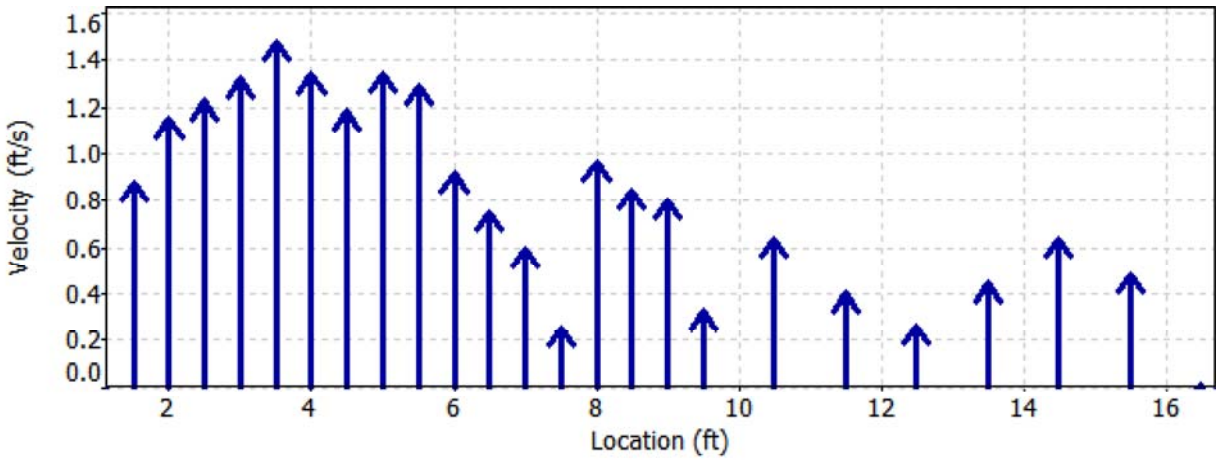
Colorado Water Conservation Board
Department of Natural Resources

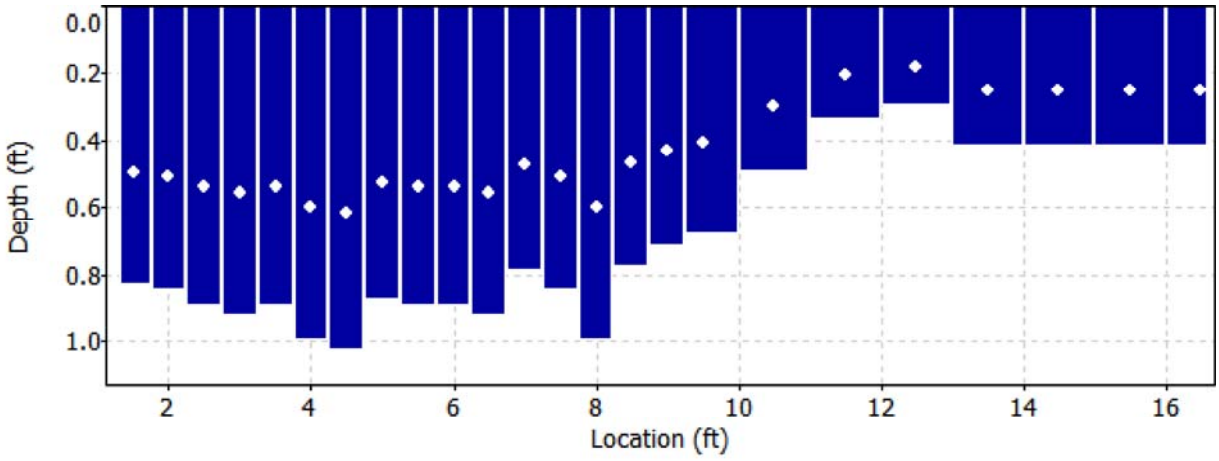
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCRASLTG.009.WAD	Site Name	LTL CIMRN A SPG LN
Start Date and Time	2015/07/29 17:48:05	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCRASLTG.009.WAD
Start Date and Time	2015/07/29 17:48:05

Site Details

Site Name	LTL CIMRN A SPG LN
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
12	7.00	0.6	High standard error: 0.043
13	7.50	0.6	High standard error: 0.062
15	8.50	0.6	High standard error: 0.045
17	9.50	0.6	High standard error: 0.031

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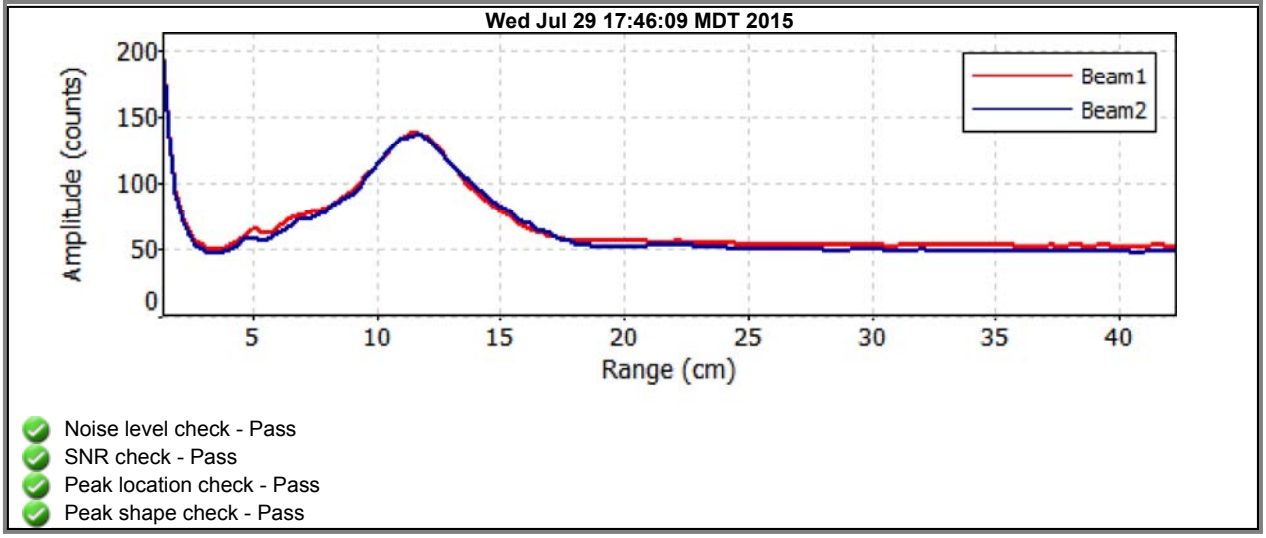
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCRASLTG.009.WAD	Site Name	LTL CIMRN A SPG LN
Start Date and Time	2015/07/29 17:48:05	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCIMR2X3.001.WAD
Start Date and Time	2015/07/28 17:40:18

Site Details

Site Name	LIL CIM US CPW RD
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.4%	8.4%
Velocity	1.9%	15.6%
Width	0.1%	0.1%
Method	2.2%	-
# Stations	2.2%	-
Overall	**3.8%**	**17.7%**

Summary

Averaging Int.	40	# Stations	23
Start Edge	LEW	Total Width	20.700
Mean SNR	33.5 dB	Total Area	8.218
Mean Temp	63.84 °F	Mean Depth	0.397
Disch. Equation	Mid-Section	Mean Velocity	0.8559
		Total Discharge	**7.0334**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	17:40	5.70	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	*17:40*	*6.00*	*0.6*	*0.220*	*0.6*	*0.088*	*-0.0207*	*1.00*	*-0.0207*	*0.143*	*-0.0030*	*0.0*
2	17:42	7.00	0.6	0.200	0.6	0.080	0.0479	1.00	0.0479	0.200	0.0096	0.1
3	17:43	8.00	0.6	0.370	0.6	0.148	0.1447	1.00	0.1447	0.370	0.0535	0.8
4	17:44	9.00	0.6	0.300	0.6	0.120	0.9879	1.00	0.9879	0.300	0.2962	4.2
5	*17:45*	*10.00*	*0.6*	*0.650*	*0.6*	*0.260*	*0.5249*	*1.00*	*0.5249*	*0.650*	*0.3412*	*4.9*
6	17:46	11.00	0.6	0.500	0.6	0.200	2.1713	1.00	2.1713	0.500	1.0856	15.4
7	*17:47*	*12.00*	*0.6*	*0.650*	*0.6*	*0.260*	*1.0010*	*1.00*	*1.0010*	*0.650*	*0.6506*	*9.2*
8	*17:48*	*13.00*	*0.6*	*0.250*	*0.6*	*0.100*	*1.2205*	*1.00*	*1.2205*	*0.250*	*0.3051*	*4.3*
9	*17:50*	*14.00*	*0.6*	*0.550*	*0.6*	*0.220*	*1.3563*	*1.00*	*1.3563*	*0.550*	*0.7458*	*10.6*
10	17:51	15.00	0.6	0.450	0.6	0.180	0.5541	1.00	0.5541	0.450	0.2494	3.5
11	17:52	16.00	0.6	0.750	0.6	0.300	0.7615	1.00	0.7615	0.750	0.5711	8.1
12	17:53	17.00	0.6	0.600	0.6	0.240	1.2110	1.00	1.2110	0.600	0.7267	10.3
13	17:54	18.00	0.6	0.600	0.6	0.240	0.6486	1.00	0.6486	0.600	0.3892	5.5
14	17:56	19.00	0.6	0.500	0.6	0.200	0.7277	1.00	0.7277	0.500	0.3638	5.2
15	*17:58*	*20.00*	*0.6*	*0.400*	*0.6*	*0.160*	*1.5194*	*1.00*	*1.5194*	*0.400*	*0.6076*	*8.6*
16	17:59	21.00	0.6	0.300	0.6	0.120	0.2310	1.00	0.2310	0.300	0.0693	1.0
17	18:00	22.00	0.6	0.200	0.6	0.080	1.0092	1.00	1.0092	0.200	0.2020	2.9
18	*18:01*	*23.00*	*0.6*	*0.300*	*0.6*	*0.120*	*0.1558*	*1.00*	*0.1558*	*0.300*	*0.0467*	*0.7*
19	*18:03*	*24.00*	*0.6*	*0.150*	*0.6*	*0.060*	*0.7293*	*1.00*	*0.7293*	*0.150*	*0.1094*	*1.6*
20	18:04	25.00	0.6	0.250	0.6	0.100	0.8107	1.00	0.8107	0.250	0.2027	2.9
21	18:05	26.00	0.6	0.150	0.6	0.060	0.1030	1.00	0.1030	0.105	0.0108	0.2
22	18:05	26.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

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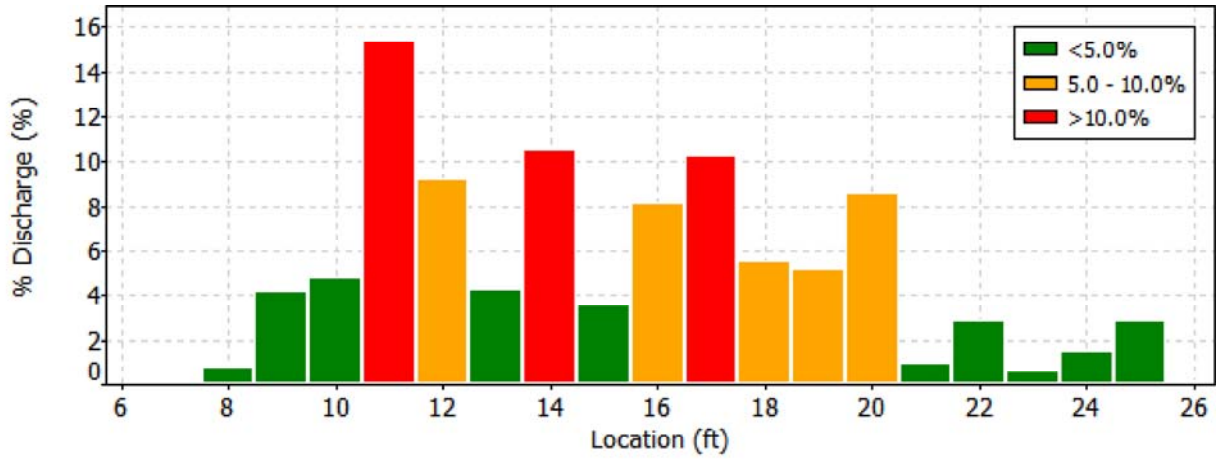
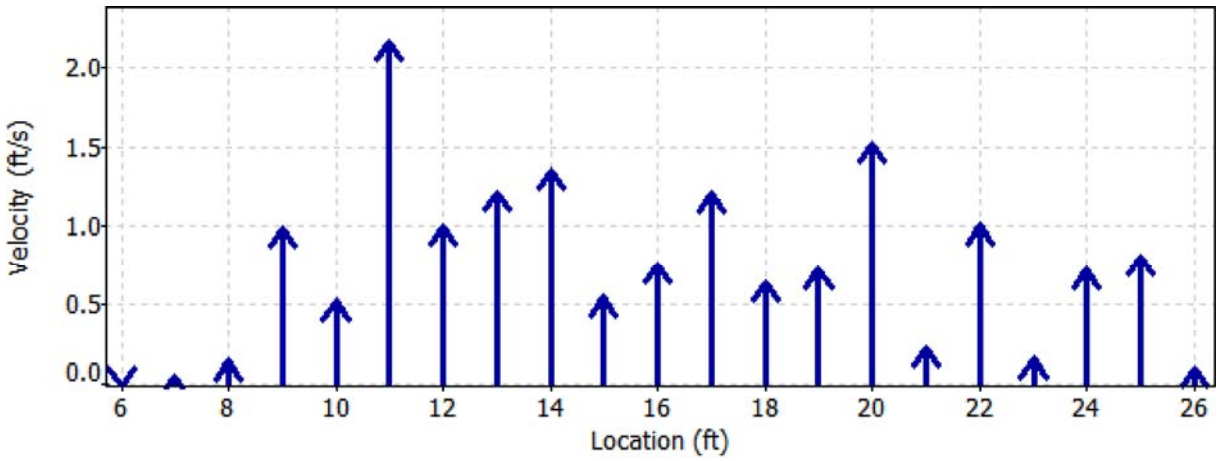
Department of Natural Resources

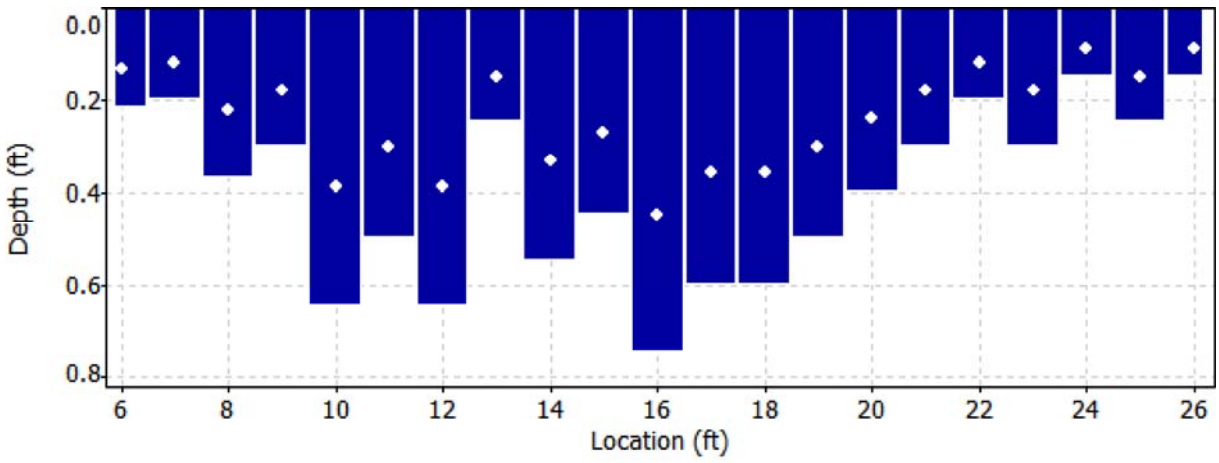
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X3.001.WAD	Site Name	LIL CIM US CPW RD
Start Date and Time	2015/07/28 17:40:18	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X3.001.WAD	Site Name	LIL CIM US CPW RD
Start Date and Time	2015/07/28 17:40:18	Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
1	6.00	0.6	High angle: -150
		0.6	SNR (45.8) is different from typical SNR (33.5)
5	10.00	0.6	High standard error: 0.096
7	12.00	0.6	High standard error: 0.092
8	13.00	0.6	High standard error: 0.088
9	14.00	0.6	High standard error: 0.105
15	20.00	0.6	High angle: 21
18	23.00	0.6	High angle: 30
19	24.00	0.6	High angle: 20

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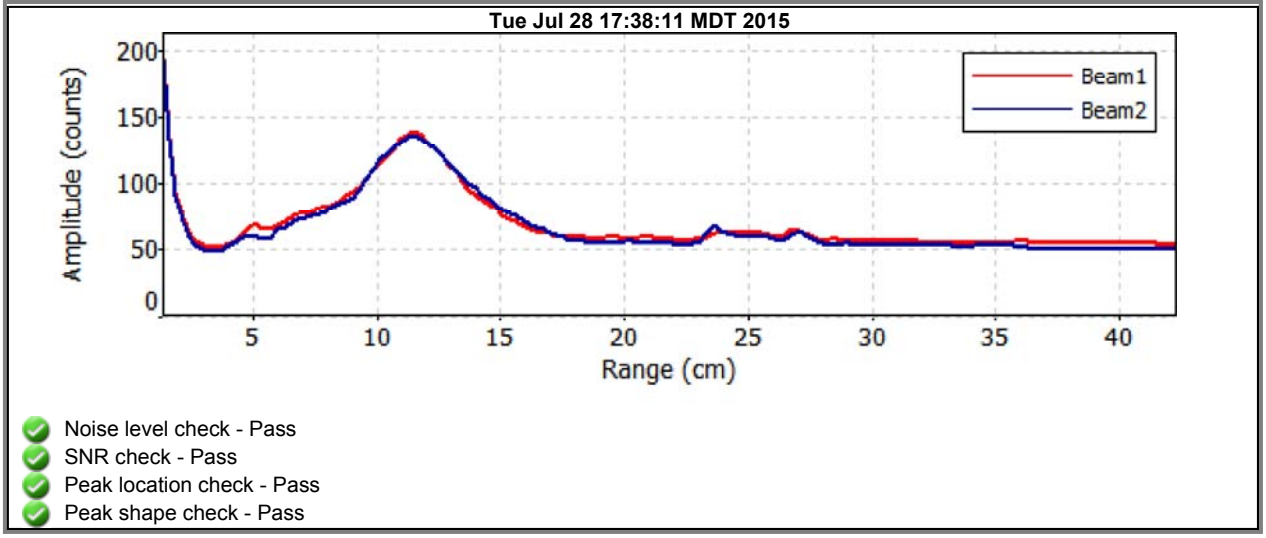
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X3.001.WAD	Site Name	LIL CIM US CPW RD
Start Date and Time	2015/07/28 17:40:18	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCIMR2X1.001.WAD
Start Date and Time	2015/07/28 11:48:10

Site Details

Site Name	LIT CIMRN AT LT C RD
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.4%	7.1%
Velocity	1.2%	5.7%
Width	0.1%	0.1%
Method	1.9%	-
# Stations	2.2%	-
Overall	**3.3%**	**9.2%**

Summary

Averaging Int.	40	# Stations	23
Start Edge	REW	Total Width	21.900
Mean SNR	36.5 dB	Total Area	12.950
Mean Temp	52.06 °F	Mean Depth	0.591
Disch. Equation	Mid-Section	Mean Velocity	1.6521
		Total Discharge	**21.3945**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	11:48	11.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	11:48	12.00	0.6	0.400	0.6	0.160	0.5338	1.00	0.5338	0.400	0.2135	1.0
2	*11:49*	*13.00*	*0.6*	*0.370*	*0.6*	*0.148*	*0.7277*	*1.00*	*0.7277*	*0.370*	*0.2693*	*1.3*
3	*11:54*	*14.00*	*0.6*	*0.320*	*0.6*	*0.128*	*-0.0236*	*1.00*	*-0.0236*	*0.320*	*-0.0076*	*0.0*
4	11:55	15.00	0.6	0.680	0.6	0.272	1.8606	1.00	1.8606	0.680	1.2654	5.9
5	11:56	16.00	0.6	0.750	0.6	0.300	2.2867	1.00	2.2867	0.750	1.7151	8.0
6	*11:57*	*17.00*	*0.6*	*0.750*	*0.6*	*0.300*	*1.5318*	*1.00*	*1.5318*	*0.750*	*1.1489*	*5.4*
7	11:58	18.00	0.6	0.600	0.6	0.240	1.3156	1.00	1.3156	0.600	0.7895	3.7
8	12:00	19.00	0.6	0.600	0.6	0.240	1.2805	1.00	1.2805	0.600	0.7684	3.6
9	*12:02*	*20.00*	*0.6*	*0.850*	*0.6*	*0.340*	*1.8104*	*1.00*	*1.8104*	*0.850*	*1.5389*	*7.2*
10	12:04	21.00	0.6	1.000	0.6	0.400	2.4177	1.00	2.4177	1.000	2.4177	11.3
11	12:06	22.00	0.6	0.800	0.6	0.320	2.3940	1.00	2.3940	0.800	1.9149	9.0
12	12:07	23.00	0.6	0.750	0.6	0.300	2.1841	1.00	2.1841	0.750	1.6380	7.7
13	*12:08*	*24.00*	*0.6*	*0.850*	*0.6*	*0.340*	*1.1601*	*1.00*	*1.1601*	*0.850*	*0.9862*	*4.6*
14	12:10	25.00	0.6	0.900	0.6	0.360	1.4715	1.00	1.4715	0.900	1.3242	6.2
15	12:11	26.00	0.6	0.500	0.6	0.200	1.4567	1.00	1.4567	0.500	0.7283	3.4
16	12:12	27.00	0.6	0.600	0.6	0.240	2.1109	1.00	2.1109	0.600	1.2667	5.9
17	12:13	28.00	0.6	0.400	0.6	0.160	2.5876	1.00	2.5876	0.400	1.0349	4.8
18	12:16	29.00	0.6	0.950	0.6	0.380	1.7900	1.00	1.7900	0.950	1.7008	7.9
19	12:18	30.00	0.6	0.150	0.6	0.060	1.4111	1.00	1.4111	0.150	0.2116	1.0
20	*12:19*	*31.00*	*0.6*	*0.350*	*0.6*	*0.140*	*1.2835*	*1.00*	*1.2835*	*0.350*	*0.4493*	*2.1*
21	*12:20*	*32.00*	*0.6*	*0.400*	*0.6*	*0.160*	*0.0545*	*1.00*	*0.0545*	*0.380*	*0.0207*	*0.1*
22	12:20	32.90	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

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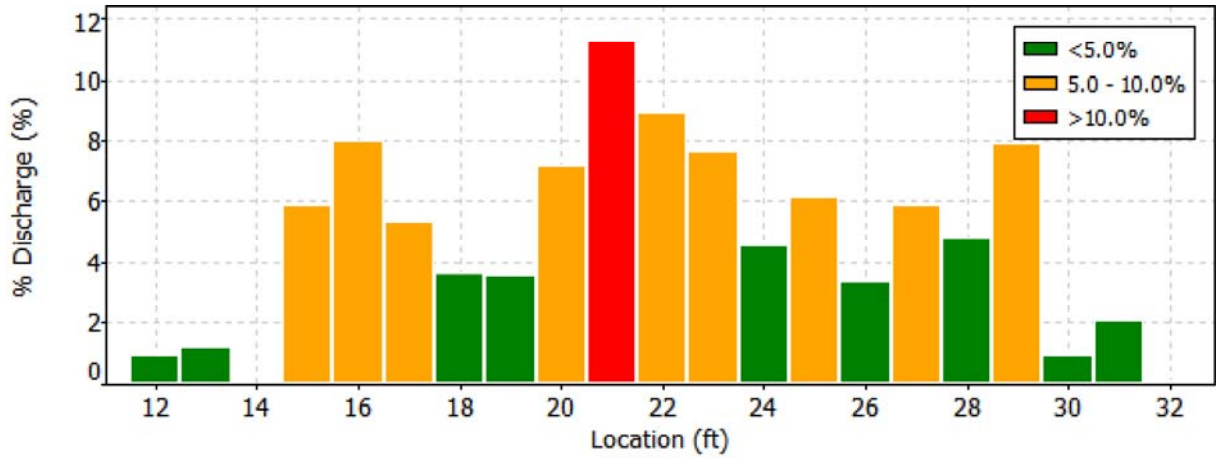
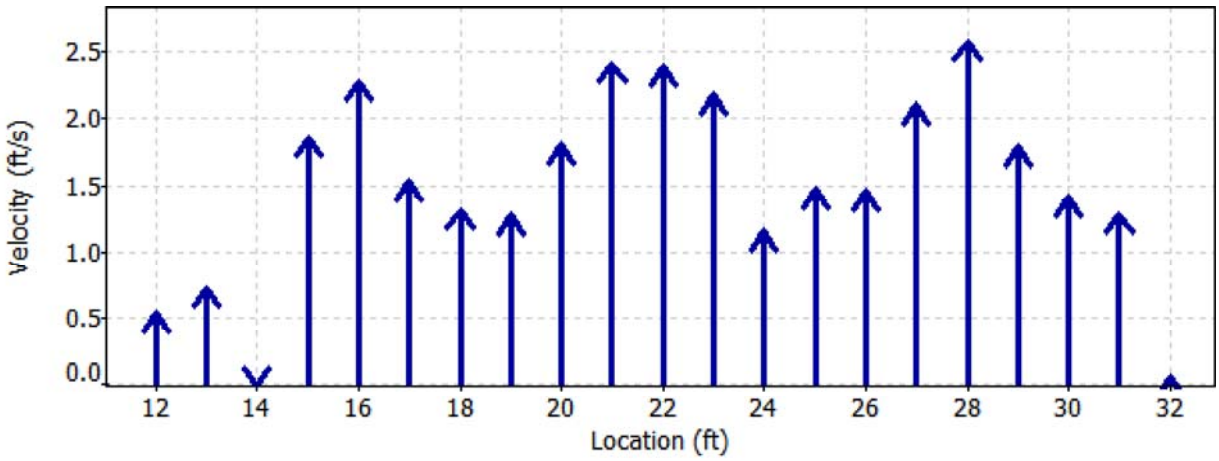
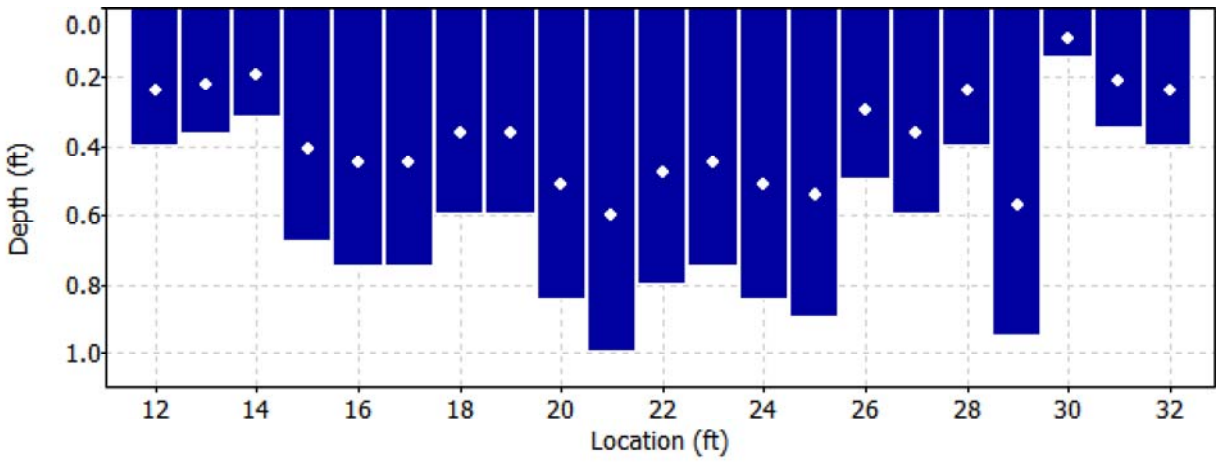
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X1.001.WAD	Site Name	LIT CIMRN AT LT C RD
Start Date and Time	2015/07/28 11:48:10	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCIMR2X1.001.WAD
Start Date and Time	2015/07/28 11:48:10

Site Details

Site Name	LIT CIMRN AT LT C RD
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
2	13.00	0.6	High standard error: 0.101
3	14.00	0.6	High angle: 116
6	17.00	0.6	High number of spikes: 5
9	20.00	0.6	High standard error: 0.121
13	24.00	0.6	High standard error: 0.113
20	31.00	0.6	High angle: 20
21	32.00	0.6	High angle: 77

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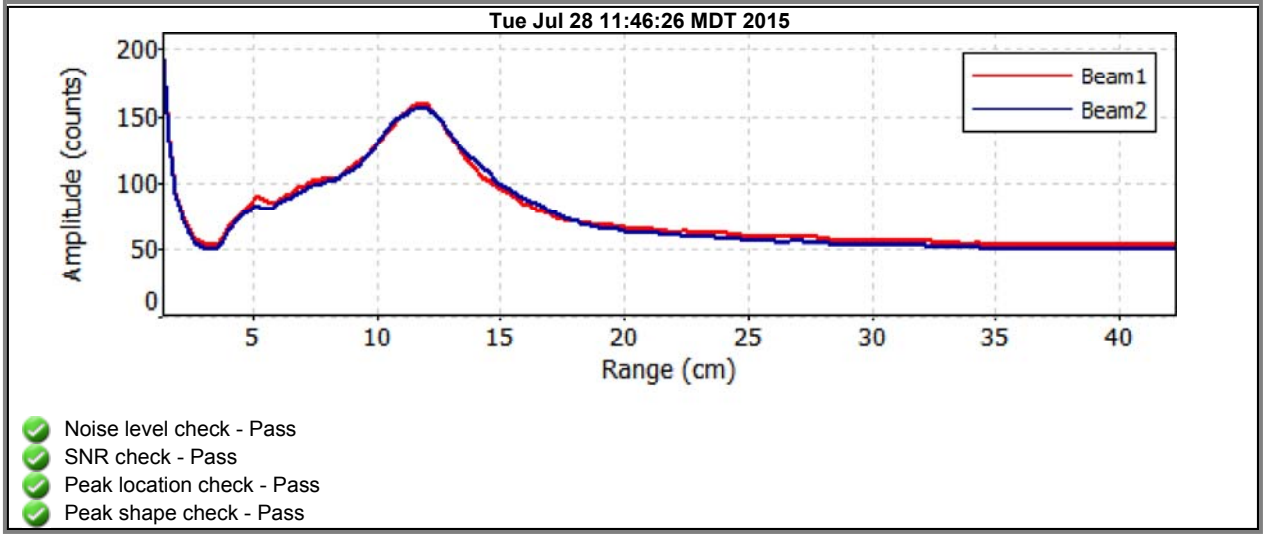
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X1.001.WAD	Site Name	LIT CIMRN AT LT C RD
Start Date and Time	2015/07/28 11:48:10	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCIMR2X2.002.WAD
Start Date and Time	2015/07/28 14:50:42

Site Details

Site Name	LIL CMRN AB FIREBOX
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	4.8%
Velocity	1.0%	3.7%
Width	0.1%	0.1%
Method	1.6%	-
# Stations	1.8%	-
Overall	**2.8%**	**6.1%**

Summary

Averaging Int.	40	# Stations	29
Start Edge	REW	Total Width	14.500
Mean SNR	38.1 dB	Total Area	6.768
Mean Temp	57.04 °F	Mean Depth	0.467
Disch. Equation	Mid-Section	Mean Velocity	1.7491
		Total Discharge	**11.8369**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	14:50	19.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	14:50	20.00	0.6	0.350	0.6	0.140	0.4980	1.00	0.4980	0.193	0.0959	0.8
2	14:51	20.50	0.6	0.300	0.6	0.120	1.4396	1.00	1.4396	0.150	0.2159	1.8
3	14:53	21.00	0.6	0.500	0.6	0.200	1.7969	1.00	1.7969	0.250	0.4492	3.8
4	14:55	21.50	0.6	0.500	0.6	0.200	1.5463	1.00	1.5463	0.250	0.3866	3.3
5	*14:57*	*22.00*	*0.6*	*0.700*	*0.6*	*0.280*	*1.5062*	*1.00*	*1.5062*	*0.350*	*0.5273*	*4.5*
6	14:58	22.50	0.6	0.550	0.6	0.220	1.3278	1.00	1.3278	0.275	0.3650	3.1
7	14:59	23.00	0.6	0.400	0.6	0.160	1.0581	1.00	1.0581	0.200	0.2116	1.8
8	15:00	23.50	0.6	0.500	0.6	0.200	1.0994	1.00	1.0994	0.250	0.2749	2.3
9	15:01	24.00	0.6	0.550	0.6	0.220	1.0338	1.00	1.0338	0.275	0.2842	2.4
10	15:02	24.50	0.6	0.700	0.6	0.280	0.9311	1.00	0.9311	0.350	0.3259	2.8
11	15:04	25.00	0.6	0.400	0.6	0.160	1.5558	1.00	1.5558	0.200	0.3111	2.6
12	15:05	25.50	0.6	0.700	0.6	0.280	1.6365	1.00	1.6365	0.350	0.5729	4.8
13	15:06	26.00	0.6	0.650	0.6	0.260	1.9400	1.00	1.9400	0.325	0.6304	5.3
14	15:07	26.50	0.6	0.450	0.6	0.180	2.6322	1.00	2.6322	0.225	0.5924	5.0
15	15:09	27.00	0.6	0.600	0.6	0.240	3.4429	1.00	3.4429	0.300	1.0330	8.7
16	*15:10*	*27.50*	*0.6*	*0.600*	*0.6*	*0.240*	*2.2267*	*1.00*	*2.2267*	*0.300*	*0.6681*	*5.6*
17	15:11	28.00	0.6	0.300	0.6	0.120	2.7844	1.00	2.7844	0.150	0.4175	3.5
18	15:13	28.50	0.6	0.300	0.6	0.120	2.5453	1.00	2.5453	0.150	0.3816	3.2
19	*15:14*	*29.00*	*0.6*	*0.600*	*0.6*	*0.240*	*1.3514*	*1.00*	*1.3514*	*0.300*	*0.4055*	*3.4*
20	15:15	29.50	0.6	0.400	0.6	0.160	1.3980	1.00	1.3980	0.200	0.2795	2.4
21	15:16	30.00	0.6	0.500	0.6	0.200	2.2077	1.00	2.2077	0.250	0.5519	4.7
22	15:17	30.50	0.6	0.500	0.6	0.200	2.8570	1.00	2.8570	0.250	0.7142	6.0
23	15:20	31.00	0.6	0.450	0.6	0.180	2.9646	1.00	2.9646	0.225	0.6672	5.6
24	*15:21*	*31.50*	*0.6*	*0.500*	*0.6*	*0.200*	*1.9291*	*1.00*	*1.9291*	*0.250*	*0.4823*	*4.1*
25	15:22	32.00	0.6	0.350	0.6	0.140	1.5164	1.00	1.5164	0.175	0.2654	2.2
26	*15:24*	*32.50*	*0.6*	*0.450*	*0.6*	*0.180*	*1.7064*	*1.00*	*1.7064*	*0.225*	*0.3840*	*3.2*
27	*15:25*	*33.00*	*0.6*	*0.500*	*0.6*	*0.200*	*0.9810*	*1.00*	*0.9810*	*0.350*	*0.3433*	*2.9*
28	15:25	33.90	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

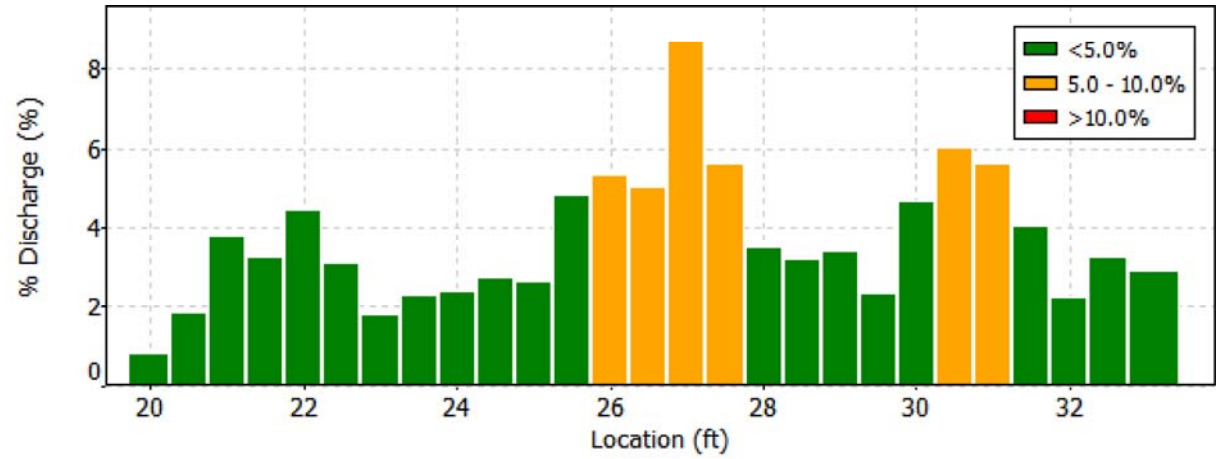
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

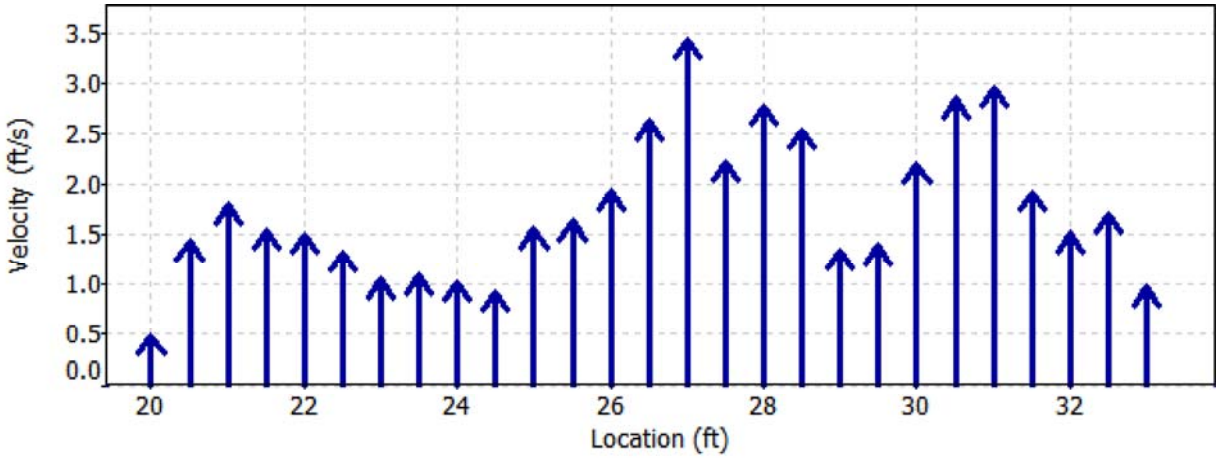
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

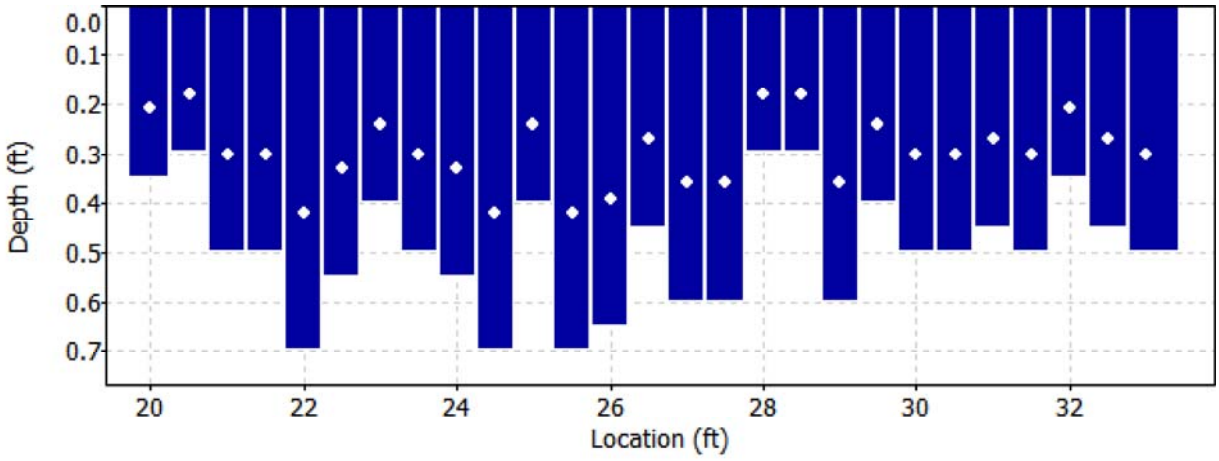
Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X2.002.WAD	Site Name	LIL CMRN AB FIREBOX
Start Date and Time	2015/07/28 14:50:42	Operator(s)	BRIAN EPSTEIN







COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information

File Name	LCIMR2X2.002.WAD
Start Date and Time	2015/07/28 14:50:42

Site Details

Site Name	LIL CMRN AB FIREBOX
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
5	22.00	0.6	High standard error: 0.110
16	27.50	0.6	High standard error: 0.139
19	29.00	0.6	High standard error: 0.136
24	31.50	0.6	High standard error: 0.137
26	32.50	0.6	High number of spikes: 5
27	33.00	0.6	High standard error: 0.110

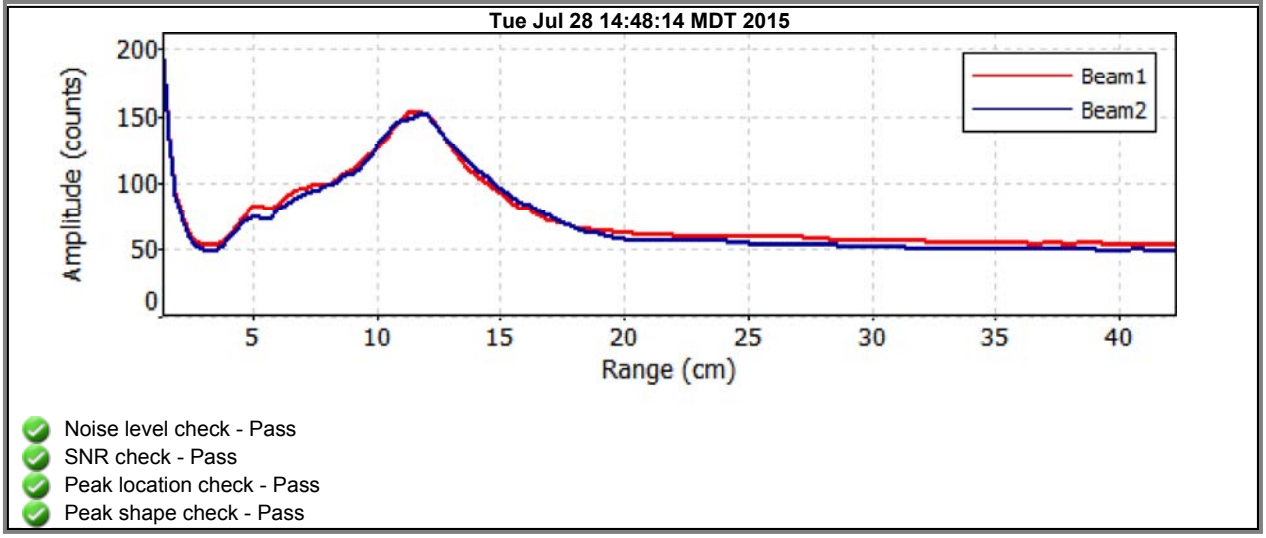
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Sep 2 2015

File Information		Site Details	
File Name	LCIMR2X2.002.WAD	Site Name	LIL CMRN AB FIREBOX
Start Date and Time	2015/07/28 14:50:42	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LTCIMAJP.001.WAD
Start Date and Time	2015/05/21 15:55:39

Site Details

Site Name	LIL CIMRN AT JHN PRK
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	1.7%
Velocity	0.4%	0.8%
Width	0.1%	0.1%
Method	1.6%	-
# Stations	1.9%	-
Overall	**2.7%**	**2.1%**

Summary

Averaging Int.	40	# Stations	27
Start Edge	LEW	Total Width	15.400
Mean SNR	31.8 dB	Total Area	13.973
Mean Temp	46.00 °F	Mean Depth	0.907
Disch. Equation	Mid-Section	Mean Velocity	2.4745
		Total Discharge	**34.5771**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	15:55	0.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	15:55	1.00	0.6	0.470	0.6	0.188	0.4843	1.00	0.4843	0.376	0.1821	0.5
2	15:56	2.00	0.6	0.810	0.6	0.324	0.6286	1.00	0.6286	0.810	0.5092	1.5
3	15:58	3.00	0.6	1.070	0.6	0.428	1.0039	1.00	1.0039	0.802	0.8056	2.3
4	16:00	3.50	0.6	1.100	0.6	0.440	1.4911	1.00	1.4911	0.550	0.8202	2.4
5	16:01	4.00	0.6	1.050	0.6	0.420	2.1985	1.00	2.1985	0.525	1.1541	3.3
6	16:02	4.50	0.6	1.050	0.6	0.420	2.3278	1.00	2.3278	0.525	1.2219	3.5
7	16:03	5.00	0.6	1.120	0.6	0.448	2.5003	1.00	2.5003	0.560	1.4003	4.0
8	16:05	5.50	0.6	1.140	0.6	0.456	2.9573	1.00	2.9573	0.570	1.6858	4.9
9	16:06	6.00	0.6	1.150	0.6	0.460	3.0135	1.00	3.0135	0.575	1.7326	5.0
10	16:07	6.50	0.6	1.100	0.6	0.440	3.1909	1.00	3.1909	0.550	1.7551	5.1
11	16:08	7.00	0.6	1.210	0.6	0.484	3.2982	1.00	3.2982	0.605	1.9954	5.8
12	16:10	7.50	0.6	1.200	0.6	0.480	3.3527	1.00	3.3527	0.600	2.0118	5.8
13	16:11	8.00	0.6	1.280	0.6	0.512	3.2756	1.00	3.2756	0.640	2.0961	6.1
14	16:12	8.50	0.6	1.300	0.6	0.520	3.0781	1.00	3.0781	0.650	2.0006	5.8
15	16:14	9.00	0.6	1.280	0.6	0.512	2.9140	1.00	2.9140	0.640	1.8648	5.4
16	16:15	9.50	0.6	1.260	0.6	0.504	2.7293	1.00	2.7293	0.630	1.7193	5.0
17	16:17	10.00	0.6	1.150	0.6	0.460	2.9380	1.00	2.9380	0.575	1.6892	4.9
18	16:18	10.50	0.6	1.050	0.6	0.420	2.8885	1.00	2.8885	0.525	1.5162	4.4
19	16:20	11.00	0.6	0.730	0.6	0.292	2.9314	1.00	2.9314	0.365	1.0700	3.1
20	16:21	11.50	0.6	1.100	0.6	0.440	2.9797	1.00	2.9797	0.550	1.6389	4.7
21	16:22	12.00	0.6	0.950	0.6	0.380	2.8602	1.00	2.8602	0.475	1.3588	3.9
22	16:23	12.50	0.6	0.870	0.6	0.348	2.6112	1.00	2.6112	0.435	1.1360	3.3
23	16:25	13.00	0.6	0.780	0.6	0.312	2.4606	1.00	2.4606	0.585	1.4392	4.2
24	16:26	14.00	0.6	0.540	0.6	0.216	2.1417	1.00	2.1417	0.540	1.1566	3.3
25	16:28	15.00	0.6	0.350	0.6	0.140	1.9593	1.00	1.9593	0.315	0.6173	1.8
26	16:28	15.80	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

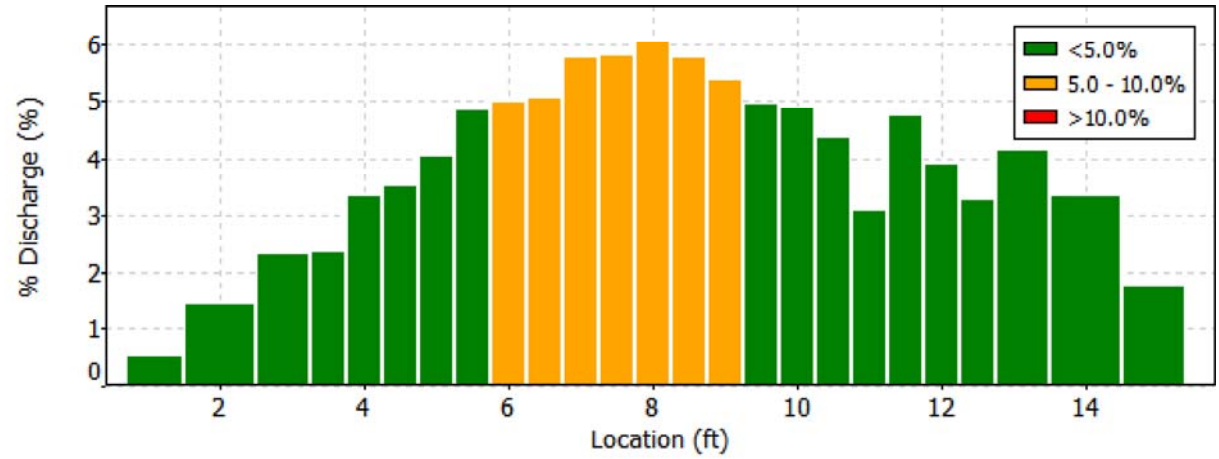
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

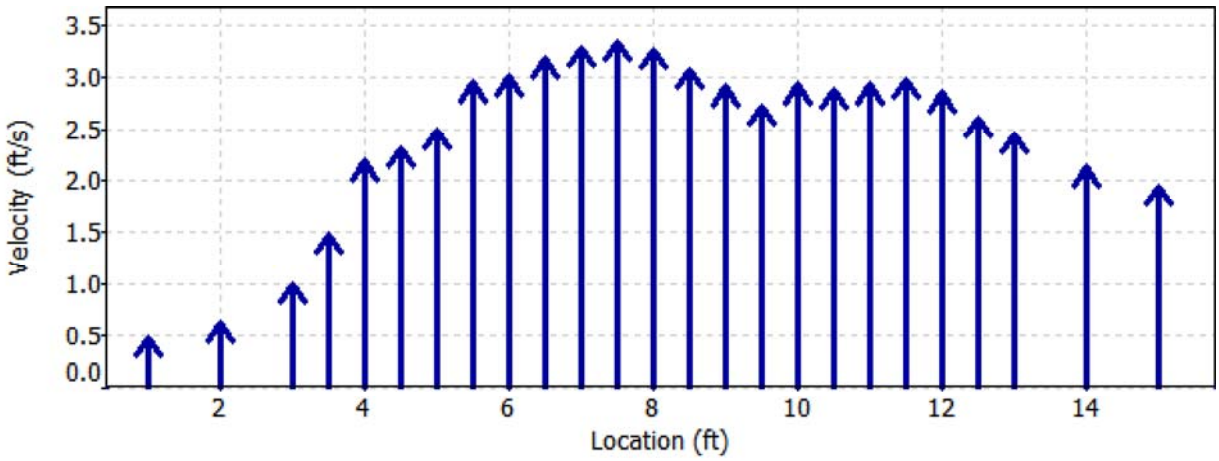
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

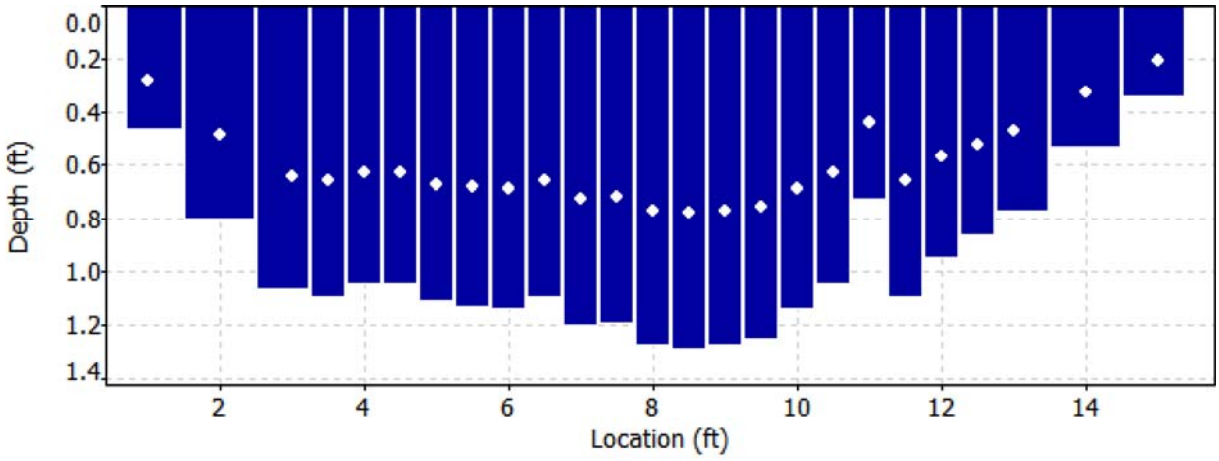
Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LTCIMAJP.001.WAD	Site Name	LIL CIMRN AT JHN PRK
Start Date and Time	2015/05/21 15:55:39	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LTCIMAJP.001.WAD	Site Name	LIL CIMRN AT JHN PRK
Start Date and Time	2015/05/21 15:55:39	Operator(s)	BRIAN EPSTEIN

Quality Control

No Quality Control warnings

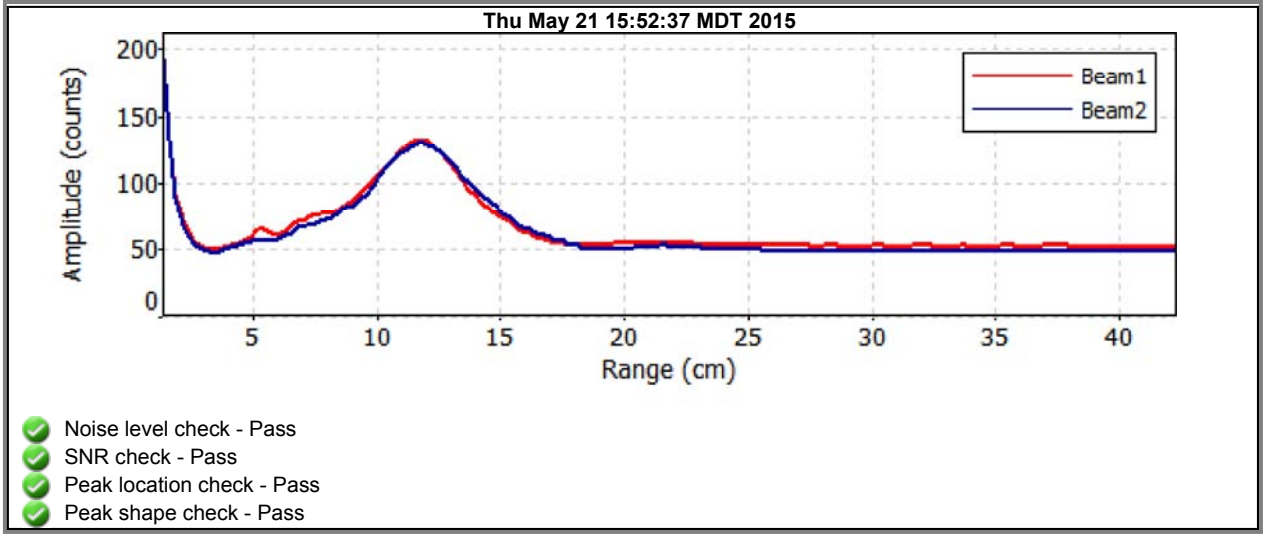
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LTCIMAJP.001.WAD	Site Name	LIL CIMRN AT JHN PRK
Start Date and Time	2015/05/21 15:55:39	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRASLTG.008.WAD
Start Date and Time	2015/05/20 18:54:14

Site Details

Site Name	LTL CIMARRON A SPG L
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	3.1%
Velocity	0.5%	1.7%
Width	0.1%	0.1%
Method	1.4%	-
# Stations	1.4%	-
Overall	**2.3%**	**3.7%**

Summary

Averaging Int.	40	# Stations	36
Start Edge	REW	Total Width	21.200
Mean SNR	33.8 dB	Total Area	11.347
Mean Temp	54.18 °F	Mean Depth	0.535
Disch. Equation	Mid-Section	Mean Velocity	0.8087
		Total Discharge	**9.1755**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	18:54	3.80	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	*18:54*	*4.60*	*0.6*	*0.670*	*0.6*	*0.268*	*0.3937*	*1.00*	*0.3937*	*0.569*	*0.2242*	*2.4*
2	*18:55*	*5.50*	*0.6*	*0.800*	*0.6*	*0.320*	*0.6726*	*1.00*	*0.6726*	*0.560*	*0.3766*	*4.1*
3	18:57	6.00	0.6	0.760	0.6	0.304	1.0154	1.00	1.0154	0.380	0.3858	4.2
4	18:58	6.50	0.6	0.650	0.6	0.260	1.0052	1.00	1.0052	0.325	0.3267	3.6
5	18:59	7.00	0.6	0.840	0.6	0.336	1.1430	1.00	1.1430	0.420	0.4800	5.2
6	19:00	7.50	0.6	0.950	0.6	0.380	1.1414	1.00	1.1414	0.475	0.5422	5.9
7	19:01	8.00	0.6	0.800	0.6	0.320	1.2415	1.00	1.2415	0.400	0.4965	5.4
8	19:03	8.50	0.6	0.820	0.6	0.328	1.1883	1.00	1.1883	0.410	0.4871	5.3
9	19:04	9.00	0.6	0.670	0.6	0.268	1.2365	1.00	1.2365	0.335	0.4142	4.5
10	19:05	9.50	0.6	0.800	0.6	0.320	1.0807	1.00	1.0807	0.400	0.4322	4.7
11	19:06	10.00	0.6	0.750	0.6	0.300	1.0377	1.00	1.0377	0.375	0.3891	4.2
12	19:07	10.50	0.6	0.700	0.6	0.280	0.9783	1.00	0.9783	0.350	0.3425	3.7
13	19:09	11.00	0.6	0.410	0.6	0.164	1.0128	1.00	1.0128	0.205	0.2077	2.3
14	19:10	11.50	0.6	0.740	0.6	0.296	0.8445	1.00	0.8445	0.370	0.3125	3.4
15	19:11	12.00	0.6	0.620	0.6	0.248	0.8688	1.00	0.8688	0.310	0.2694	2.9
16	19:13	12.50	0.6	0.700	0.6	0.280	0.9833	1.00	0.9833	0.350	0.3442	3.8
17	19:14	13.00	0.6	0.630	0.6	0.252	0.9262	1.00	0.9262	0.315	0.2917	3.2
18	19:18	13.50	0.6	0.600	0.6	0.240	0.8389	1.00	0.8389	0.300	0.2517	2.7
19	19:19	14.00	0.6	0.630	0.6	0.252	0.9665	1.00	0.9665	0.315	0.3044	3.3
20	19:21	14.50	0.6	0.330	0.6	0.132	0.8343	1.00	0.8343	0.165	0.1377	1.5
21	19:22	15.00	0.6	0.370	0.6	0.148	0.8199	1.00	0.8199	0.185	0.1517	1.7
22	19:23	15.50	0.6	0.590	0.6	0.236	0.7936	1.00	0.7936	0.295	0.2341	2.6
23	19:24	16.00	0.6	0.500	0.6	0.200	0.9045	1.00	0.9045	0.250	0.2261	2.5
24	19:25	16.50	0.6	0.560	0.6	0.224	0.6493	1.00	0.6493	0.280	0.1818	2.0
25	19:26	17.00	0.6	0.550	0.6	0.220	0.7881	1.00	0.7881	0.275	0.2167	2.4
26	19:32	17.50	0.6	0.380	0.6	0.152	0.7707	1.00	0.7707	0.190	0.1464	1.6
27	19:33	18.00	0.6	0.630	0.6	0.252	0.6286	1.00	0.6286	0.315	0.1980	2.2
28	19:34	18.50	0.6	0.500	0.6	0.200	0.6686	1.00	0.6686	0.250	0.1672	1.8
29	19:35	19.00	0.6	0.360	0.6	0.144	0.7749	1.00	0.7749	0.180	0.1395	1.5
30	19:36	19.50	0.6	0.520	0.6	0.208	0.7126	1.00	0.7126	0.260	0.1853	2.0
31	19:37	20.00	0.6	0.450	0.6	0.180	0.6509	1.00	0.6509	0.338	0.2197	2.4
32	*19:39*	*21.00*	*0.6*	*0.250*	*0.6*	*0.100*	*0.2615*	*1.00*	*0.2615*	*0.250*	*0.0654*	*0.7*
33	19:41	22.00	0.6	0.500	0.6	0.200	0.0190	1.00	0.0190	0.500	0.0095	0.1
34	*19:43*	*23.00*	*0.6*	*0.300*	*0.6*	*0.120*	*0.0394*	*1.00*	*0.0394*	*0.450*	*0.0177*	*0.2*
35	19:43	25.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

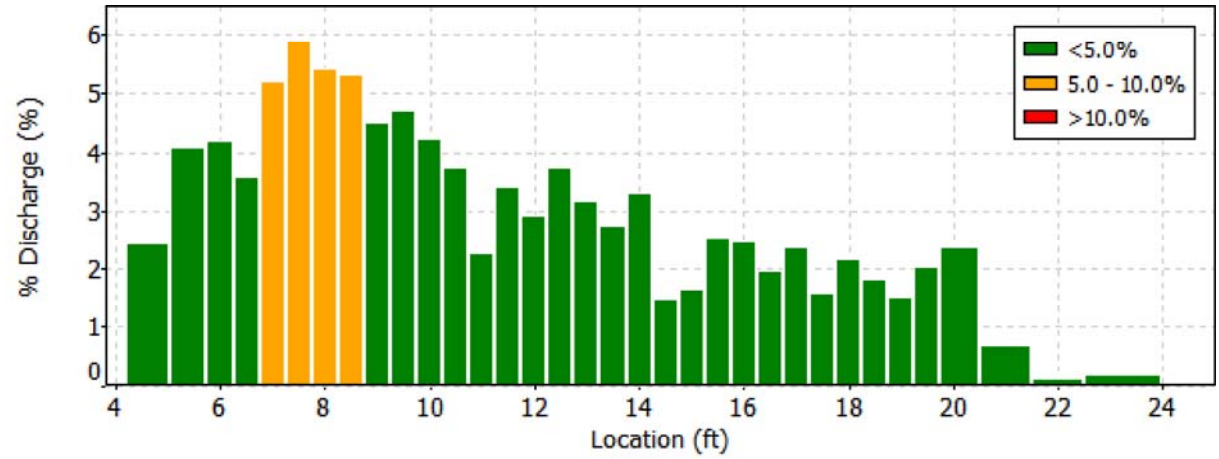
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

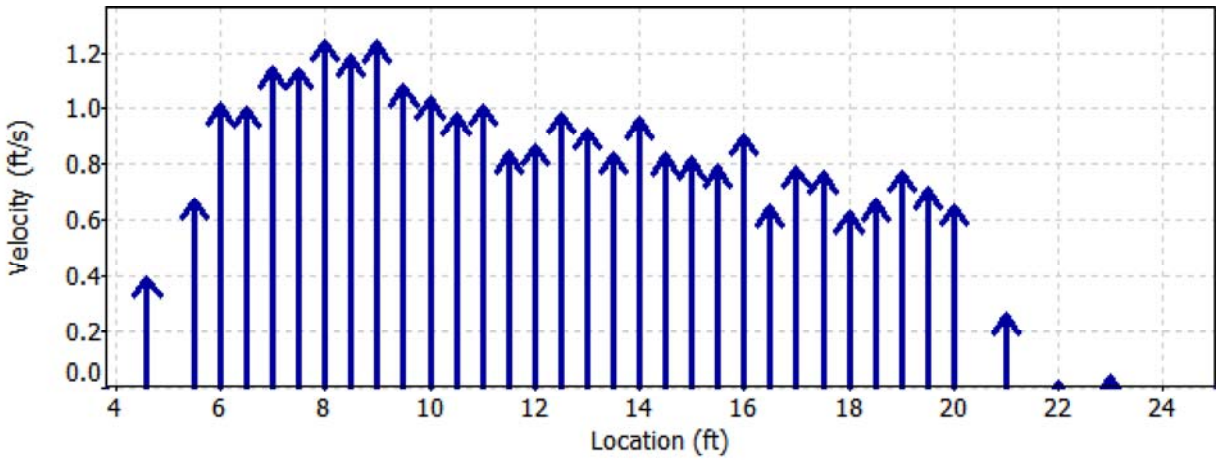
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

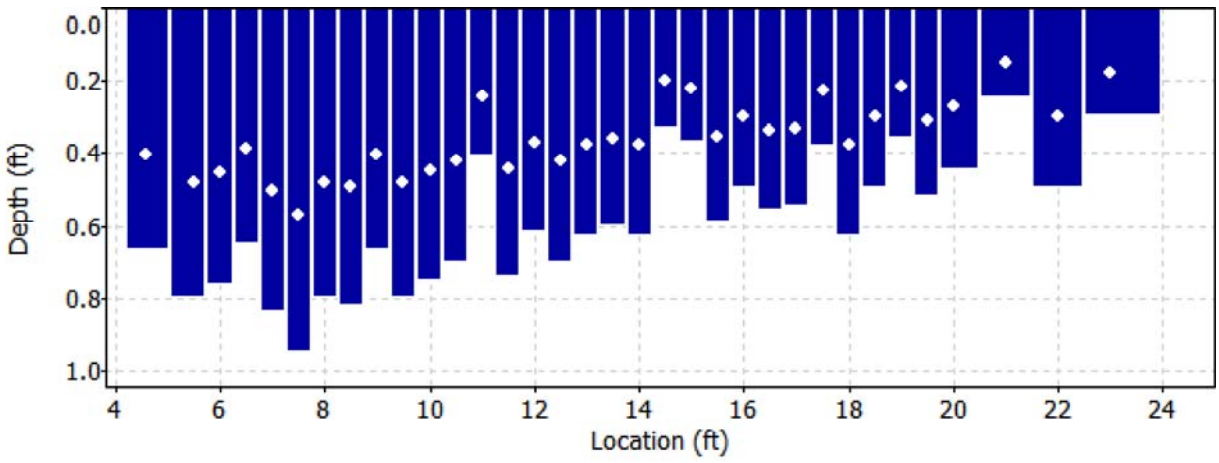
Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRASLTG.008.WAD	Site Name	LTL CIMARRON A SPG L
Start Date and Time	2015/05/20 18:54:14	Operator(s)	BRIAN EPSTEIN







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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRASLTG.008.WAD
Start Date and Time	2015/05/20 18:54:14

Site Details

Site Name	LTL CIMARRON A SPG L
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
1	4.60	0.6	High angle: -28
2	5.50	0.6	High standard error: 0.035
32	21.00	0.6	High angle: 23
34	23.00	0.6	High angle: 31

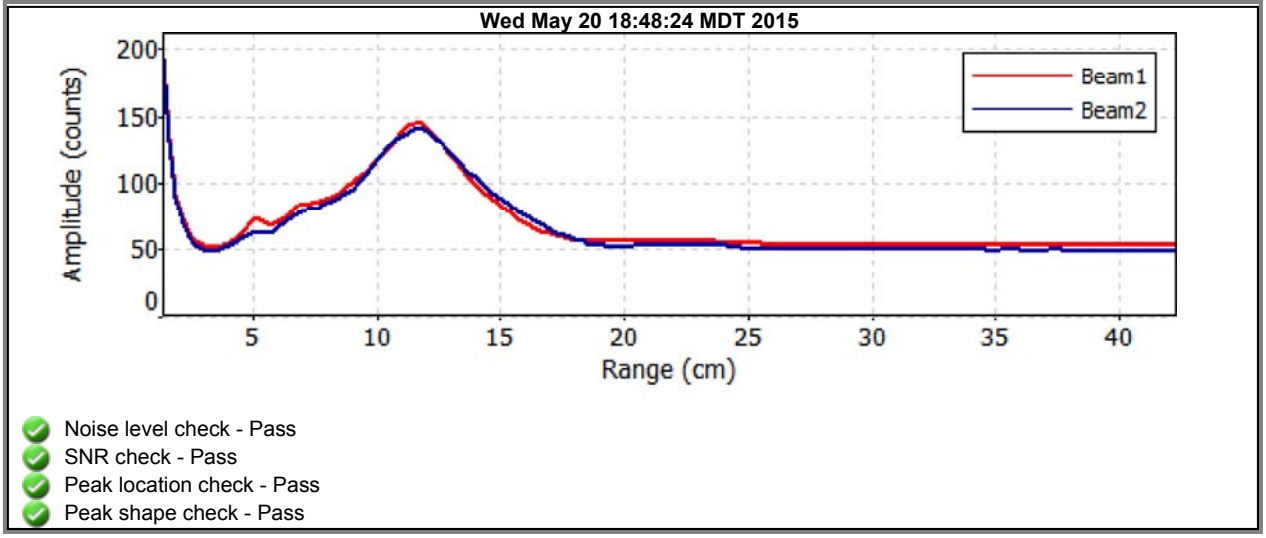
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRASLTG.008.WAD	Site Name	LTL CIMARRON A SPG L
Start Date and Time	2015/05/20 18:54:14	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRACPWR.005.WAD
Start Date and Time	2015/05/21 19:13:29

Site Details

Site Name	LIL CIMRN AT CPW RD
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	1.5%
Velocity	1.0%	2.8%
Width	0.1%	0.1%
Method	1.7%	-
# Stations	2.0%	-
Overall	**3.0%**	**3.3%**

Summary

Averaging Int.	40	# Stations	25
Start Edge	LEW	Total Width	18.000
Mean SNR	35.4 dB	Total Area	14.060
Mean Temp	47.41 °F	Mean Depth	0.781
Disch. Equation	Mid-Section	Mean Velocity	0.9909
		Total Discharge	**13.9316**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	19:13	4.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	19:13	6.00	0.6	0.530	0.6	0.212	0.2333	1.00	0.2333	0.795	0.1854	1.3
2	19:14	7.00	0.6	0.650	0.6	0.260	0.5020	1.00	0.5020	0.650	0.3262	2.3
3	19:15	8.00	0.6	0.760	0.6	0.304	0.6699	1.00	0.6699	0.760	0.5091	3.7
4	19:18	9.00	0.6	1.000	0.6	0.400	1.0669	1.00	1.0669	0.750	0.8002	5.7
5	19:19	9.50	0.6	1.100	0.6	0.440	1.3996	1.00	1.3996	0.550	0.7698	5.5
6	19:21	10.00	0.6	1.320	0.6	0.528	1.4541	1.00	1.4541	0.660	0.9596	6.9
7	19:22	10.50	0.6	1.320	0.6	0.528	1.4885	1.00	1.4885	0.660	0.9823	7.1
8	19:24	11.00	0.6	1.300	0.6	0.520	1.5312	1.00	1.5312	0.650	0.9952	7.1
9	19:25	11.50	0.6	1.040	0.6	0.416	1.7871	1.00	1.7871	0.520	0.9293	6.7
10	19:26	12.00	0.6	1.200	0.6	0.480	1.4846	1.00	1.4846	0.600	0.8908	6.4
11	*19:28*	*12.50*	*0.6*	*1.150*	*0.6*	*0.460*	*1.2280*	*1.00*	*1.2280*	*0.575*	*0.7061*	*5.1*
12	19:29	13.00	0.6	1.100	0.6	0.440	1.5610	1.00	1.5610	0.550	0.8586	6.2
13	19:30	13.50	0.6	1.060	0.6	0.424	1.5640	1.00	1.5640	0.530	0.8289	6.0
14	19:31	14.00	0.6	1.100	0.6	0.440	1.0709	1.00	1.0709	0.550	0.5890	4.2
15	19:33	14.50	0.6	1.050	0.6	0.420	0.9229	1.00	0.9229	0.525	0.4845	3.5
16	19:34	15.00	0.6	0.920	0.6	0.368	1.3123	1.00	1.3123	0.460	0.6036	4.3
17	*19:35*	*15.50*	*0.6*	*0.990*	*0.6*	*0.396*	*1.1627*	*1.00*	*1.1627*	*0.495*	*0.5756*	*4.1*
18	19:36	16.00	0.6	1.000	0.6	0.400	0.8084	1.00	0.8084	0.750	0.6063	4.4
19	19:37	17.00	0.6	0.900	0.6	0.360	0.5781	1.00	0.5781	0.900	0.5202	3.7
20	*19:38*	*18.00*	*0.6*	*0.680*	*0.6*	*0.272*	*0.4173*	*1.00*	*0.4173*	*0.680*	*0.2838*	*2.0*
21	19:39	19.00	0.6	0.620	0.6	0.248	0.4318	1.00	0.4318	0.620	0.2677	1.9
22	19:41	20.00	0.6	0.600	0.6	0.240	0.3314	1.00	0.3314	0.600	0.1988	1.4
23	*19:42*	*21.00*	*0.6*	*0.230*	*0.6*	*0.092*	*0.2625*	*1.00*	*0.2625*	*0.230*	*0.0604*	*0.4*
24	19:42	22.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

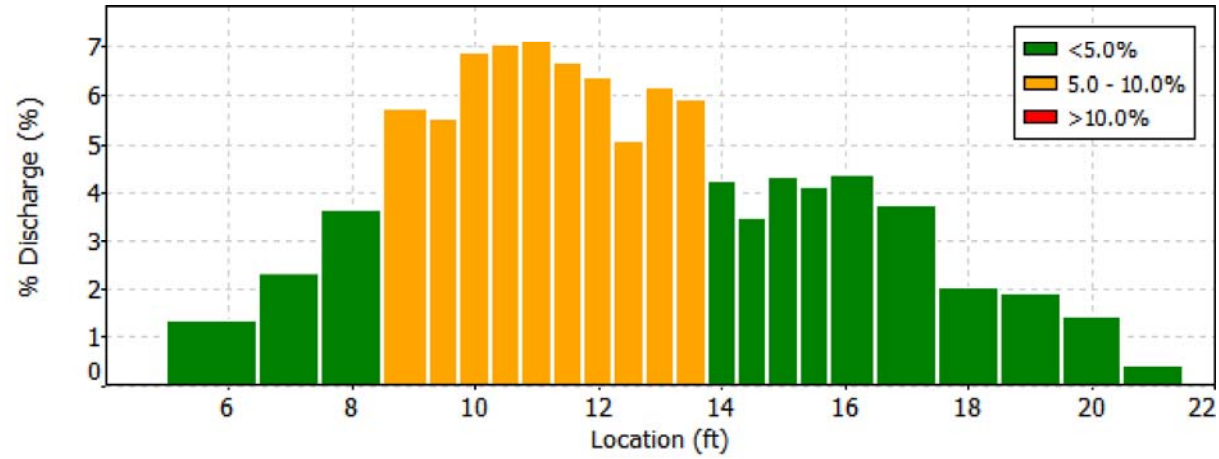
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

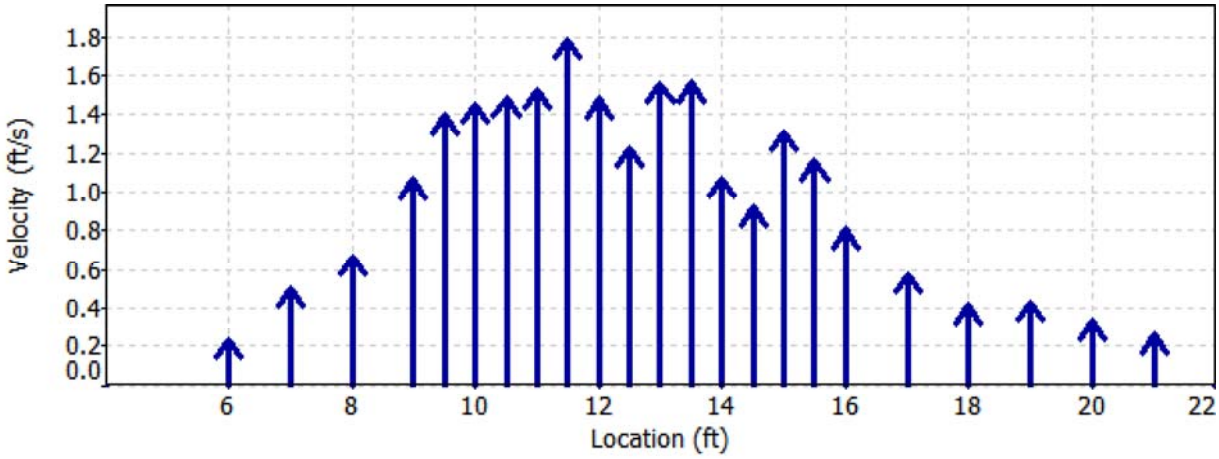
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

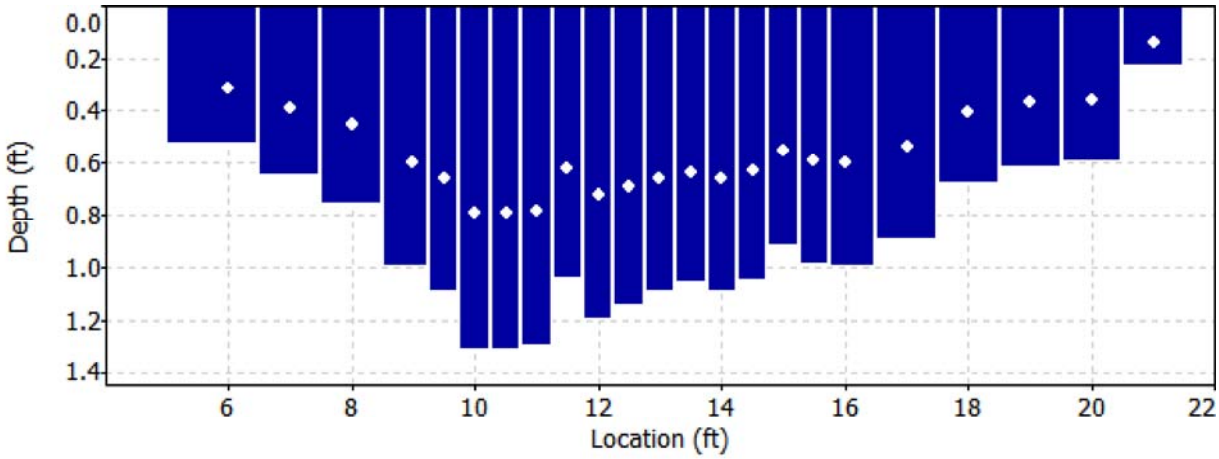
Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRACPWR.005.WAD	Site Name	LIL CIMRN AT CPW RD
Start Date and Time	2015/05/21 19:13:29	Operator(s)	BRIAN EPSTEIN







COLORADO
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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRACPWR.005.WAD
Start Date and Time	2015/05/21 19:13:29

Site Details

Site Name	LIL CIMRN AT CPW RD
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
11	12.50	0.6	High standard error: 0.083
17	15.50	0.6	High angle: -21
20	18.00	0.6	High angle: -20
23	21.00	0.6	High angle: -21

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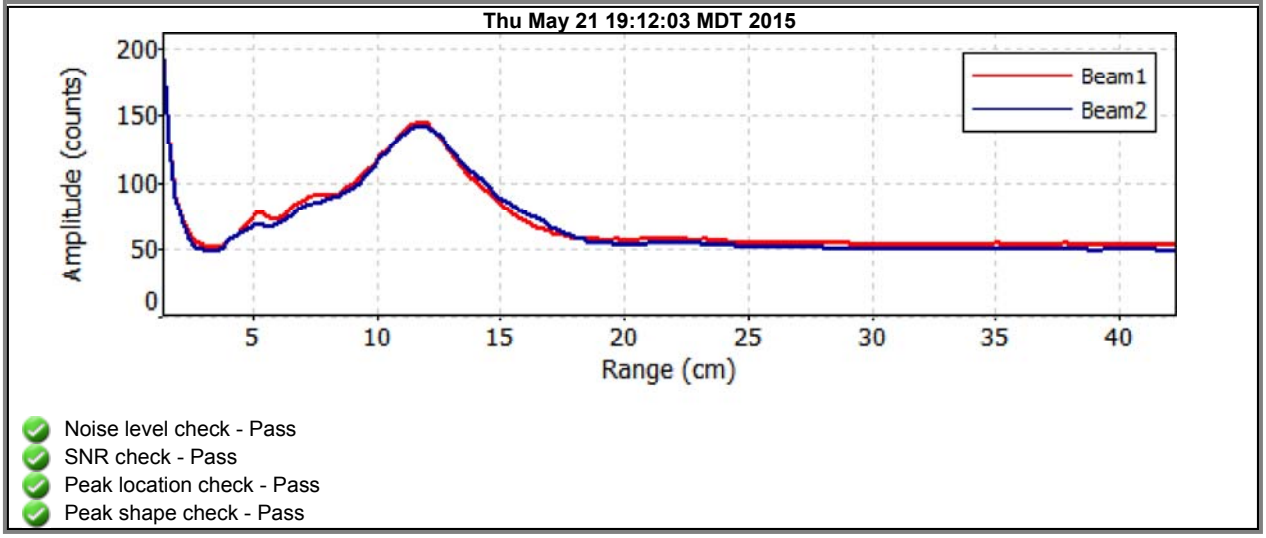
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRACPWR.005.WAD	Site Name	LIL CIMRN AT CPW RD
Start Date and Time	2015/05/21 19:13:29	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRASLTG.007.WAD
Start Date and Time	2015/03/19 11:00:46

Site Details

Site Name	LIL CIM AT SPG LN
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	1.9%
Velocity	0.5%	1.6%
Width	0.1%	0.1%
Method	1.4%	-
# Stations	1.5%	-
Overall	**2.4%**	**2.6%**

Summary

Averaging Int.	40	# Stations	34
Start Edge	REW	Total Width	22.600
Mean SNR	33.9 dB	Total Area	15.143
Mean Temp	38.10 °F	Mean Depth	0.670
Disch. Equation	Mid-Section	Mean Velocity	1.2999
		Total Discharge	**19.6841**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	11:00	3.30	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	11:00	4.00	0.6	0.470	0.6	0.188	0.3406	1.00	0.3406	0.282	0.0961	0.5
2	11:02	4.50	0.6	0.830	0.6	0.332	0.7785	1.00	0.7785	0.415	0.3231	1.6
3	11:03	5.00	0.6	0.700	0.6	0.280	1.2503	1.00	1.2503	0.350	0.4377	2.2
4	11:04	5.50	0.6	0.910	0.6	0.364	1.6355	1.00	1.6355	0.455	0.7442	3.8
5	11:06	6.00	0.6	0.930	0.6	0.372	1.3330	1.00	1.3330	0.465	0.6199	3.1
6	11:07	6.50	0.6	0.910	0.6	0.364	1.5958	1.00	1.5958	0.455	0.7262	3.7
7	11:08	7.00	0.6	1.020	0.6	0.408	1.8169	1.00	1.8169	0.510	0.9266	4.7
8	11:18	7.50	0.6	1.100	0.6	0.440	1.7904	1.00	1.7904	0.550	0.9848	5.0
9	11:19	8.00	0.6	1.000	0.6	0.400	1.7844	1.00	1.7844	0.500	0.8922	4.5
10	11:20	8.50	0.6	1.010	0.6	0.404	1.7697	1.00	1.7697	0.505	0.8936	4.5
11	11:22	9.00	0.6	1.100	0.6	0.440	1.6020	1.00	1.6020	0.550	0.8812	4.5
12	11:23	9.50	0.6	1.150	0.6	0.460	1.6411	1.00	1.6411	0.575	0.9436	4.8
13	11:24	10.00	0.6	1.080	0.6	0.432	1.6109	1.00	1.6109	0.540	0.8699	4.4
14	11:26	10.50	0.6	1.050	0.6	0.420	1.4636	1.00	1.4636	0.525	0.7683	3.9
15	11:27	11.00	0.6	0.820	0.6	0.328	1.5325	1.00	1.5325	0.410	0.6282	3.2
16	11:29	11.50	0.6	0.880	0.6	0.352	1.5863	1.00	1.5863	0.440	0.6979	3.5
17	11:30	12.00	0.6	0.900	0.6	0.360	1.3458	1.00	1.3458	0.450	0.6056	3.1
18	11:32	12.50	0.6	0.810	0.6	0.324	1.4032	1.00	1.4032	0.405	0.5683	2.9
19	11:34	13.00	0.6	0.710	0.6	0.284	1.3091	1.00	1.3091	0.355	0.4647	2.4
20	11:35	13.50	0.6	0.800	0.6	0.320	1.2516	1.00	1.2516	0.400	0.5006	2.5
21	11:36	14.00	0.6	0.700	0.6	0.280	1.3809	1.00	1.3809	0.350	0.4834	2.5
22	11:43	14.50	0.6	0.500	0.6	0.200	1.5112	1.00	1.5112	0.250	0.3778	1.9
23	11:45	15.00	0.6	0.680	0.6	0.272	1.3143	1.00	1.3143	0.340	0.4469	2.3
24	11:46	15.50	0.6	0.600	0.6	0.240	1.5436	1.00	1.5436	0.450	0.6947	3.5
25	11:48	16.50	0.6	0.490	0.6	0.196	1.3632	1.00	1.3632	0.490	0.6682	3.4
26	11:49	17.50	0.6	0.700	0.6	0.280	1.2887	1.00	1.2887	0.700	0.9023	4.6
27	11:50	18.50	0.6	0.700	0.6	0.280	1.1909	1.00	1.1909	0.700	0.8338	4.2
28	11:52	19.50	0.6	0.680	0.6	0.272	1.0866	1.00	1.0866	0.680	0.7390	3.8
29	11:53	20.50	0.6	0.500	0.6	0.200	1.0148	1.00	1.0148	0.500	0.5074	2.6
30	11:54	21.50	0.6	0.350	0.6	0.140	0.4895	1.00	0.4895	0.438	0.2142	1.1
31	11:56	23.00	0.6	0.400	0.6	0.160	0.1545	1.00	0.1545	0.600	0.0927	0.5
32	11:57	24.50	0.6	0.350	0.6	0.140	0.2976	1.00	0.2976	0.508	0.1510	0.8
33	11:57	25.90	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

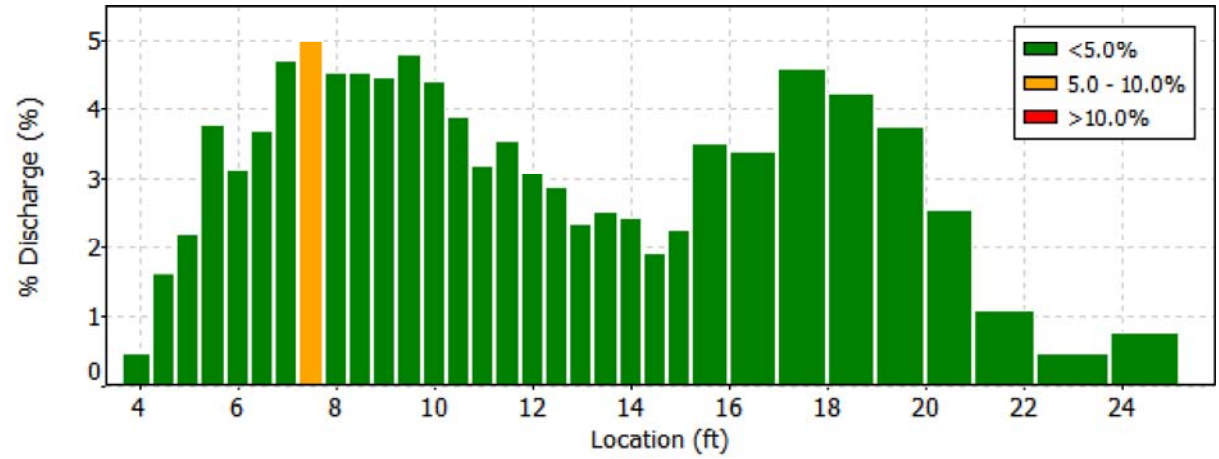
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

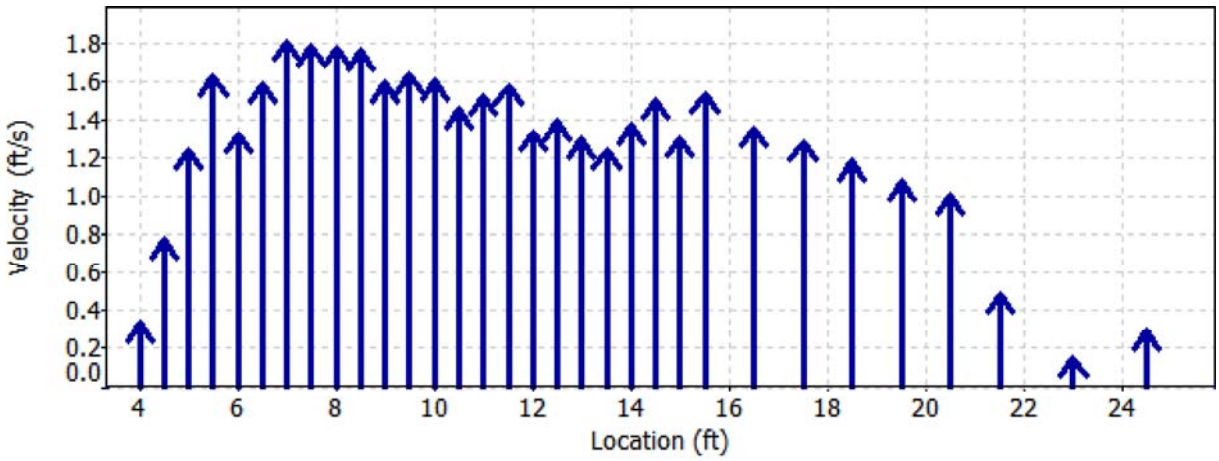
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

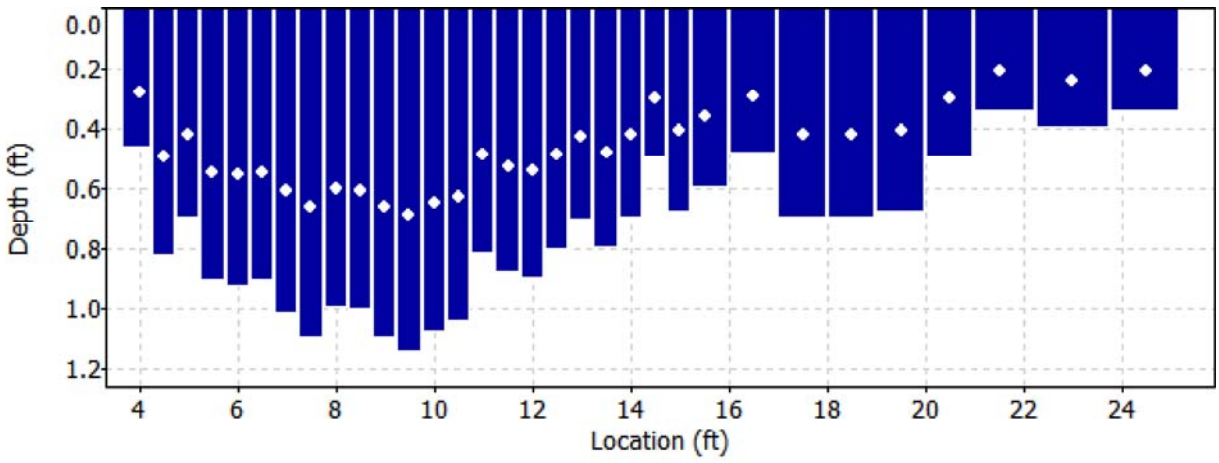
Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRASLTG.007.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2015/03/19 11:00:46	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRASLTG.007.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2015/03/19 11:00:46	Operator(s)	BRIAN EPSTEIN

Quality Control

No Quality Control warnings

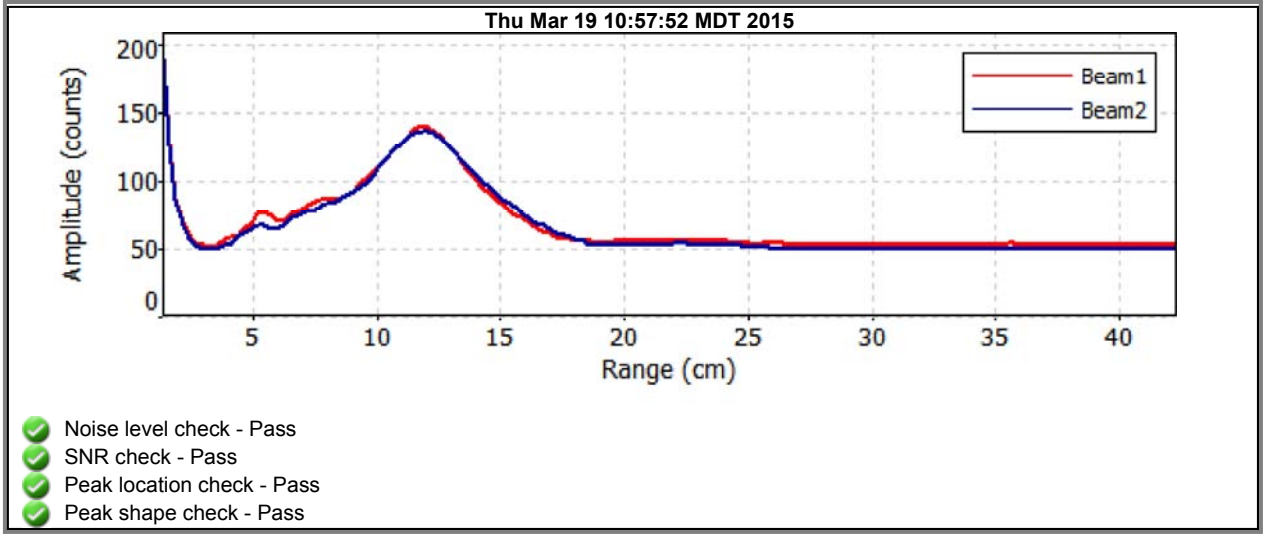
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRASLTG.007.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2015/03/19 11:00:46	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRACPWR.004.WAD
Start Date and Time	2015/03/19 14:26:24

Site Details

Site Name	LIL CIM RV AT CPW RD
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	3.0%
Velocity	0.8%	2.5%
Width	0.1%	0.1%
Method	1.6%	-
# Stations	2.0%	-
Overall	**2.8%**	**4.0%**

Summary

Averaging Int.	40	# Stations	26
Start Edge	REW	Total Width	20.400
Mean SNR	38.5 dB	Total Area	14.167
Mean Temp	41.98 °F	Mean Depth	0.694
Disch. Equation	Mid-Section	Mean Velocity	1.2857
		Total Discharge	**18.2143**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	14:26	5.80	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	14:26	8.00	0.6	0.400	0.6	0.160	0.5833	1.00	0.5833	0.840	0.4899	2.7
2	14:28	10.00	0.6	0.550	0.6	0.220	0.7700	1.00	0.7700	0.825	0.6351	3.5
3	14:29	11.00	0.6	0.700	0.6	0.280	0.8652	1.00	0.8652	0.700	0.6057	3.3
4	14:30	12.00	0.6	0.650	0.6	0.260	1.0571	1.00	1.0571	0.650	0.6870	3.8
5	14:32	13.00	0.6	0.890	0.6	0.356	0.9537	1.00	0.9537	0.890	0.8489	4.7
6	*14:33*	*14.00*	*0.6*	*0.980*	*0.6*	*0.392*	*1.1677*	*1.00*	*1.1677*	*0.735*	*0.8582*	*4.7*
7	*14:35*	*14.50*	*0.6*	*0.800*	*0.6*	*0.320*	*1.1575*	*1.00*	*1.1575*	*0.400*	*0.4629*	*2.5*
8	14:36	15.00	0.6	0.900	0.6	0.360	1.4042	1.00	1.4042	0.450	0.6318	3.5
9	14:37	15.50	0.6	1.010	0.6	0.404	1.6654	1.00	1.6654	0.505	0.8409	4.6
10	14:38	16.00	0.6	1.050	0.6	0.420	1.7986	1.00	1.7986	0.525	0.9441	5.2
11	*14:40*	*16.50*	*0.6*	*1.100*	*0.6*	*0.440*	*1.3570*	*1.00*	*1.3570*	*0.550*	*0.7464*	*4.1*
12	14:41	17.00	0.6	1.060	0.6	0.424	1.5892	1.00	1.5892	0.530	0.8423	4.6
13	14:42	17.50	0.6	1.100	0.6	0.440	1.8517	1.00	1.8517	0.550	1.0185	5.6
14	14:43	18.00	0.6	0.940	0.6	0.376	2.0531	1.00	2.0531	0.470	0.9649	5.3
15	14:45	18.50	0.6	1.180	0.6	0.472	1.9111	1.00	1.9111	0.590	1.1277	6.2
16	14:46	19.00	0.6	0.790	0.6	0.316	2.2464	1.00	2.2464	0.395	0.8874	4.9
17	14:47	19.50	0.6	1.000	0.6	0.400	1.9649	1.00	1.9649	0.500	0.9824	5.4
18	*14:48*	*20.00*	*0.6*	*1.060*	*0.6*	*0.424*	*1.3346*	*1.00*	*1.3346*	*0.530*	*0.7074*	*3.9*
19	14:50	20.50	0.6	0.780	0.6	0.312	1.6037	1.00	1.6037	0.390	0.6253	3.4
20	14:51	21.00	0.6	0.700	0.6	0.280	1.5531	1.00	1.5531	0.525	0.8156	4.5
21	14:53	22.00	0.6	0.860	0.6	0.344	1.1043	1.00	1.1043	0.860	0.9496	5.2
22	14:54	23.00	0.6	0.650	0.6	0.260	0.9475	1.00	0.9475	0.650	0.6158	3.4
23	14:55	24.00	0.6	0.700	0.6	0.280	0.8478	1.00	0.8478	0.700	0.5935	3.3
24	14:56	25.00	0.6	0.370	0.6	0.148	0.8173	1.00	0.8173	0.407	0.3327	1.8
25	14:56	26.20	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

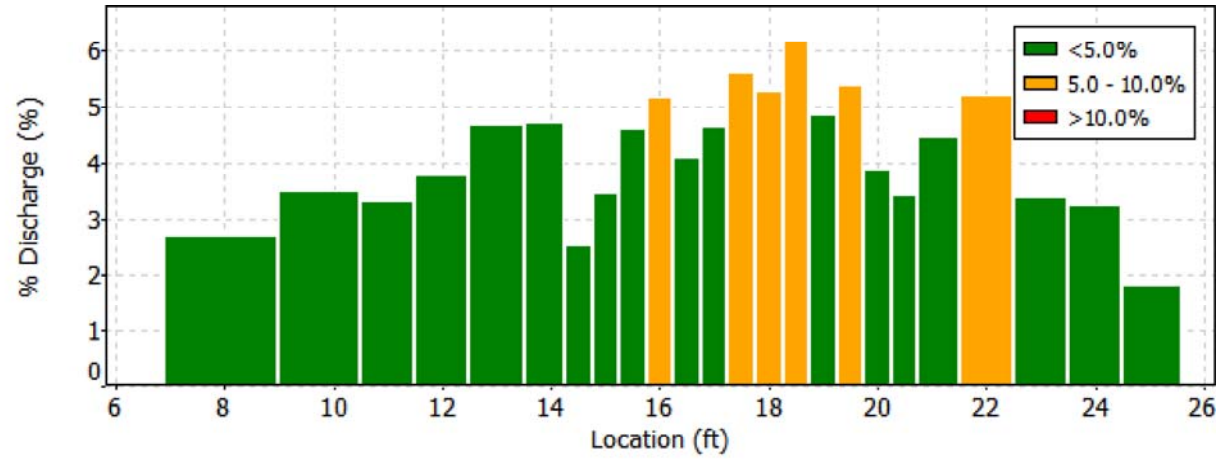
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

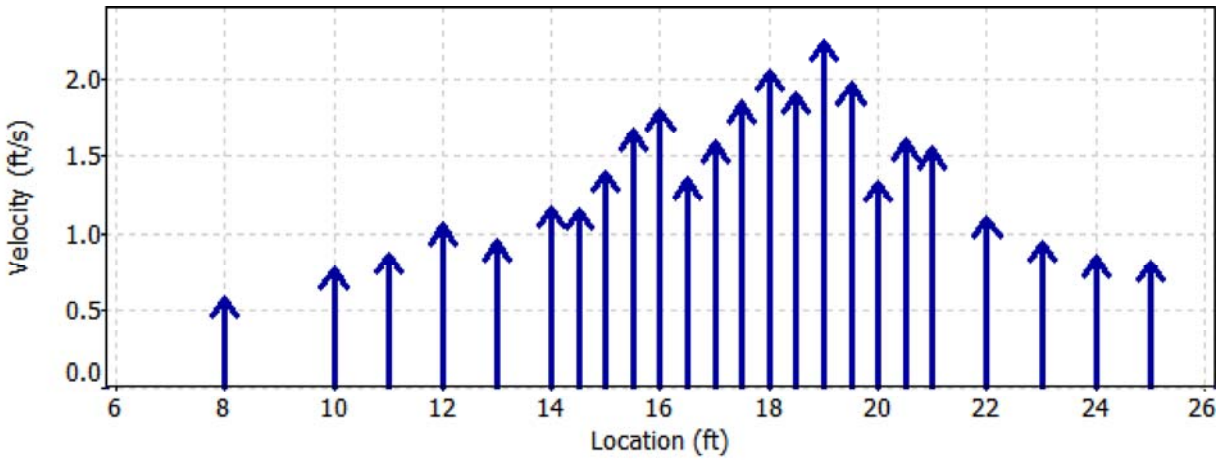
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

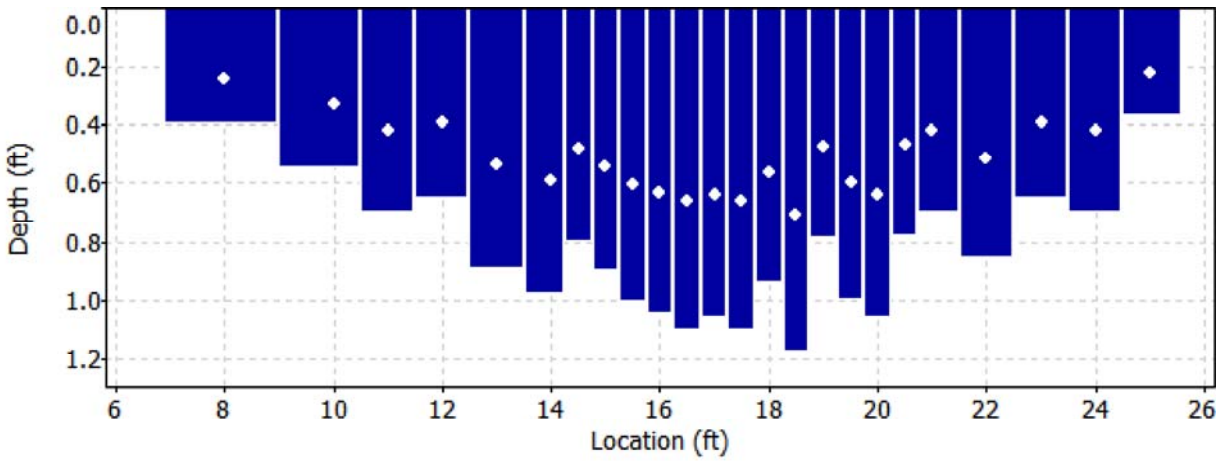
Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRACPWR.004.WAD	Site Name	LIL CIM RV AT CPW RD
Start Date and Time	2015/03/19 14:26:24	Operator(s)	BRIAN EPSTEIN







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Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information

File Name	LCRACPWR.004.WAD
Start Date and Time	2015/03/19 14:26:24

Site Details

Site Name	LIL CIM RV AT CPW RD
Operator(s)	BRIAN EPSTEIN

Quality Control

St	Loc	%Dep	Message
6	14.00	0.6	High angle: -20
7	14.50	0.6	High angle: -29
11	16.50	0.6	High standard error: 0.094
18	20.00	0.6	High standard error: 0.094

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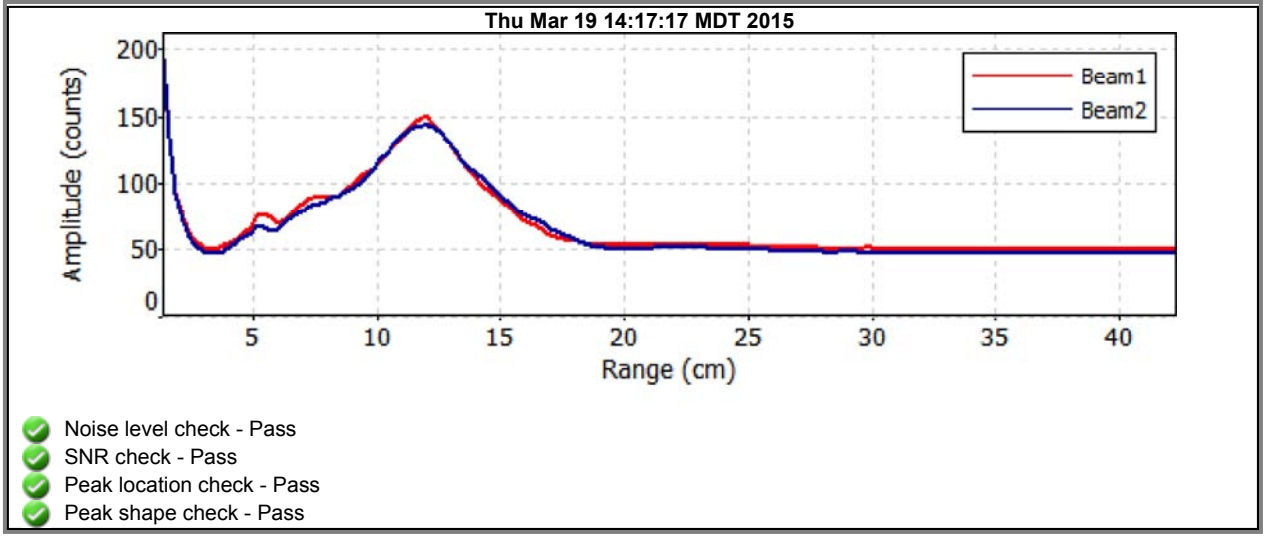
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Wed Jun 3 2015

File Information		Site Details	
File Name	LCRACPWR.004.WAD	Site Name	LIL CIM RV AT CPW RD
Start Date and Time	2015/03/19 14:26:24	Operator(s)	BRIAN EPSTEIN

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information

File Name	LCRASLTG.006.WAD
Start Date and Time	2014/11/11 14:43:31

Site Details

Site Name	LIL CIMRN A SPG LN
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	2.0%
Velocity	0.7%	2.4%
Width	0.1%	0.1%
Method	1.3%	-
# Stations	1.2%	-
Overall	**2.2%**	**3.3%**

Summary

Averaging Int.	40	# Stations	42
Start Edge	REW	Total Width	20.700
Mean SNR	23.7 dB	Total Area	11.415
Mean Temp	37.57 °F	Mean Depth	0.551
Disch. Equation	Mid-Section	Mean Velocity	0.9719
		Total Discharge	**11.0945**

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Department of Natural Resources

Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information	
File Name	LCRASLTG.006.WAD
Start Date and Time	2014/11/11 14:43:31

Site Details	
Site Name	LIL CIMRN A SPG LN
Operator(s)	BJE

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	14:43	2.30	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	14:43	2.80	0.6	0.570	0.6	0.228	0.4865	1.00	0.4865	0.285	0.1386	1.2
2	14:44	3.30	0.6	0.650	0.6	0.260	0.6929	1.00	0.6929	0.325	0.2252	2.0
3	14:45	3.80	0.6	0.840	0.6	0.336	1.0538	1.00	1.0538	0.420	0.4425	4.0
4	14:47	4.30	0.6	0.900	0.6	0.360	0.9715	1.00	0.9715	0.450	0.4371	3.9
5	14:53	4.80	0.6	0.930	0.6	0.372	1.2287	1.00	1.2287	0.465	0.5714	5.2
6	14:55	5.30	0.6	0.900	0.6	0.360	1.3701	1.00	1.3701	0.450	0.6165	5.6
7	14:56	5.80	0.6	0.800	0.6	0.320	1.2178	1.00	1.2178	0.400	0.4871	4.4
8	14:57	6.30	0.6	0.800	0.6	0.320	0.7546	1.00	0.7546	0.400	0.3018	2.7
9	14:59	6.80	0.6	0.800	0.6	0.320	1.0079	1.00	1.0079	0.400	0.4031	3.6
10	*15:03*	*7.30*	*0.6*	*0.670*	*0.6*	*0.268*	*0.9144*	*1.00*	*0.9144*	*0.335*	*0.3063*	*2.8*
11	15:04	7.80	0.6	0.900	0.6	0.360	1.2710	1.00	1.2710	0.450	0.5719	5.2
12	15:06	8.30	0.6	0.750	0.6	0.300	1.2343	1.00	1.2343	0.375	0.4628	4.2
13	15:08	8.80	0.6	0.580	0.6	0.232	0.9705	1.00	0.9705	0.290	0.2815	2.5
14	15:09	9.30	0.6	0.530	0.6	0.212	1.1414	1.00	1.1414	0.265	0.3024	2.7
15	15:10	9.80	0.6	0.600	0.6	0.240	1.2175	1.00	1.2175	0.300	0.3653	3.3
16	15:12	10.30	0.6	0.500	0.6	0.200	1.3839	1.00	1.3839	0.250	0.3460	3.1
17	15:14	10.80	0.6	0.510	0.6	0.204	1.4091	1.00	1.4091	0.255	0.3592	3.2
18	15:15	11.30	0.6	0.430	0.6	0.172	1.2789	1.00	1.2789	0.215	0.2750	2.5
19	15:17	11.80	0.6	0.580	0.6	0.232	1.3317	1.00	1.3317	0.290	0.3862	3.5
20	15:23	12.30	0.6	0.750	0.6	0.300	1.1371	1.00	1.1371	0.375	0.4264	3.8
21	15:24	12.80	0.6	0.580	0.6	0.232	0.8842	1.00	0.8842	0.290	0.2564	2.3
22	15:26	13.30	0.6	0.650	0.6	0.260	0.8330	1.00	0.8330	0.325	0.2707	2.4
23	15:27	13.80	0.6	0.330	0.6	0.132	0.7530	1.00	0.7530	0.165	0.1243	1.1
24	15:28	14.30	0.6	0.210	0.6	0.084	0.6345	1.00	0.6345	0.126	0.0799	0.7
25	15:30	15.00	0.6	0.490	0.6	0.196	0.2700	1.00	0.2700	0.294	0.0794	0.7
26	15:31	15.50	0.6	0.580	0.6	0.232	0.8537	1.00	0.8537	0.290	0.2476	2.2
27	*15:32*	*16.00*	*0.6*	*0.490*	*0.6*	*0.196*	*0.7818*	*1.00*	*0.7818*	*0.245*	*0.1916*	*1.7*
28	15:34	16.50	0.6	0.600	0.6	0.240	1.2326	1.00	1.2326	0.300	0.3698	3.3
29	15:36	17.00	0.6	0.600	0.6	0.240	1.0276	1.00	1.0276	0.300	0.3083	2.8
30	15:37	17.50	0.6	0.500	0.6	0.200	0.8002	1.00	0.8002	0.250	0.2000	1.8
31	15:38	18.00	0.6	0.500	0.6	0.200	0.9331	1.00	0.9331	0.250	0.2333	2.1
32	15:40	18.50	0.6	0.340	0.6	0.136	0.7333	1.00	0.7333	0.170	0.1246	1.1
33	15:41	19.00	0.6	0.410	0.6	0.164	0.5325	1.00	0.5325	0.205	0.1092	1.0
34	15:42	19.50	0.6	0.500	0.6	0.200	0.5541	1.00	0.5541	0.250	0.1385	1.2
35	15:43	20.00	0.6	0.500	0.6	0.200	0.6201	1.00	0.6201	0.250	0.1550	1.4
36	15:44	20.50	0.6	0.350	0.6	0.140	0.8668	1.00	0.8668	0.175	0.1517	1.4
37	15:45	21.00	0.6	0.210	0.6	0.084	0.7648	1.00	0.7648	0.105	0.0803	0.7
38	15:47	21.50	0.6	0.210	0.6	0.084	0.6450	1.00	0.6450	0.105	0.0677	0.6
39	15:48	22.00	0.6	0.250	0.6	0.100	0.5997	1.00	0.5997	0.125	0.0750	0.7
40	15:49	22.50	0.6	0.400	0.6	0.160	0.6237	1.00	0.6237	0.200	0.1247	1.1
41	15:49	23.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

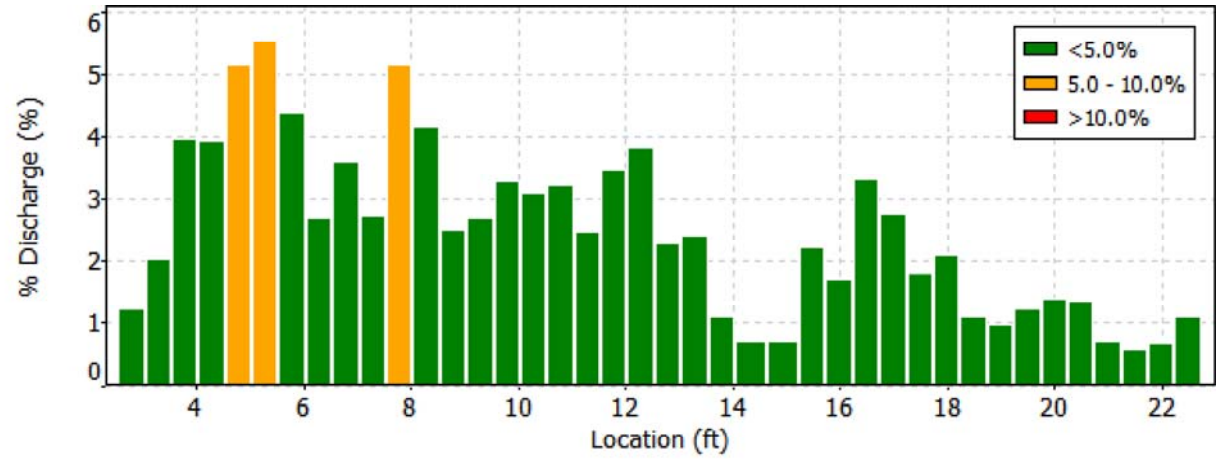
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

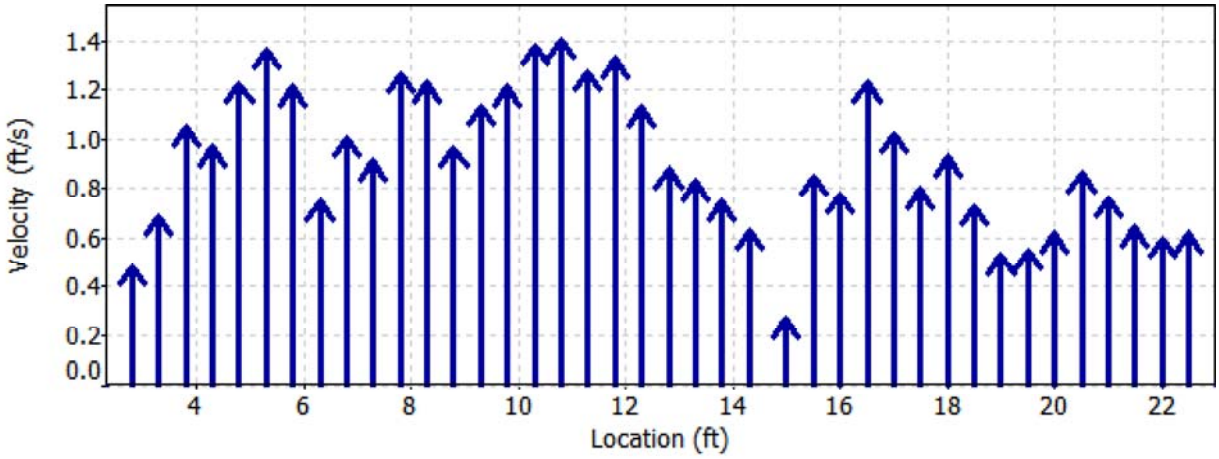
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

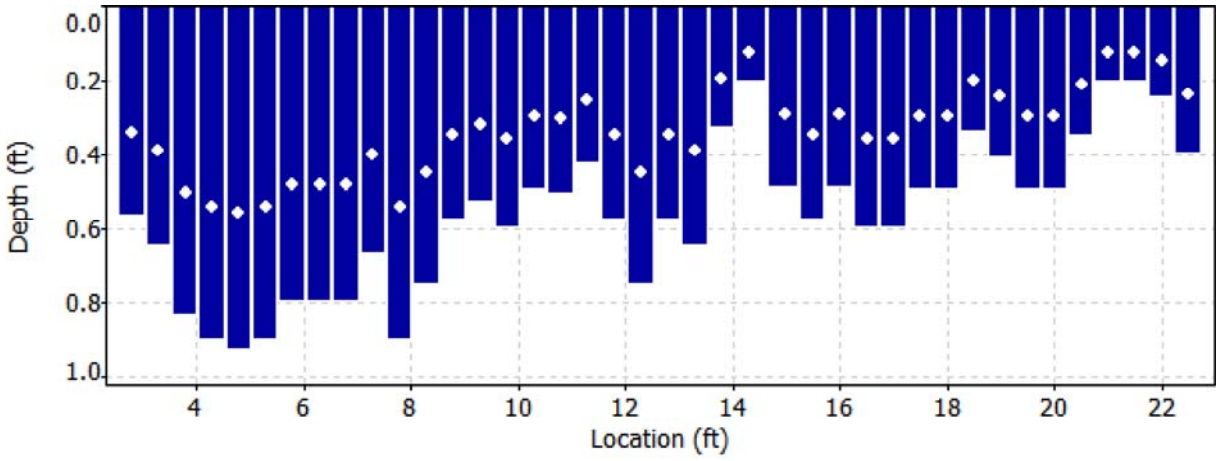
Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information		Site Details	
File Name	LCRASLTG.006.WAD	Site Name	LIL CIMRN A SPG LN
Start Date and Time	2014/11/11 14:43:31	Operator(s)	BJE







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Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information

File Name	LCRASLTG.006.WAD
Start Date and Time	2014/11/11 14:43:31

Site Details

Site Name	LIL CIMRN A SPG LN
Operator(s)	BJE

Quality Control

St	Loc	%Dep	Message
10	7.30	0.6	High standard error: 0.083
27	16.00	0.6	High SNR variation during measurement: 6.0,2.1

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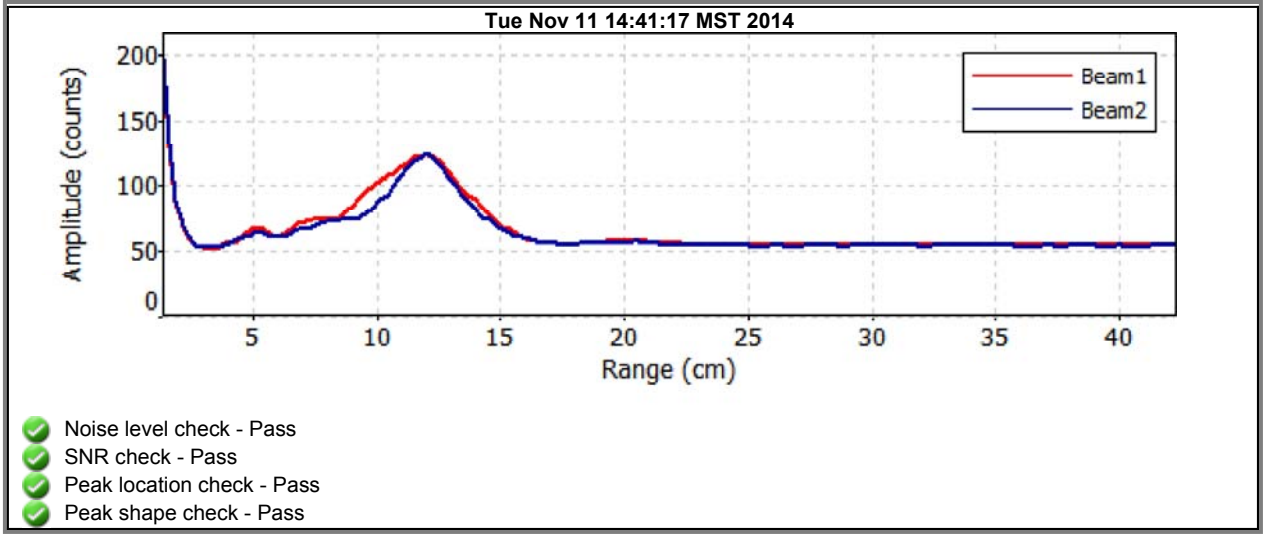
Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information		Site Details	
File Name	LCRASLTG.006.WAD	Site Name	LIL CIMRN A SPG LN
Start Date and Time	2014/11/11 14:43:31	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Colorado Water Conservation Board
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information

File Name	LCRACPWR.003.WAD
Start Date and Time	2014/11/11 17:11:37

Site Details

Site Name	LIL CIMRN A CPW RD
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	2.0%
Velocity	1.0%	2.4%
Width	0.1%	0.1%
Method	1.7%	-
# Stations	1.9%	-
Overall	**2.9%**	**3.3%**

Summary

Averaging Int.	40	# Stations	27
Start Edge	REW	Total Width	18.300
Mean SNR	34.2 dB	Total Area	14.118
Mean Temp	35.07 °F	Mean Depth	0.771
Disch. Equation	Mid-Section	Mean Velocity	0.9700
		Total Discharge	**13.6949**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	17:11	4.70	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	17:11	6.10	0.6	0.350	0.6	0.140	0.3527	1.00	0.3527	0.403	0.1420	1.0
2	17:12	7.00	0.6	0.500	0.6	0.200	0.3648	1.00	0.3648	0.475	0.1733	1.3
3	17:14	8.00	0.6	0.530	0.6	0.212	0.4813	1.00	0.4813	0.530	0.2550	1.9
4	17:15	9.00	0.6	0.620	0.6	0.248	0.6106	1.00	0.6106	0.620	0.3786	2.8
5	17:16	10.00	0.6	0.830	0.6	0.332	0.6230	1.00	0.6230	0.830	0.5171	3.8
6	17:17	11.00	0.6	0.950	0.6	0.380	0.9751	1.00	0.9751	0.950	0.9264	6.8
7	*17:18*	*12.00*	*0.6*	*1.000*	*0.6*	*0.400*	*0.9055*	*1.00*	*0.9055*	*0.750*	*0.6791*	*5.0*
8	17:19	12.50	0.6	1.000	0.6	0.400	0.7818	1.00	0.7818	0.500	0.3909	2.9
9	17:21	13.00	0.6	1.250	0.6	0.500	1.1188	1.00	1.1188	0.625	0.6992	5.1
10	17:22	13.50	0.6	1.200	0.6	0.480	1.4505	1.00	1.4505	0.600	0.8704	6.4
11	*17:23*	*14.00*	*0.6*	*1.000*	*0.6*	*0.400*	*1.2582*	*1.00*	*1.2582*	*0.500*	*0.6291*	*4.6*
12	17:24	14.50	0.6	1.180	0.6	0.472	1.3271	1.00	1.3271	0.590	0.7831	5.7
13	17:25	15.00	0.6	1.000	0.6	0.400	1.7352	1.00	1.7352	0.500	0.8676	6.3
14	17:27	15.50	0.6	1.000	0.6	0.400	1.5787	1.00	1.5787	0.500	0.7894	5.8
15	17:28	16.00	0.6	1.250	0.6	0.500	1.3625	1.00	1.3625	0.625	0.8516	6.2
16	17:29	16.50	0.6	1.500	0.6	0.600	1.3012	1.00	1.3012	0.750	0.9759	7.1
17	17:31	17.00	0.6	1.200	0.6	0.480	1.3983	1.00	1.3983	0.600	0.8391	6.1
18	17:32	17.50	0.6	1.120	0.6	0.448	1.2953	1.00	1.2953	0.560	0.7254	5.3
19	17:33	18.00	0.6	0.950	0.6	0.380	0.8780	1.00	0.8780	0.475	0.4171	3.0
20	17:34	18.50	0.6	0.950	0.6	0.380	0.8835	1.00	0.8835	0.475	0.4197	3.1
21	17:36	19.00	0.6	1.020	0.6	0.408	0.8474	1.00	0.8474	0.510	0.4322	3.2
22	17:38	19.50	0.6	0.830	0.6	0.332	0.6467	1.00	0.6467	0.415	0.2684	2.0
23	17:39	20.00	0.6	0.780	0.6	0.312	0.5203	1.00	0.5203	0.585	0.3043	2.2
24	17:41	21.00	0.6	0.550	0.6	0.220	0.4626	1.00	0.4626	0.550	0.2544	1.9
25	*17:43*	*22.00*	*0.6*	*0.200*	*0.6*	*0.080*	*-0.5276*	*-1.00*	*0.5276*	*0.200*	*0.1056*	*0.8*
26	17:43	23.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

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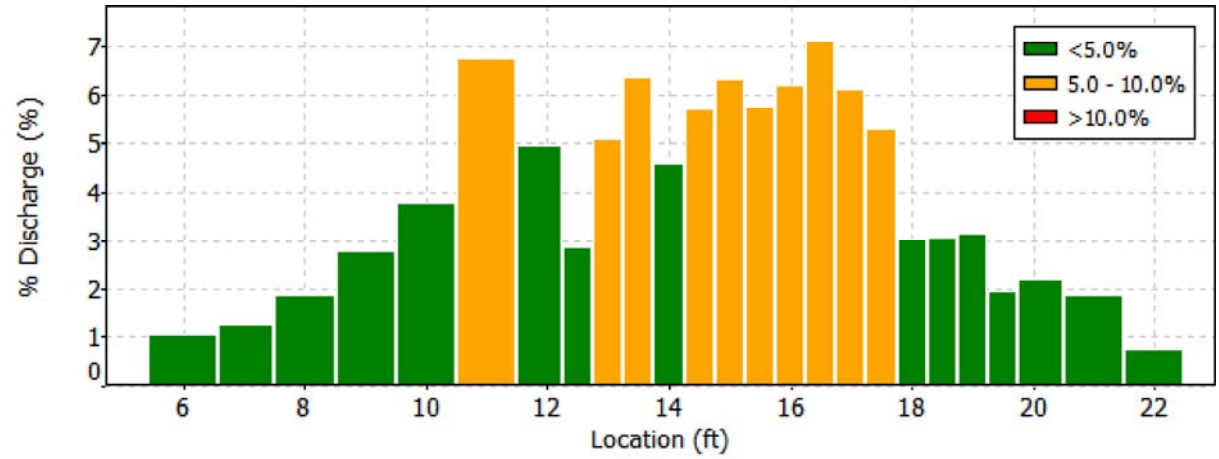
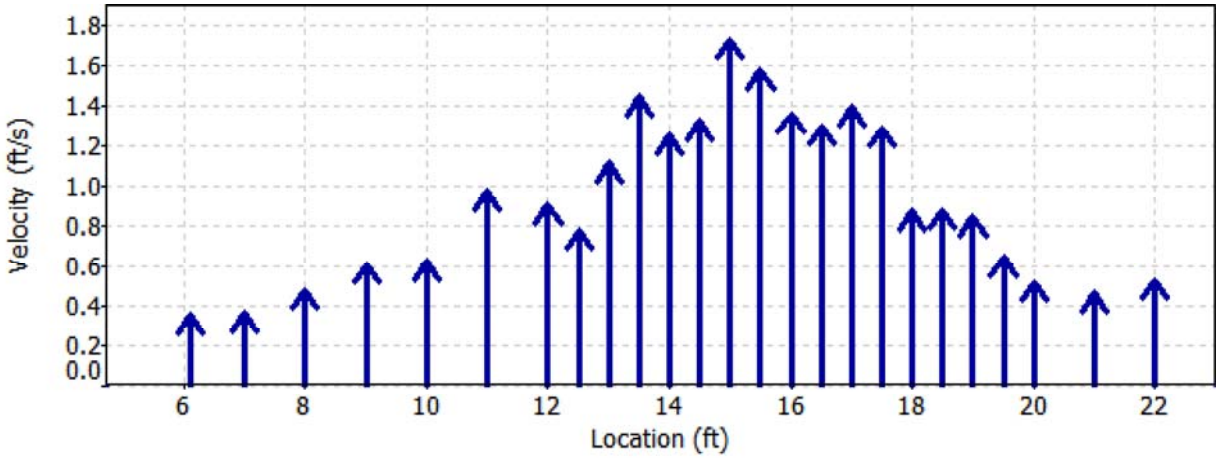
Department of Natural Resources

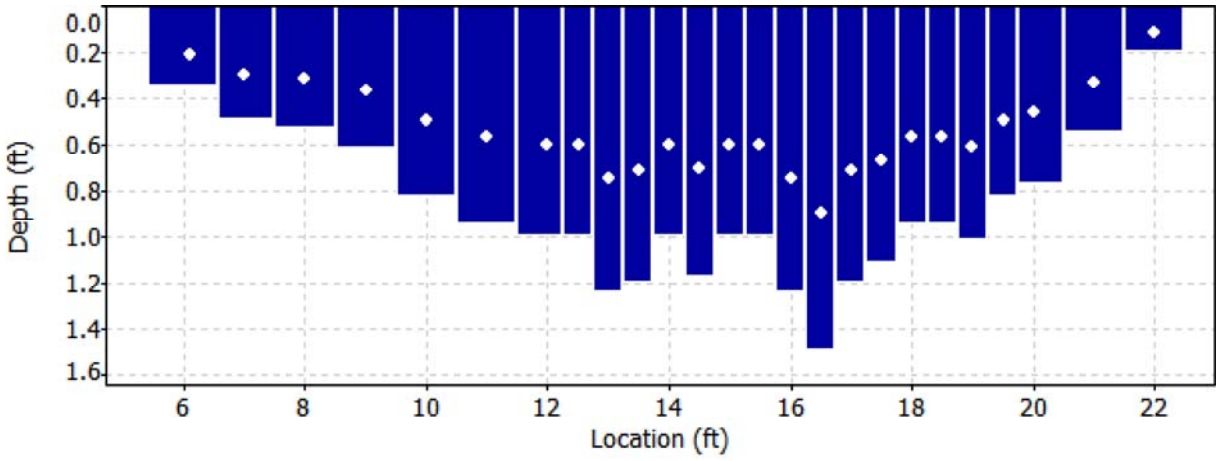
Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information		Site Details	
File Name	LCRACPWR.003.WAD	Site Name	LIL CIMRN A CPW RD
Start Date and Time	2014/11/11 17:11:37	Operator(s)	BJE







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Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information

File Name	LCRACPWR.003.WAD
Start Date and Time	2014/11/11 17:11:37

Site Details

Site Name	LIL CIMRN A CPW RD
Operator(s)	BJE

Quality Control

St	Loc	%Dep	Message
7	12.00	0.6	High standard error: 0.075
11	14.00	0.6	High standard error: 0.075
25	22.00	0.6	High angle: -159

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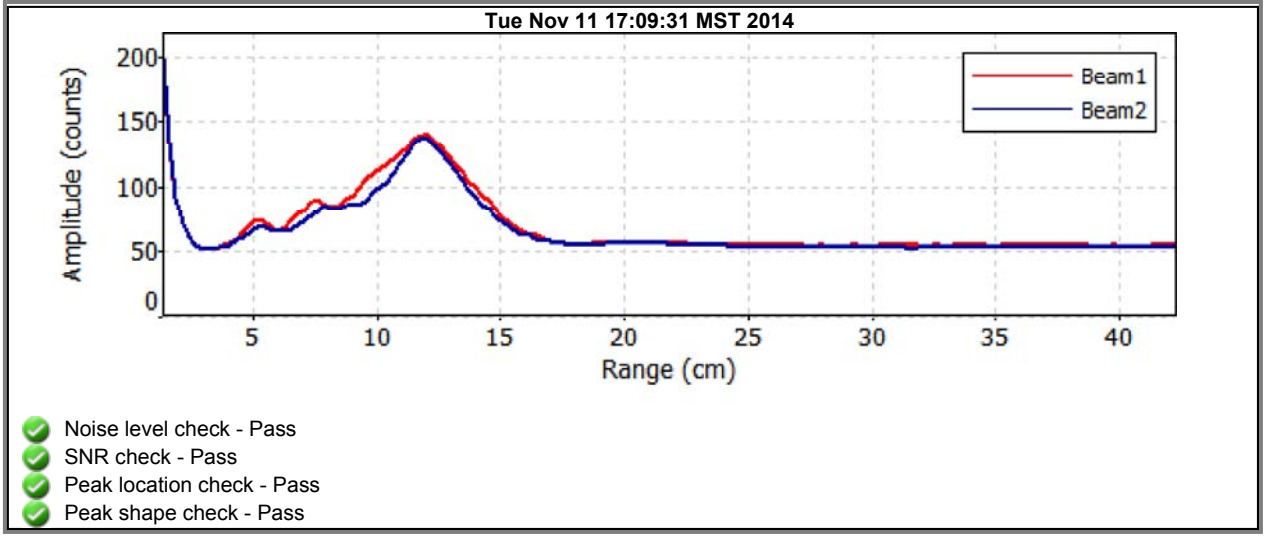
Department of Natural Resources

Discharge Measurement Summary

Date Generated: Mon Dec 15 2014

File Information		Site Details	
File Name	LCRACPWR.003.WAD	Site Name	LIL CIMRN A CPW RD
Start Date and Time	2014/11/11 17:11:37	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information	
File Name	LCRASLTG.005.WAD
Start Date and Time	2014/09/17 11:36:24

Site Details	
Site Name	LIL CIMARRON A SPG L
Operator(s)	BJE

System Information	
Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units	(English Units)
Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Summary			
Averaging Int.	40	# Stations	27
Start Edge	REW	Total Width	15.100
Mean SNR	25.9 dB	Total Area	9.828
Mean Temp	54.27 °F	Mean Depth	0.651
Disch. Equation	Mid-Section	Mean Velocity	0.6735
		Total Discharge	**6.6198**

Discharge Uncertainty		
Category	**ISO**	**Stats**
Accuracy	1.0%	1.0%
Depth	0.3%	2.1%
Velocity	0.7%	3.4%
Width	0.1%	0.1%
Method	1.6%	-
# Stations	1.9%	-
Overall	**2.8%**	**4.2%**

Measurement Results

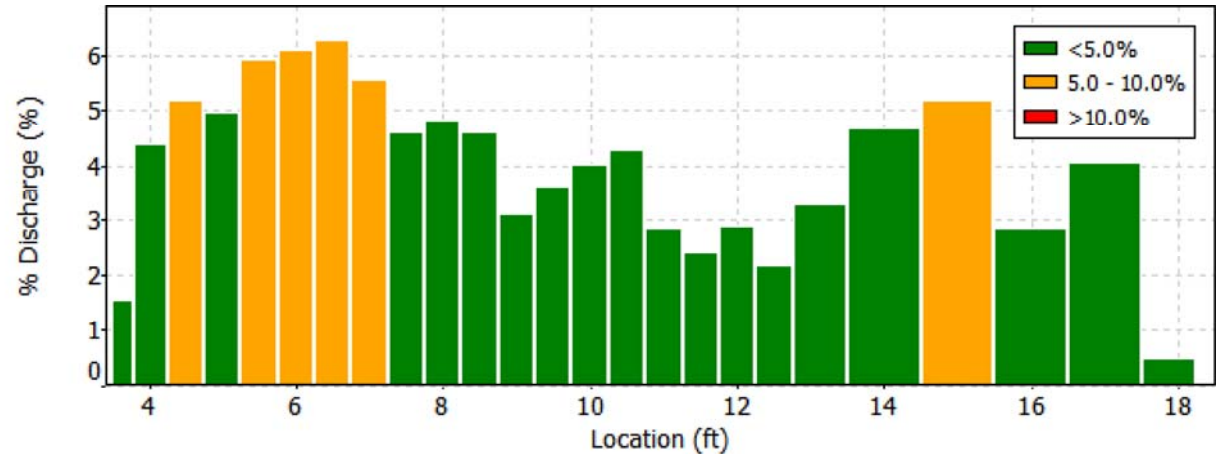
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	11:36	3.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	11:36	3.60	0.6	0.740	0.6	0.296	0.4669	1.00	0.4669	0.222	0.1037	1.6
2	11:37	4.00	0.6	0.820	0.6	0.328	0.7858	1.00	0.7858	0.369	0.2899	4.4
3	11:38	4.50	0.6	1.050	0.6	0.420	0.6555	1.00	0.6555	0.525	0.3441	5.2
4	11:40	5.00	0.6	0.900	0.6	0.360	0.7336	1.00	0.7336	0.450	0.3301	5.0
5	11:41	5.50	0.6	0.920	0.6	0.368	0.8507	1.00	0.8507	0.460	0.3913	5.9
6	11:42	6.00	0.6	1.000	0.6	0.400	0.8097	1.00	0.8097	0.500	0.4049	6.1
7	11:43	6.50	0.6	1.000	0.6	0.400	0.8333	1.00	0.8333	0.500	0.4167	6.3
8	11:47	7.00	0.6	0.810	0.6	0.324	0.9104	1.00	0.9104	0.405	0.3687	5.6
9	11:49	7.50	0.6	0.800	0.6	0.320	0.7612	1.00	0.7612	0.400	0.3044	4.6
10	11:52	8.00	0.6	0.780	0.6	0.312	0.8219	1.00	0.8219	0.390	0.3205	4.8
11	11:53	8.50	0.6	0.770	0.6	0.308	0.7956	1.00	0.7956	0.385	0.3063	4.6
12	11:54	9.00	0.6	0.780	0.6	0.312	0.5262	1.00	0.5262	0.390	0.2052	3.1
13	11:55	9.50	0.6	0.950	0.6	0.380	0.5033	1.00	0.5033	0.475	0.2391	3.6
14	11:57	10.00	0.6	0.680	0.6	0.272	0.7831	1.00	0.7831	0.340	0.2663	4.0
15	11:58	10.50	0.6	0.650	0.6	0.260	0.8691	1.00	0.8691	0.325	0.2824	4.3
16	12:01	11.00	0.6	0.720	0.6	0.288	0.5262	1.00	0.5262	0.360	0.1895	2.9
17	12:02	11.50	0.6	0.730	0.6	0.292	0.4409	1.00	0.4409	0.365	0.1609	2.4
18	12:03	12.00	0.6	0.620	0.6	0.248	0.6158	1.00	0.6158	0.310	0.1909	2.9
19	12:05	12.50	0.6	0.500	0.6	0.200	0.5732	1.00	0.5732	0.250	0.1433	2.2
20	12:06	13.00	0.6	0.490	0.6	0.196	0.5932	1.00	0.5932	0.368	0.2181	3.3
21	12:08	14.00	0.6	0.580	0.6	0.232	0.5364	1.00	0.5364	0.580	0.3112	4.7
22	12:09	15.00	0.6	0.510	0.6	0.204	0.6722	1.00	0.6722	0.510	0.3427	5.2
23	12:10	16.00	0.6	0.400	0.6	0.160	0.4744	1.00	0.4744	0.400	0.1897	2.9
24	12:12	17.00	0.6	0.400	0.6	0.160	0.6696	1.00	0.6696	0.400	0.2678	4.0
25	*12:13*	*18.00*	*0.6*	*0.200*	*0.6*	*0.080*	*0.2139*	*1.00*	*0.2139*	*0.150*	*0.0321*	*0.5*
26	12:13	18.50	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

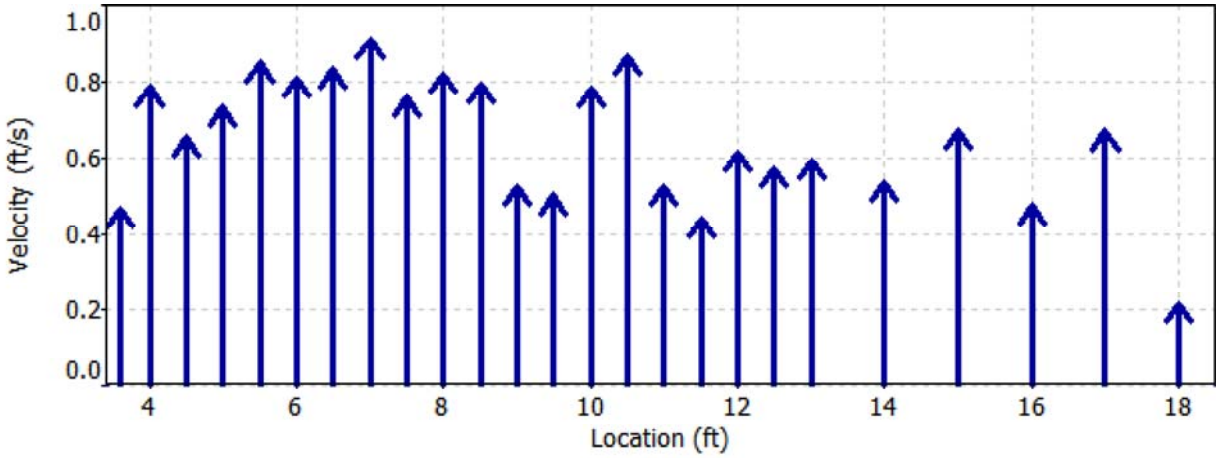
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

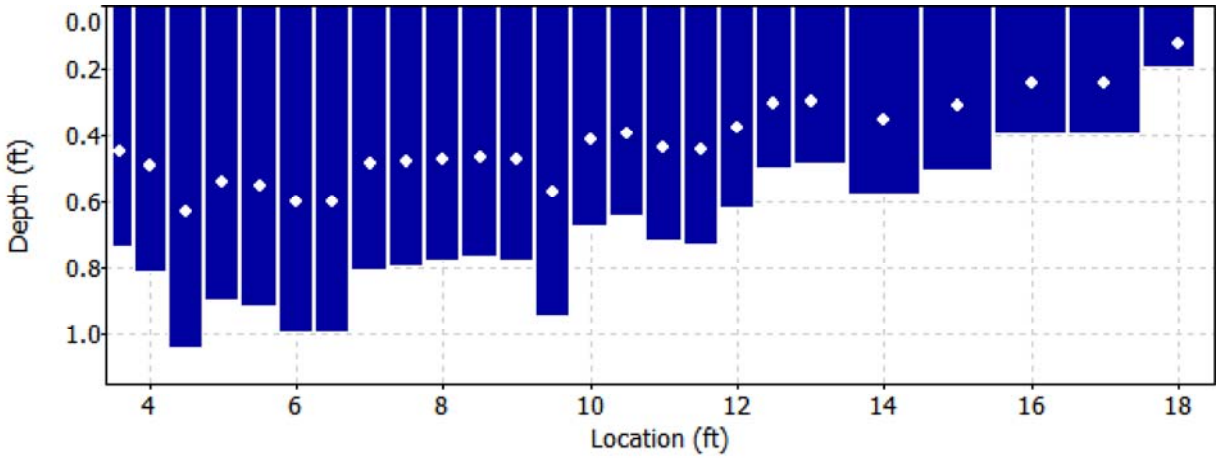
Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.005.WAD	Site Name	LIL CIMARRON A SPG L
Start Date and Time	2014/09/17 11:36:24	Operator(s)	BJE







Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.005.WAD	Site Name	LIL CIMARRON A SPG L
Start Date and Time	2014/09/17 11:36:24	Operator(s)	BJE

Quality Control

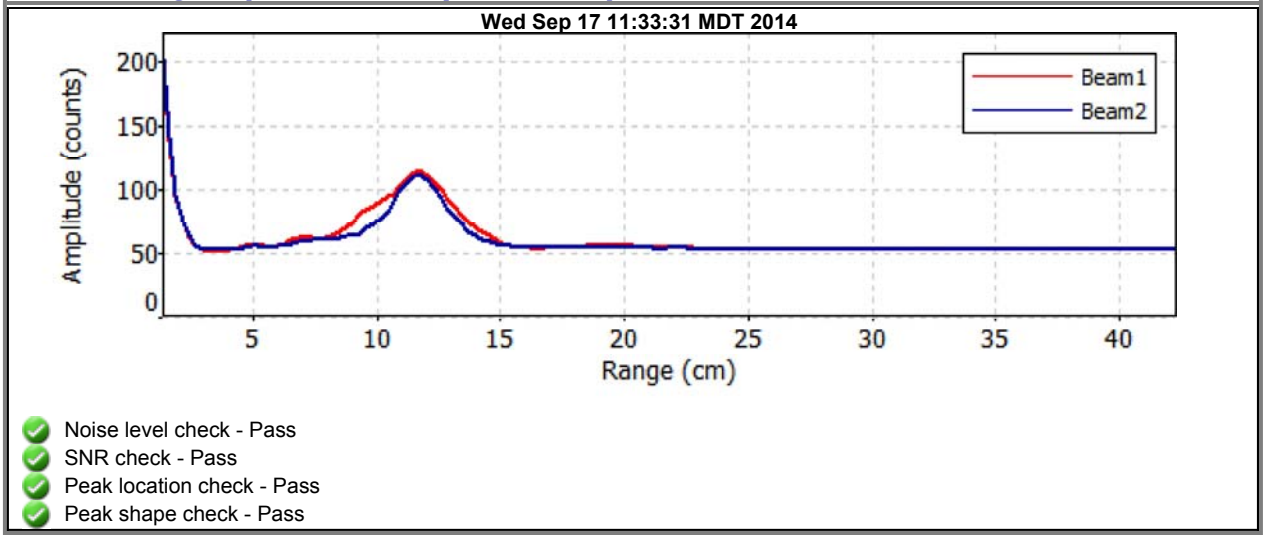
St	Loc	%Dep	Message
25	18.00	0.6	High angle: -32

Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.005.WAD	Site Name	LIL CIMARRON A SPG L
Start Date and Time	2014/09/17 11:36:24	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information

File Name	LCRACPWR.002.WAD
Start Date and Time	2014/09/17 13:11:26

Site Details

Site Name	LIL CIMRN AT CPW RD
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	2.8%
Velocity	1.0%	1.9%
Width	0.1%	0.1%
Method	1.8%	-
# Stations	1.9%	-
Overall	**3.0%**	**3.5%**

Summary

Averaging Int.	40	# Stations	27
Start Edge	REW	Total Width	18.100
Mean SNR	32.9 dB	Total Area	14.511
Mean Temp	55.28 °F	Mean Depth	0.802
Disch. Equation	Mid-Section	Mean Velocity	1.1099
		Total Discharge	**16.1050**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	13:11	6.90	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	13:11	8.00	0.6	0.310	0.6	0.124	0.3140	1.00	0.3140	0.326	0.1022	0.6
2	*13:12*	*9.00*	*0.6*	*0.680*	*0.6*	*0.272*	*0.3176*	*1.00*	*0.3176*	*0.680*	*0.2160*	*1.3*
3	*13:14*	*10.00*	*0.6*	*0.620*	*0.6*	*0.248*	*0.3750*	*1.00*	*0.3750*	*0.620*	*0.2325*	*1.4*
4	13:15	11.00	0.6	0.440	0.6	0.176	0.4642	1.00	0.4642	0.440	0.2042	1.3
5	13:16	12.00	0.6	0.800	0.6	0.320	0.6522	1.00	0.6522	0.600	0.3913	2.4
6	13:17	12.50	0.6	0.990	0.6	0.396	0.8241	1.00	0.8241	0.495	0.4080	2.5
7	13:18	13.00	0.6	0.870	0.6	0.348	0.9209	1.00	0.9209	0.435	0.4006	2.5
8	13:19	13.50	0.6	1.000	0.6	0.400	1.0594	1.00	1.0594	0.500	0.5297	3.3
9	13:21	14.00	0.6	0.930	0.6	0.372	1.2001	1.00	1.2001	0.465	0.5581	3.5
10	13:22	14.50	0.6	0.630	0.6	0.252	1.5230	1.00	1.5230	0.315	0.4797	3.0
11	13:24	15.00	0.6	0.900	0.6	0.360	1.7251	1.00	1.7251	0.450	0.7762	4.8
12	13:25	15.50	0.6	1.200	0.6	0.480	1.8556	1.00	1.8556	0.600	1.1135	6.9
13	13:26	16.00	0.6	1.110	0.6	0.444	2.0538	1.00	2.0538	0.555	1.1398	7.1
14	*13:27*	*16.50*	*0.6*	*1.420*	*0.6*	*0.568*	*1.7694*	*1.00*	*1.7694*	*0.710*	*1.2562*	*7.8*
15	*13:29*	*17.00*	*0.6*	*1.250*	*0.6*	*0.500*	*1.7195*	*1.00*	*1.7195*	*0.625*	*1.0747*	*6.7*
16	13:30	17.50	0.6	1.500	0.6	0.600	1.6316	1.00	1.6316	0.750	1.2237	7.6
17	*13:31*	*18.00*	*0.6*	*1.550*	*0.6*	*0.620*	*1.4902*	*1.00*	*1.4902*	*0.775*	*1.1548*	*7.2*
18	13:32	18.50	0.6	1.300	0.6	0.520	1.8363	1.00	1.8363	0.650	1.1935	7.4
19	13:33	19.00	0.6	1.320	0.6	0.528	1.4721	1.00	1.4721	0.660	0.9715	6.0
20	13:34	19.50	0.6	1.400	0.6	0.560	1.4577	1.00	1.4577	0.700	1.0203	6.3
21	*13:36*	*20.00*	*0.6*	*0.940*	*0.6*	*0.376*	*1.2044*	*1.00*	*1.2044*	*0.470*	*0.5660*	*3.5*
22	13:37	20.50	0.6	0.950	0.6	0.380	0.8369	1.00	0.8369	0.713	0.5964	3.7
23	*13:38*	*21.50*	*0.6*	*0.900*	*0.6*	*0.360*	*0.4111*	*1.00*	*0.4111*	*0.900*	*0.3700*	*2.3*
24	13:39	22.50	0.6	0.640	0.6	0.256	0.1555	1.00	0.1555	0.640	0.0995	0.6
25	*13:41*	*23.50*	*0.6*	*0.350*	*0.6*	*0.140*	*0.0607*	*1.00*	*0.0607*	*0.438*	*0.0266*	*0.2*
26	13:41	25.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

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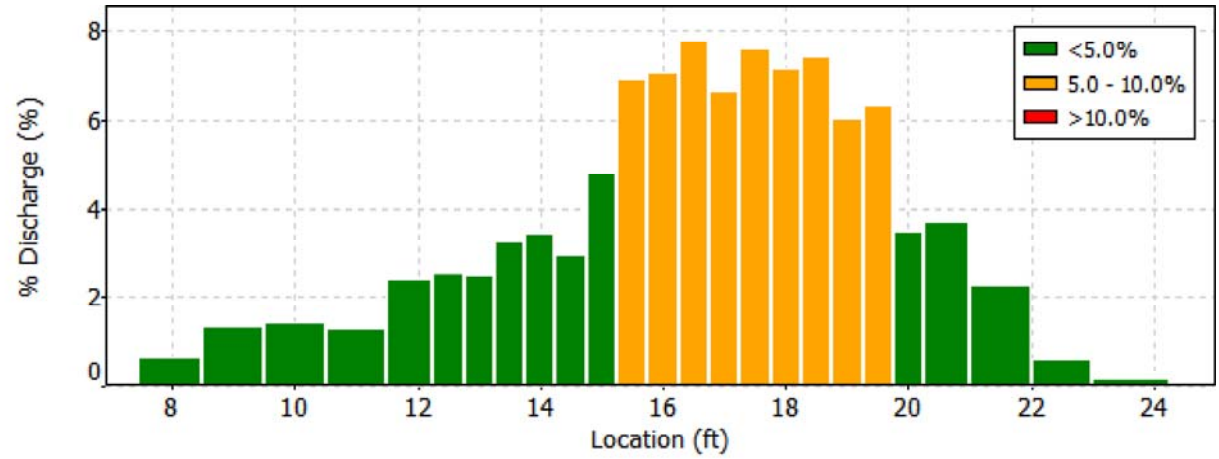
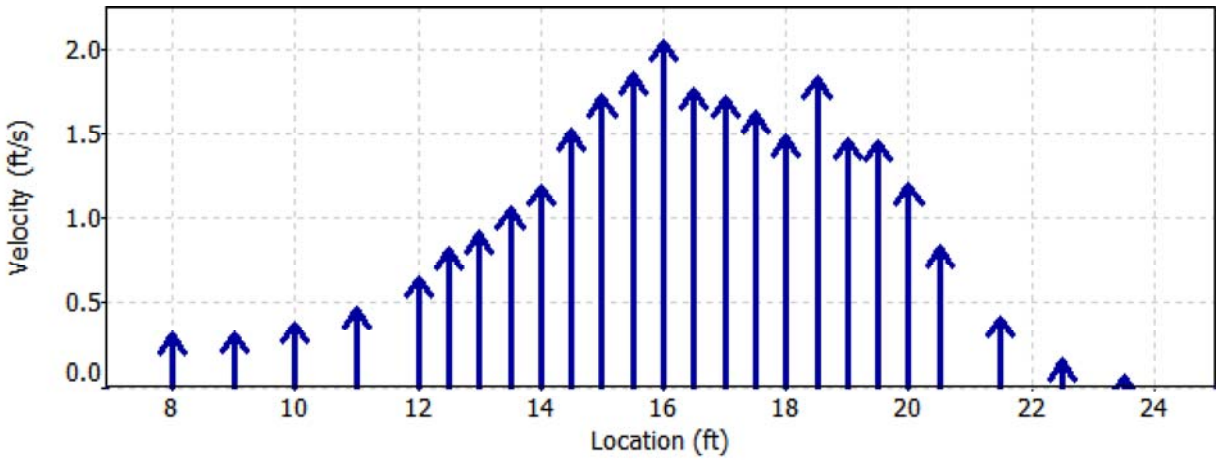
Department of Natural Resources

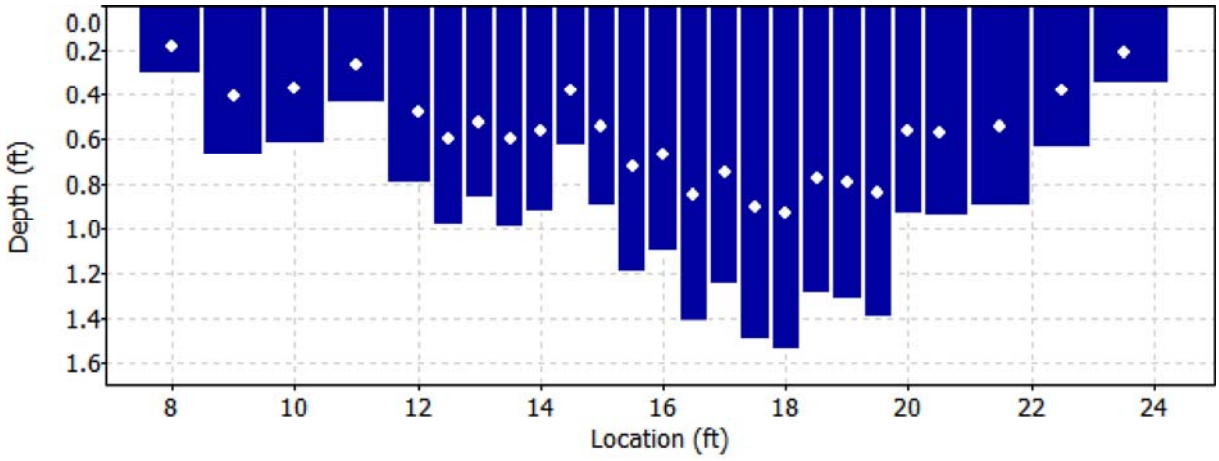
Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information		Site Details	
File Name	LCRACPWR.002.WAD	Site Name	LIL CIMRN AT CPW RD
Start Date and Time	2014/09/17 13:11:26	Operator(s)	BJE







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Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information

File Name	LCRACPWR.002.WAD
Start Date and Time	2014/09/17 13:11:26

Site Details

Site Name	LIL CIMRN AT CPW RD
Operator(s)	BJE

Quality Control

St	Loc	%Dep	Message
2	9.00	0.6	High angle: -21
3	10.00	0.6	High angle: -21
14	16.50	0.6	High standard error: 0.091
15	17.00	0.6	High standard error: 0.087
17	18.00	0.6	High standard error: 0.086
21	20.00	0.6	High angle: 23
23	21.50	0.6	High angle: 27
25	23.50	0.6	High angle: 37

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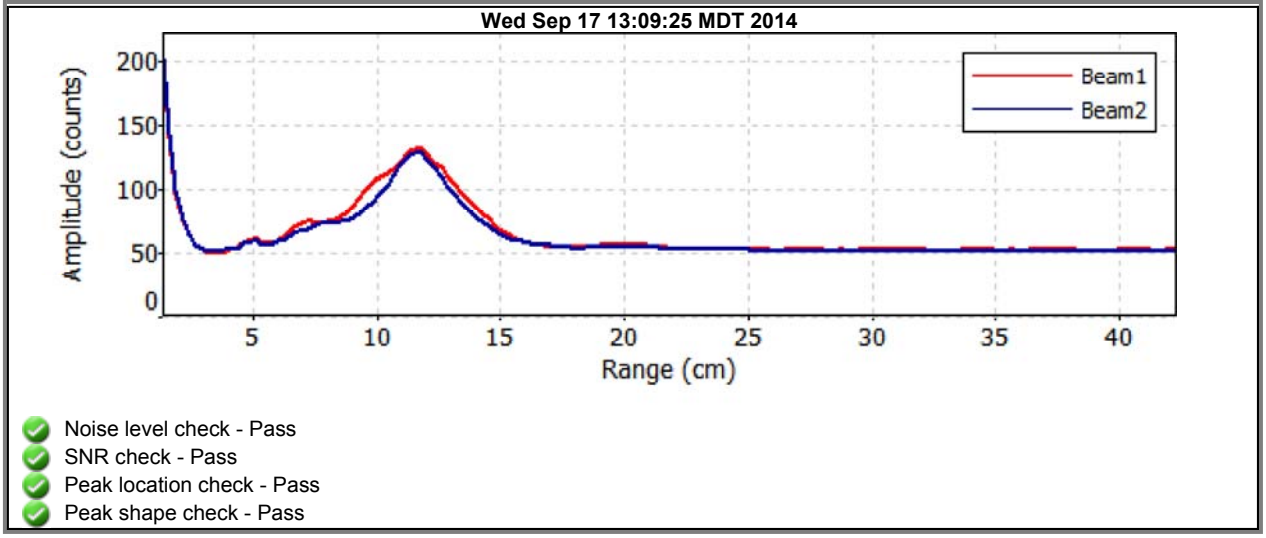
Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information		Site Details	
File Name	LCRACPWR.002.WAD	Site Name	LIL CIMRN AT CPW RD
Start Date and Time	2014/09/17 13:11:26	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

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Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information

File Name	LCRAWLRD.001.WAD
Start Date and Time	2014/07/24 20:10:45

Site Details

Site Name	LIL CMRN AT WLD L RD
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.4%	5.6%
Velocity	1.3%	5.3%
Width	0.1%	0.1%
Method	2.2%	-
# Stations	2.8%	-
Overall	**3.9%**	**7.7%**

Summary

Averaging Int.	40	# Stations	18
Start Edge	REW	Total Width	16.700
Mean SNR	24.7 dB	Total Area	7.682
Mean Temp	59.00 °F	Mean Depth	0.460
Disch. Equation	Mid-Section	Mean Velocity	0.4679
		Total Discharge	**3.5943**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	20:10	7.50	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	20:10	8.50	0.6	0.230	0.6	0.092	0.2841	1.00	0.2841	0.230	0.0653	1.8
2	20:12	9.50	0.6	0.260	0.6	0.104	0.2572	1.00	0.2572	0.273	0.0702	2.0
3	20:14	10.60	0.6	0.340	0.6	0.136	0.5302	1.00	0.5302	0.374	0.1982	5.5
4	20:15	11.70	0.6	0.600	0.6	0.240	0.5384	1.00	0.5384	0.630	0.3392	9.4
5	*20:18*	*12.70*	*0.6*	*0.540*	*0.6*	*0.216*	*0.3264*	*1.00*	*0.3264*	*0.540*	*0.1763*	*4.9*
6	*20:19*	*13.70*	*0.6*	*0.490*	*0.6*	*0.196*	*0.4298*	*1.00*	*0.4298*	*0.490*	*0.2107*	*5.9*
7	20:20	14.70	0.6	0.700	0.6	0.280	0.6401	1.00	0.6401	0.700	0.4481	12.5
8	*20:22*	*15.70*	*0.6*	*0.780*	*0.6*	*0.312*	*0.5039*	*1.00*	*0.5039*	*0.780*	*0.3930*	*10.9*
9	20:23	16.70	0.6	0.700	0.6	0.280	0.7005	1.00	0.7005	0.700	0.4904	13.6
10	20:24	17.70	0.6	0.510	0.6	0.204	0.6375	1.00	0.6375	0.510	0.3250	9.0
11	20:26	18.70	0.6	0.580	0.6	0.232	0.4984	1.00	0.4984	0.580	0.2891	8.0
12	20:27	19.70	0.6	0.230	0.6	0.092	0.5384	1.00	0.5384	0.230	0.1238	3.4
13	20:28	20.70	0.6	0.260	0.6	0.104	0.4081	1.00	0.4081	0.260	0.1061	3.0
14	20:29	21.70	0.6	0.570	0.6	0.228	0.3104	1.00	0.3104	0.570	0.1769	4.9
15	20:31	22.70	0.6	0.440	0.6	0.176	0.3074	1.00	0.3074	0.440	0.1353	3.8
16	20:32	23.70	0.6	0.500	0.6	0.200	0.1247	1.00	0.1247	0.375	0.0468	1.3
17	20:32	24.20	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

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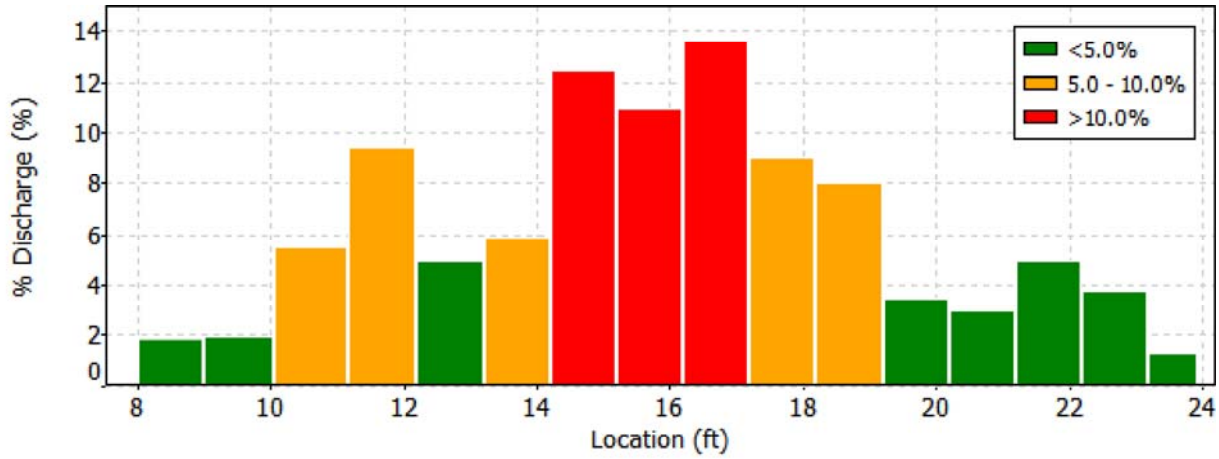
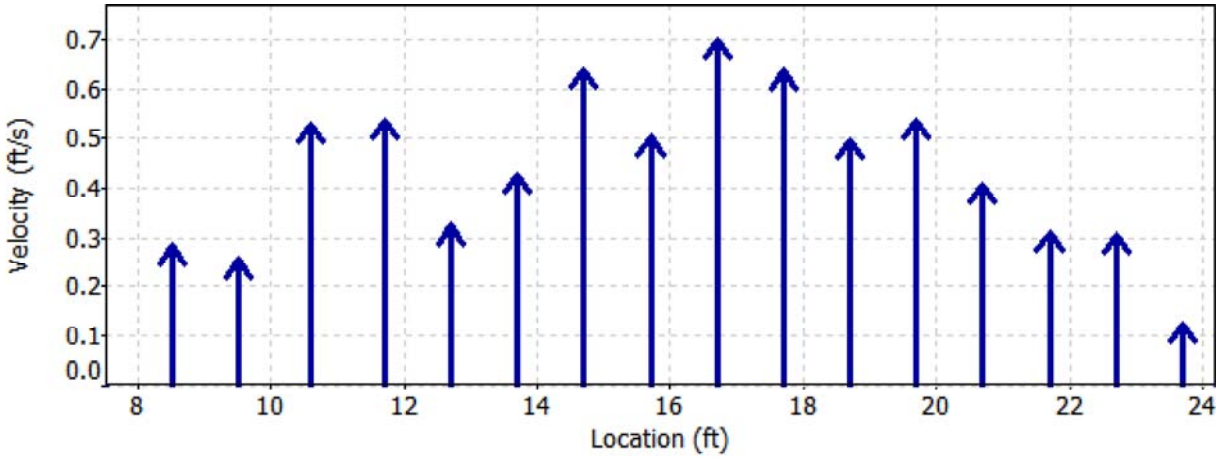
Department of Natural Resources

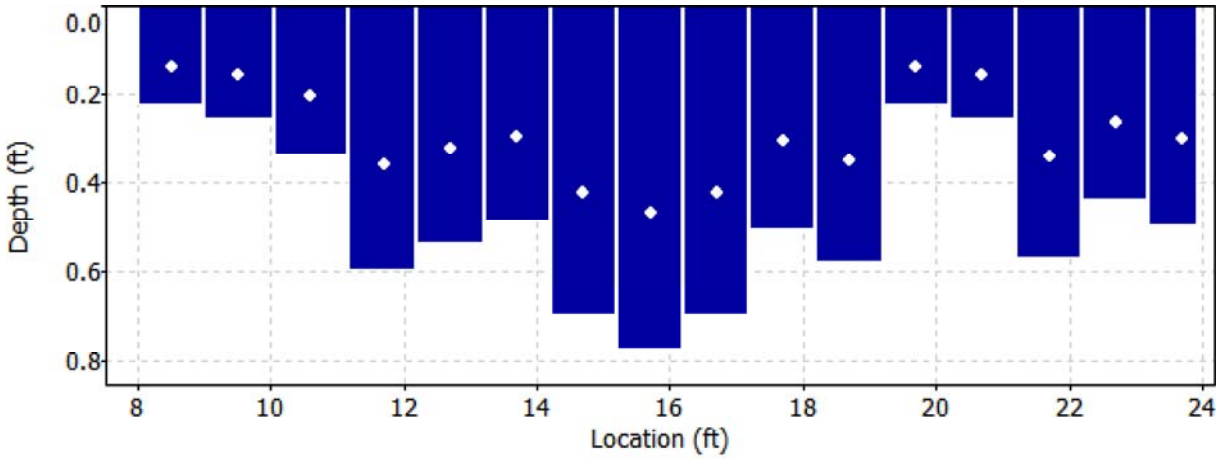
Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information		Site Details	
File Name	LCRAWLRD.001.WAD	Site Name	LIL CMRN AT WLD L RD
Start Date and Time	2014/07/24 20:10:45	Operator(s)	BJE







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Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information

File Name	LCRAWLRD.001.WAD
Start Date and Time	2014/07/24 20:10:45

Site Details

Site Name	LIL CMRN AT WLD L RD
Operator(s)	BJE

Quality Control

St	Loc	%Dep	Message
5	12.70	0.6	High angle: -27
6	13.70	0.6	High angle: -24
		0.6	High standard error: 0.032
8	15.70	0.6	High standard error: 0.036

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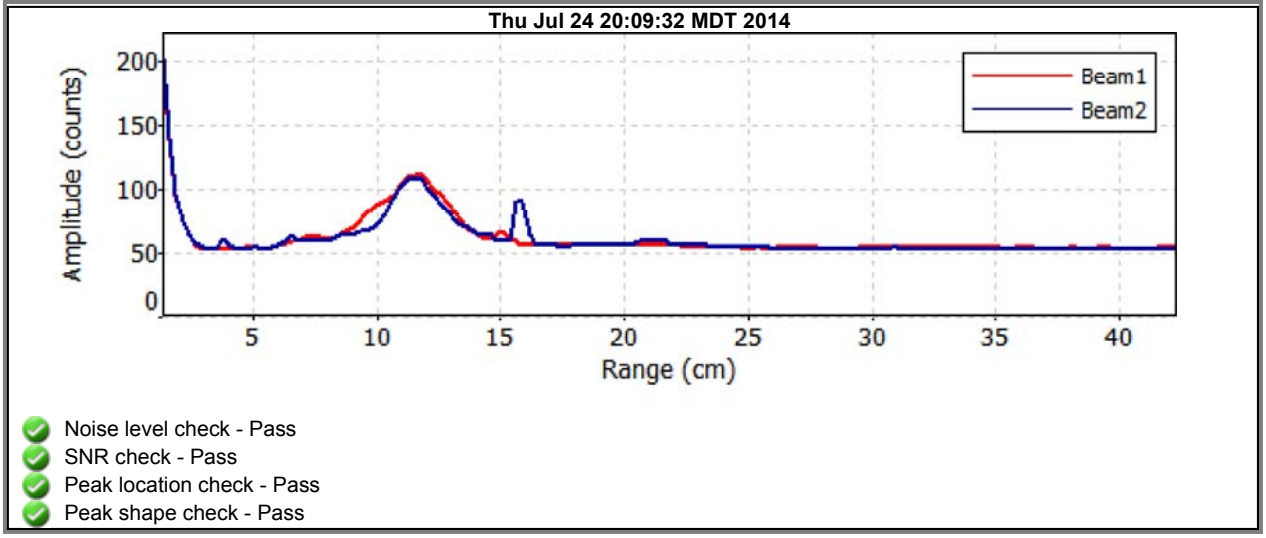
Discharge Measurement Summary

Date Generated: Fri Nov 21 2014

File Information		Site Details	
File Name	LCRAWLRD.001.WAD	Site Name	LIL CMRN AT WLD L RD
Start Date and Time	2014/07/24 20:10:45	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information

File Name	LCRASLTG.004.WAD
Start Date and Time	2014/07/23 14:53:14

Site Details

Site Name	LIL CIM AT SPG LN
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	2.6%
Velocity	0.7%	3.5%
Width	0.1%	0.1%
Method	1.6%	-
# Stations	2.0%	-
Overall	**2.9%**	**4.4%**

Summary

Averaging Int.	40	# Stations	25
Start Edge	REW	Total Width	15.600
Mean SNR	31.1 dB	Total Area	9.515
Mean Temp	71.17 °F	Mean Depth	0.610
Disch. Equation	Mid-Section	Mean Velocity	0.6403
		Total Discharge	**6.0930**

Supplemental Data (Gauge Height Change = -0.010ft)

#	Time	Location	Gauge Height	Rated Flow	Comments
1	Wed Jul 23 14:50:45 MDT 2014	0.000	1.320		
2	Wed Jul 23 15:06:00 MDT 2014	8.800	1.320		
3	Wed Jul 23 15:22:00 MDT 2014	14.500	1.320		
4	Wed Jul 23 15:33:10 MDT 2014	18.500			REV MTR CORR NEG 1
5	Wed Jul 23 15:37:00 MDT 2014	19.300	1.310		

Measurement Results

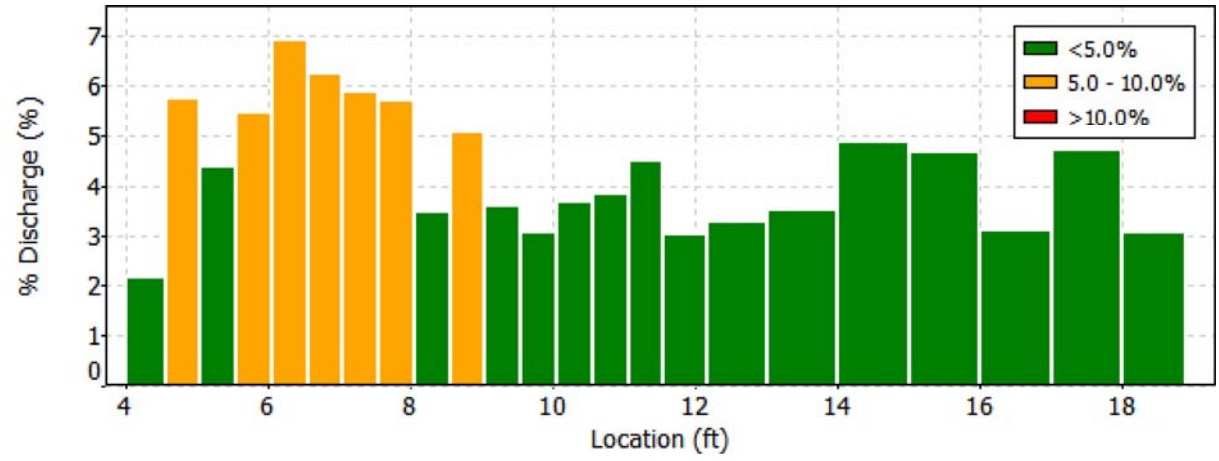
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	14:53	3.70	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	14:53	4.30	0.6	0.600	0.6	0.240	0.3976	1.00	0.3976	0.330	0.1312	2.2
2	14:54	4.80	0.6	1.000	0.6	0.400	0.7005	1.00	0.7005	0.500	0.3502	5.7
3	14:55	5.30	0.6	0.810	0.6	0.324	0.6634	1.00	0.6634	0.405	0.2687	4.4
4	14:57	5.80	0.6	0.880	0.6	0.352	0.7598	1.00	0.7598	0.440	0.3343	5.5
5	14:58	6.30	0.6	0.910	0.6	0.364	0.9278	1.00	0.9278	0.455	0.4222	6.9
6	14:59	6.80	0.6	0.940	0.6	0.376	0.8074	1.00	0.8074	0.470	0.3795	6.2
7	15:00	7.30	0.6	1.010	0.6	0.404	0.7080	1.00	0.7080	0.505	0.3575	5.9
8	15:01	7.80	0.6	0.910	0.6	0.364	0.7667	1.00	0.7667	0.455	0.3489	5.7
9	15:02	8.30	0.6	0.900	0.6	0.360	0.4708	1.00	0.4708	0.450	0.2118	3.5
10	15:06	8.80	0.6	0.760	0.6	0.304	0.8123	1.00	0.8123	0.380	0.3086	5.1
11	15:08	9.30	0.6	0.700	0.6	0.280	0.6270	1.00	0.6270	0.350	0.2195	3.6
12	15:09	9.80	0.6	0.780	0.6	0.312	0.4787	1.00	0.4787	0.390	0.1866	3.1
13	15:10	10.30	0.6	0.720	0.6	0.288	0.6198	1.00	0.6198	0.360	0.2232	3.7
14	15:11	10.80	0.6	0.650	0.6	0.260	0.7175	1.00	0.7175	0.325	0.2332	3.8
15	15:12	11.30	0.6	0.710	0.6	0.284	0.7740	1.00	0.7740	0.355	0.2747	4.5
16	15:15	11.80	0.6	0.600	0.6	0.240	0.5154	1.00	0.5154	0.360	0.1856	3.0
17	15:16	12.50	0.6	0.430	0.6	0.172	0.5436	1.00	0.5436	0.366	0.1988	3.3
18	15:18	13.50	0.6	0.430	0.6	0.172	0.4948	1.00	0.4948	0.430	0.2128	3.5
19	15:23	14.50	0.6	0.530	0.6	0.212	0.5597	1.00	0.5597	0.530	0.2966	4.9
20	15:24	15.50	0.6	0.510	0.6	0.204	0.5594	1.00	0.5594	0.510	0.2852	4.7
21	15:25	16.50	0.6	0.390	0.6	0.156	0.4879	1.00	0.4879	0.390	0.1903	3.1
22	15:26	17.50	0.6	0.490	0.6	0.196	0.5843	1.00	0.5843	0.490	0.2864	4.7
23	*15:30*	*18.50*	*0.6*	*0.300*	*0.6*	*0.120*	*-0.6936*	*-1.00*	*0.6936*	*0.270*	*0.1872*	*3.1*
24	15:30	19.30	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

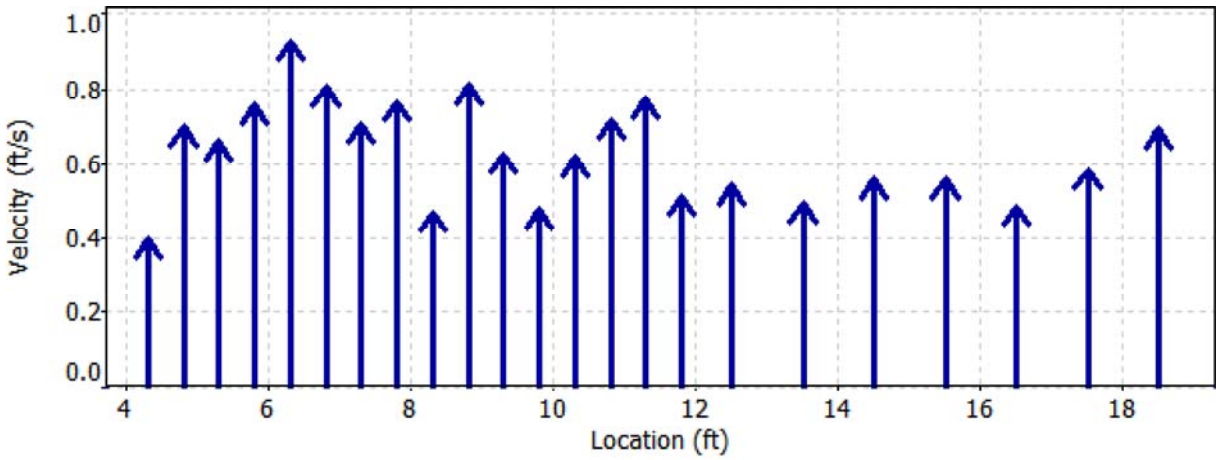
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

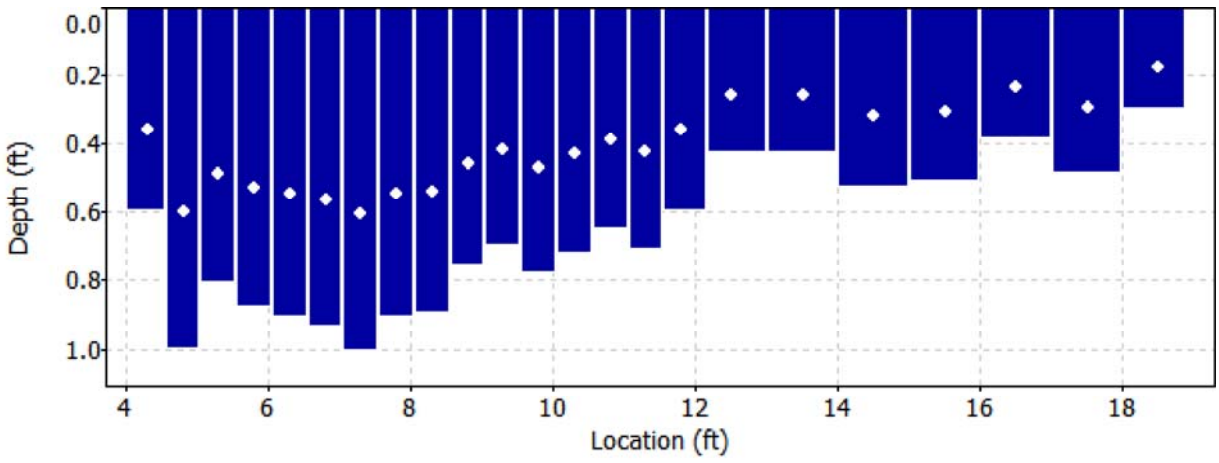
Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.004.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2014/07/23 14:53:14	Operator(s)	BJE







Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.004.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2014/07/23 14:53:14	Operator(s)	BJE

Quality Control

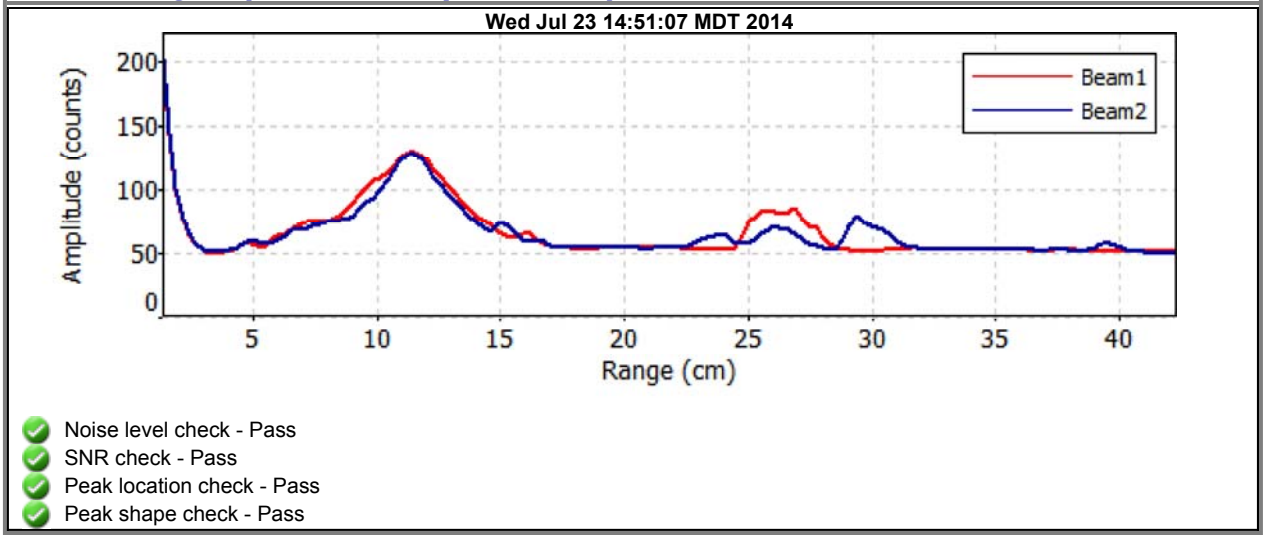
St	Loc	%Dep	Message
23	18.50	0.6	High angle: -164

Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.004.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2014/07/23 14:53:14	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information

File Name	LCRASLTG.003.WAD
Start Date and Time	2014/06/28 10:20:06

Site Details

Site Name	LTL CIMR AT SPRING L
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.1%	3.4%
Velocity	0.8%	3.9%
Width	0.1%	0.1%
Method	1.6%	-
# Stations	1.8%	-
Overall	**2.8%**	**5.3%**

Summary

Averaging Int.	40	# Stations	28
Start Edge	LEW	Total Width	25.900
Mean SNR	41.7 dB	Total Area	25.265
Mean Temp	47.89 °F	Mean Depth	0.975
Disch. Equation	Mid-Section	Mean Velocity	2.6925
		Total Discharge	**68.0265**

Measurement Results

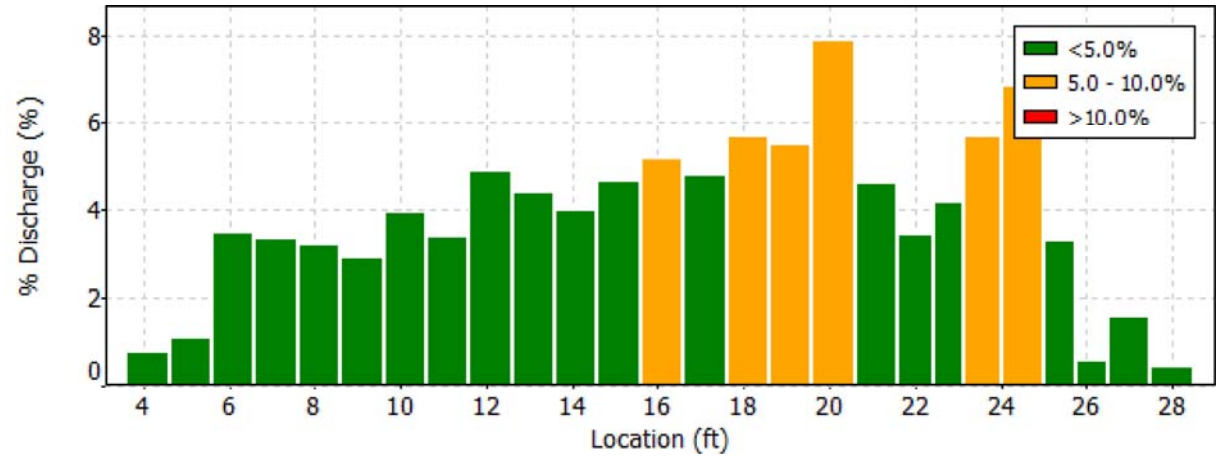
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	10:20	3.10	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	10:20	4.10	0.6	0.300	0.6	0.120	1.7418	1.00	1.7418	0.300	0.5223	0.8
2	10:21	5.10	0.6	0.350	0.6	0.140	2.1076	1.00	2.1076	0.350	0.7378	1.1
3	10:23	6.10	0.6	0.970	0.6	0.388	2.4583	1.00	2.4583	0.970	2.3849	3.5
4	10:26	7.10	0.6	0.990	0.6	0.396	2.2949	1.00	2.2949	0.990	2.2724	3.3
5	10:27	8.10	0.6	0.900	0.6	0.360	2.4245	1.00	2.4245	0.900	2.1819	3.2
6	10:29	9.10	0.6	0.650	0.6	0.260	3.0190	1.00	3.0190	0.650	1.9622	2.9
7	10:30	10.10	0.6	1.050	0.6	0.420	2.5771	1.00	2.5771	1.050	2.7056	4.0
8	10:31	11.10	0.6	1.020	0.6	0.408	2.2848	1.00	2.2848	1.020	2.3305	3.4
9	10:33	12.10	0.6	1.200	0.6	0.480	2.7762	1.00	2.7762	1.200	3.3319	4.9
10	10:34	13.10	0.6	1.110	0.6	0.444	2.7159	1.00	2.7159	1.110	3.0144	4.4
11	10:36	14.10	0.6	1.190	0.6	0.476	2.2746	1.00	2.2746	1.190	2.7067	4.0
12	10:43	15.10	0.6	1.120	0.6	0.448	2.8494	1.00	2.8494	1.120	3.1916	4.7
13	10:44	16.10	0.6	1.310	0.6	0.524	2.7005	1.00	2.7005	1.310	3.5377	5.2
14	10:46	17.10	0.6	1.100	0.6	0.440	2.9813	1.00	2.9813	1.100	3.2796	4.8
15	10:47	18.10	0.6	1.100	0.6	0.440	3.5240	1.00	3.5240	1.100	3.8766	5.7
16	10:48	19.10	0.6	1.250	0.6	0.500	3.0023	1.00	3.0023	1.250	3.7529	5.5
17	10:50	20.10	0.6	1.550	0.6	0.620	3.4665	1.00	3.4665	1.550	5.3727	7.9
18	10:51	21.10	0.6	1.230	0.6	0.492	2.5548	1.00	2.5548	1.230	3.1424	4.6
19	10:52	22.10	0.6	1.400	0.6	0.560	1.9839	1.00	1.9839	1.190	2.3605	3.5
20	10:55	22.80	0.6	1.150	0.6	0.460	3.5308	1.00	3.5308	0.805	2.8414	4.2
21	10:56	23.50	0.6	1.500	0.6	0.600	3.0436	1.00	3.0436	1.275	3.8809	5.7
22	10:58	24.50	0.6	1.380	0.6	0.552	3.3619	1.00	3.3619	1.380	4.6406	6.8
23	10:59	25.50	0.6	1.300	0.6	0.520	2.3123	1.00	2.3123	0.975	2.2543	3.3
24	11:02	26.00	0.6	0.600	0.6	0.240	0.8556	1.00	0.8556	0.450	0.3850	0.6
25	11:03	27.00	0.6	0.490	0.6	0.196	2.1677	1.00	2.1677	0.490	1.0625	1.6
26	11:04	28.00	0.6	0.310	0.6	0.124	0.9590	1.00	0.9590	0.310	0.2973	0.4
27	11:04	29.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

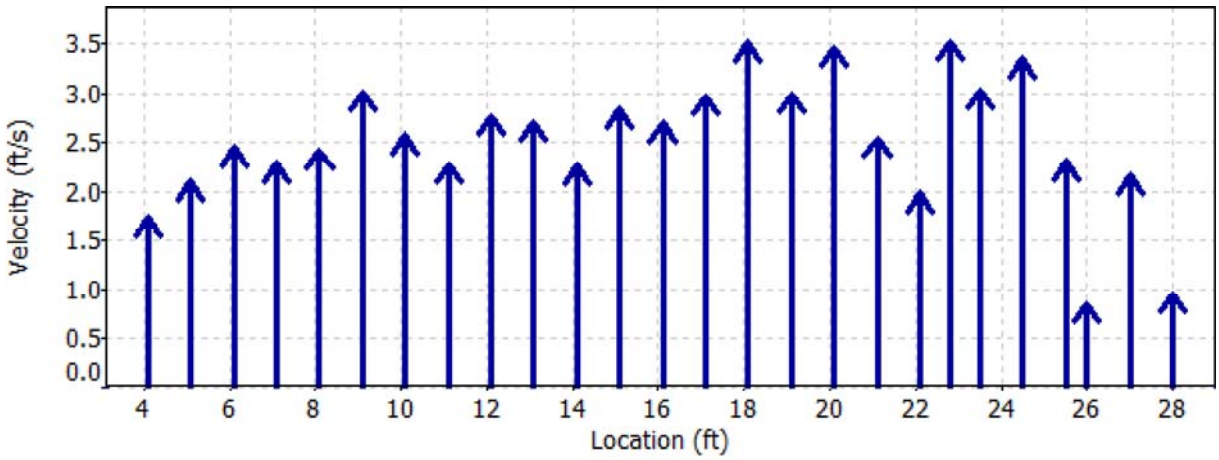
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

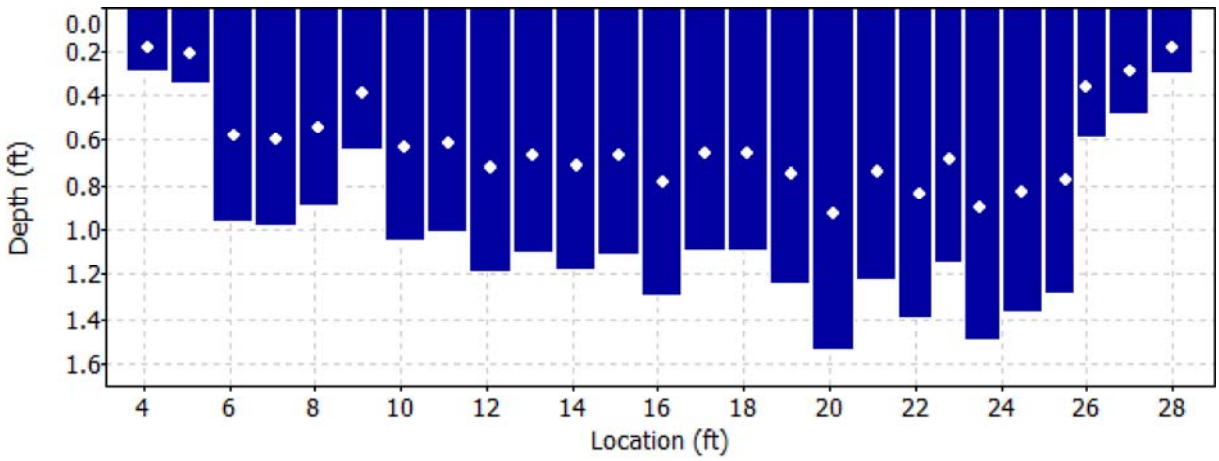
Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LCRASLTG.003.WAD	Site Name	LTL CIMR AT SPRING L
Start Date and Time	2014/06/28 10:20:06	Operator(s)	BJE







Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LCRASLTG.003.WAD	Site Name	LTL CIMR AT SPRING L
Start Date and Time	2014/06/28 10:20:06	Operator(s)	BJE

Quality Control

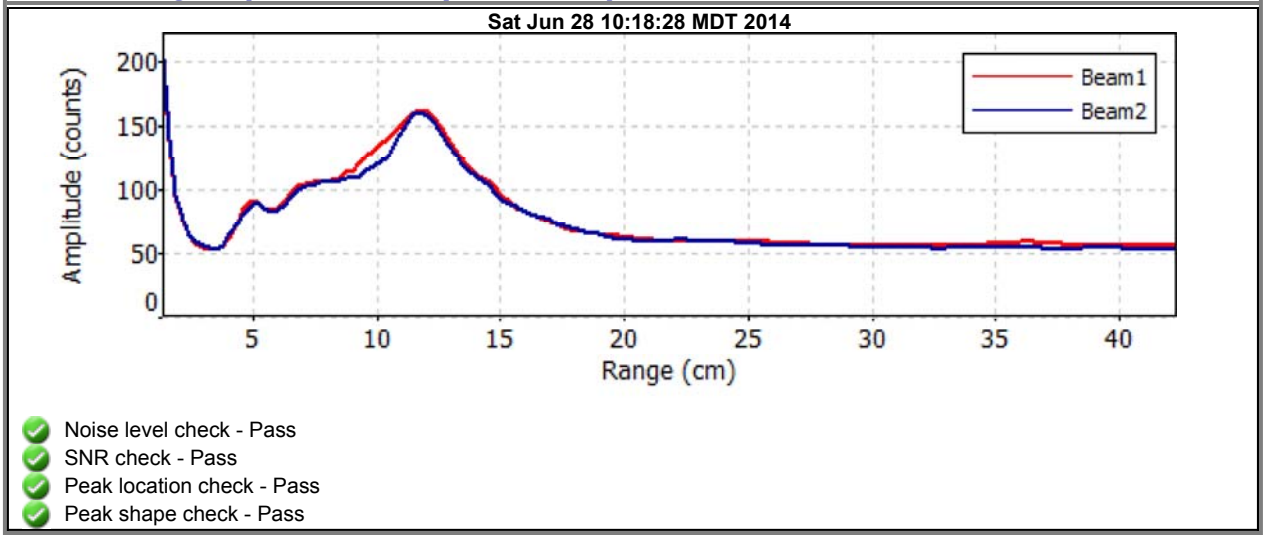
No Quality Control warnings

Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LCRASLTG.003.WAD	Site Name	LTL CIMR AT SPRING L
Start Date and Time	2014/06/28 10:20:06	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information

File Name	LCRASLTG.002.WAD
Start Date and Time	2014/06/20 12:17:46

Site Details

Site Name	LIL CIM AT SPG LN
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.1%	1.7%
Velocity	0.8%	2.1%
Width	0.1%	0.1%
Method	1.7%	-
# Stations	2.0%	-
Overall	**2.9%**	**2.9%**

Summary

Averaging Int.	40	# Stations	26
Start Edge	REW	Total Width	23.700
Mean SNR	45.8 dB	Total Area	29.555
Mean Temp	48.42 °F	Mean Depth	1.247
Disch. Equation	Mid-Section	Mean Velocity	3.1806
		Total Discharge	**94.0021**

Measurement Results

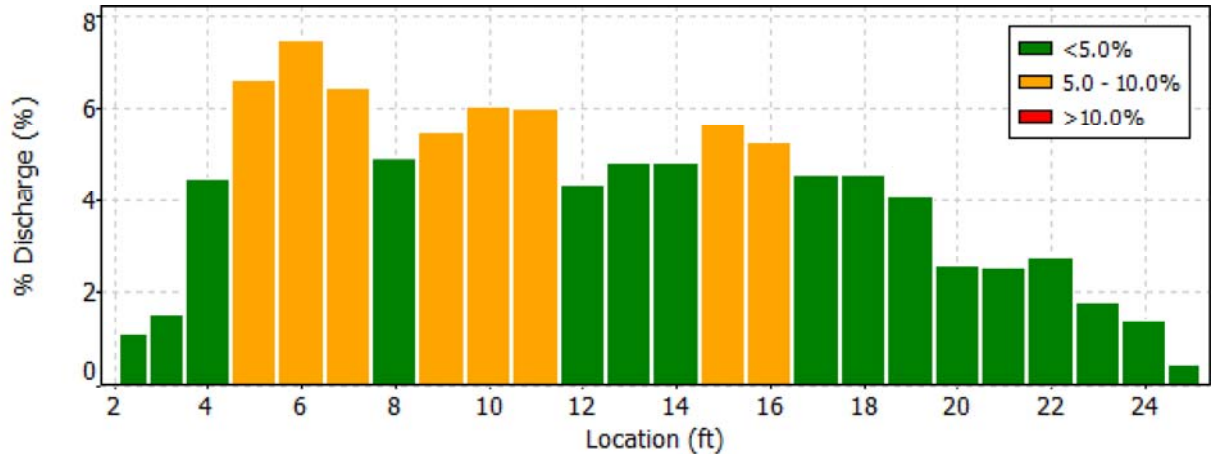
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	12:17	1.70	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	12:17	2.50	0.6	0.600	0.6	0.240	2.6644	1.00	2.6644	0.390	1.0391	1.1
2	12:22	3.00	0.6	0.860	0.6	0.344	2.2451	1.00	2.2451	0.645	1.4479	1.5
3	12:24	4.00	0.6	1.490	0.6	0.596	2.8465	1.00	2.8465	1.490	4.2417	4.5
4	12:25	5.00	0.6	1.500	0.6	0.600	4.1539	1.00	4.1539	1.500	6.2308	6.6
5	12:27	6.00	0.6	1.620	0.6	0.648	4.3507	1.00	4.3507	1.620	7.0485	7.5
6	12:29	7.00	0.6	1.750	0.6	0.700	3.4705	1.00	3.4705	1.750	6.0733	6.5
7	12:30	8.00	0.6	1.460	0.6	0.584	3.1788	1.00	3.1788	1.460	4.6410	4.9
8	12:31	9.00	0.6	1.480	0.6	0.592	3.4790	1.00	3.4790	1.480	5.1489	5.5
9	12:33	10.00	0.6	1.270	0.6	0.508	4.4751	1.00	4.4751	1.270	5.6834	6.0
10	12:34	11.00	0.6	1.430	0.6	0.572	3.9416	1.00	3.9416	1.430	5.6370	6.0
11	12:35	12.00	0.6	1.300	0.6	0.520	3.1437	1.00	3.1437	1.300	4.0864	4.3
12	12:36	13.00	0.6	1.390	0.6	0.556	3.2825	1.00	3.2825	1.390	4.5629	4.9
13	12:38	14.00	0.6	1.210	0.6	0.484	3.7772	1.00	3.7772	1.210	4.5704	4.9
14	12:39	15.00	0.6	1.390	0.6	0.556	3.8268	1.00	3.8268	1.390	5.3196	5.7
15	12:40	16.00	0.6	1.400	0.6	0.560	3.5449	1.00	3.5449	1.400	4.9627	5.3
16	12:41	17.00	0.6	1.370	0.6	0.548	3.1391	1.00	3.1391	1.370	4.3008	4.6
17	12:42	18.00	0.6	1.400	0.6	0.560	3.0650	1.00	3.0650	1.400	4.2907	4.6
18	12:44	19.00	0.6	1.310	0.6	0.524	2.9541	1.00	2.9541	1.310	3.8699	4.1
19	12:46	20.00	0.6	1.350	0.6	0.540	1.7976	1.00	1.7976	1.350	2.4268	2.6
20	*12:47*	*21.00*	*0.6*	*1.120*	*0.6*	*0.448*	*2.1214*	*1.00*	*2.1214*	*1.120*	*2.3761*	*2.5*
21	12:48	22.00	0.6	1.050	0.6	0.420	2.4570	1.00	2.4570	1.050	2.5795	2.7
22	*12:49*	*23.00*	*0.6*	*0.980*	*0.6*	*0.392*	*1.7451*	*1.00*	*1.7451*	*0.980*	*1.7102*	*1.8*
23	12:50	24.00	0.6	0.900	0.6	0.360	1.4606	1.00	1.4606	0.900	1.3145	1.4
24	12:52	25.00	0.6	0.500	0.6	0.200	1.2569	1.00	1.2569	0.350	0.4399	0.5
25	12:52	25.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

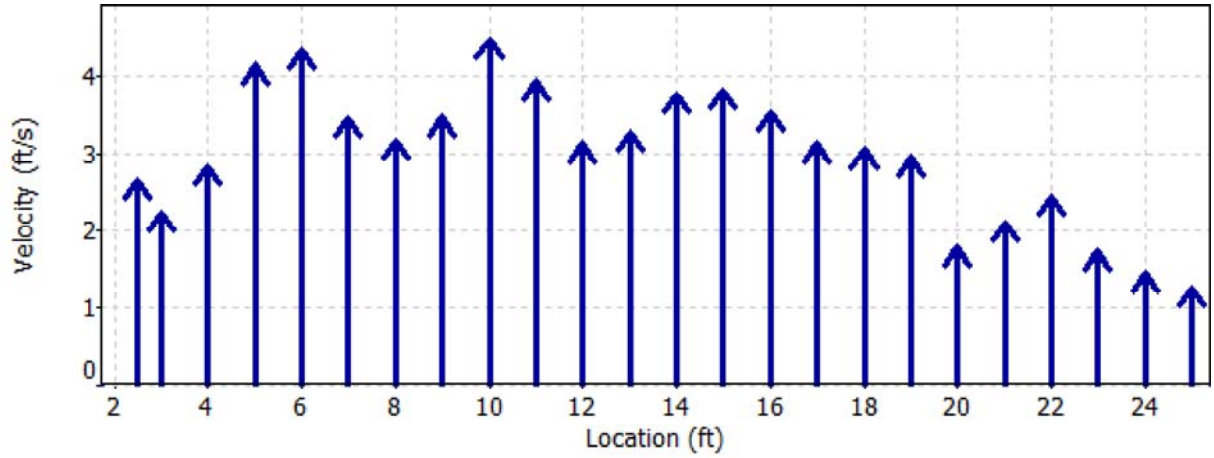
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

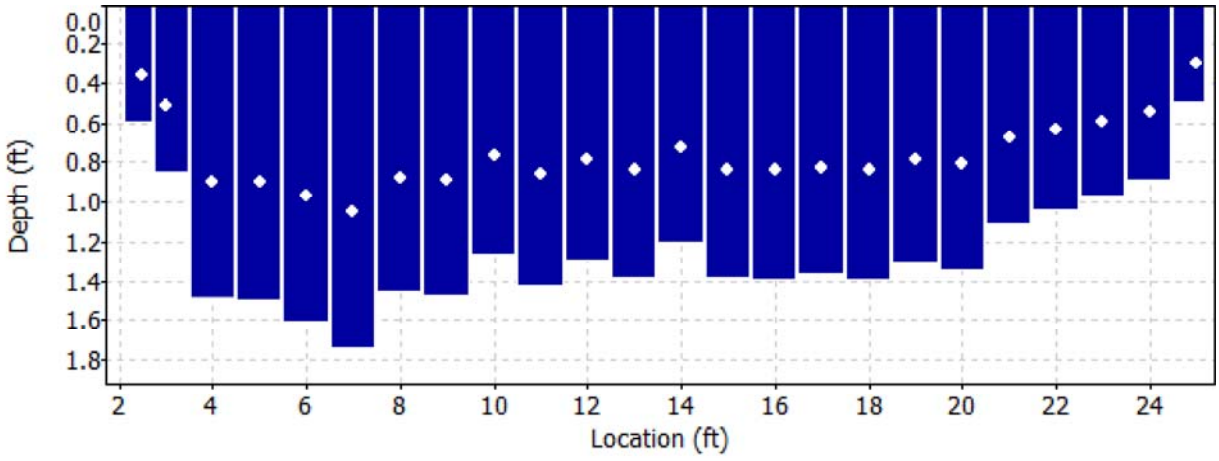
Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LCRASLTG.002.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2014/06/20 12:17:46	Operator(s)	BJE







Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LCRASLTG.002.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2014/06/20 12:17:46	Operator(s)	BJE

Quality Control

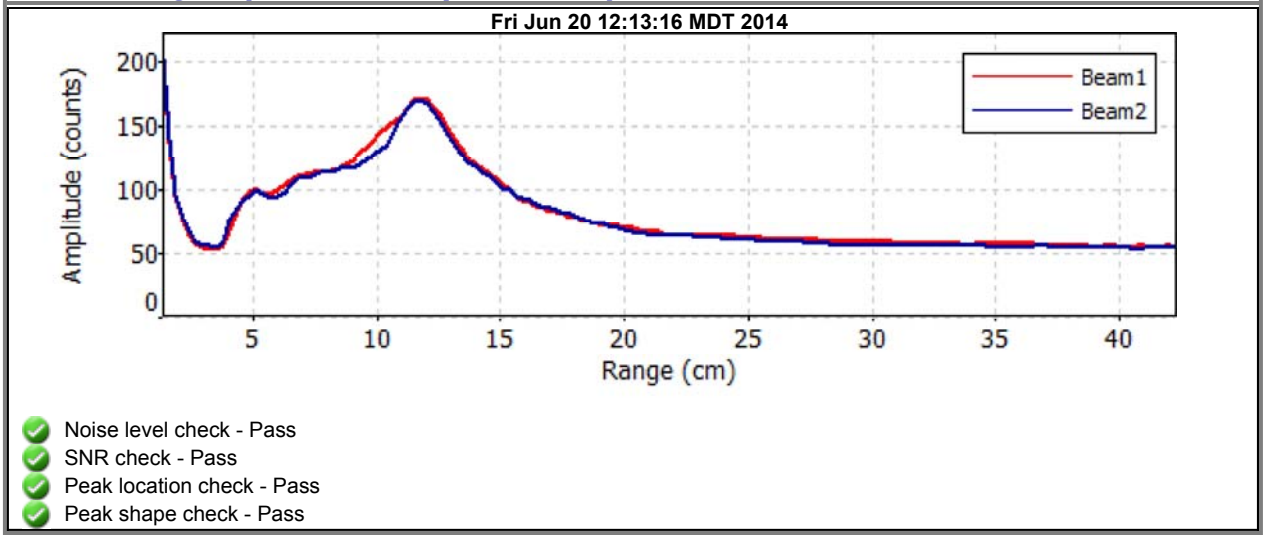
St	Loc	%Dep	Message
20	21.00	0.6	High standard error: 0.148
22	23.00	0.6	High standard error: 0.145

Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LCRASLTG.002.WAD	Site Name	LIL CIM AT SPG LN
Start Date and Time	2014/06/20 12:17:46	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information

File Name	LCRASLTG.001.WAD
Start Date and Time	2014/06/19 19:54:54

Site Details

Site Name	LTL CIMARN A SPG LN
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.1%	1.7%
Velocity	0.8%	2.7%
Width	0.1%	0.1%
Method	1.7%	-
# Stations	2.0%	-
Overall	**2.9%**	**3.3%**

Summary

Averaging Int.	40	# Stations	25
Start Edge	REW	Total Width	23.700
Mean SNR	46.2 dB	Total Area	29.672
Mean Temp	52.00 °F	Mean Depth	1.252
Disch. Equation	Mid-Section	Mean Velocity	3.1207
		Total Discharge	**92.5986**

Measurement Results

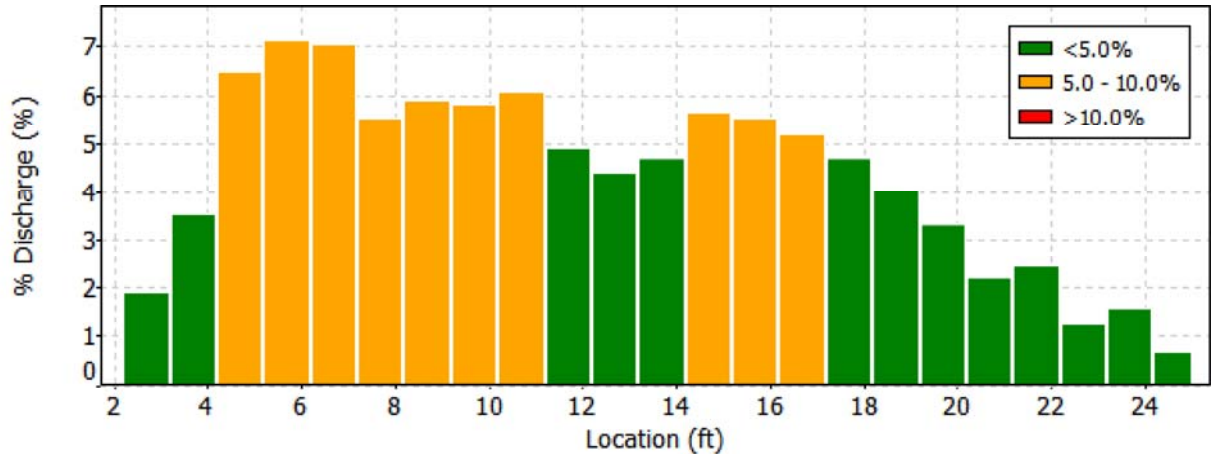
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	19:54	1.70	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	19:54	2.70	0.6	0.710	0.6	0.284	2.4987	1.00	2.4987	0.710	1.7740	1.9
2	19:56	3.70	0.6	1.370	0.6	0.548	2.3852	1.00	2.3852	1.370	3.2679	3.5
3	19:57	4.70	0.6	1.450	0.6	0.580	4.1332	1.00	4.1332	1.450	5.9937	6.5
4	19:59	5.70	0.6	1.590	0.6	0.636	4.1634	1.00	4.1634	1.590	6.6193	7.1
5	20:00	6.70	0.6	1.700	0.6	0.680	3.8409	1.00	3.8409	1.700	6.5300	7.1
6	20:01	7.70	0.6	1.750	0.6	0.700	2.9259	1.00	2.9259	1.750	5.1202	5.5
7	20:03	8.70	0.6	1.730	0.6	0.692	3.1542	1.00	3.1542	1.730	5.4567	5.9
8	20:04	9.70	0.6	1.480	0.6	0.592	3.6260	1.00	3.6260	1.480	5.3664	5.8
9	20:06	10.70	0.6	1.520	0.6	0.608	3.6932	1.00	3.6932	1.520	5.6138	6.1
10	20:07	11.70	0.6	1.260	0.6	0.504	3.6056	1.00	3.6056	1.260	4.5425	4.9
11	20:09	12.70	0.6	1.320	0.6	0.528	3.0909	1.00	3.0909	1.320	4.0796	4.4
12	20:10	13.70	0.6	1.240	0.6	0.496	3.5016	1.00	3.5016	1.240	4.3426	4.7
13	20:12	14.70	0.6	1.410	0.6	0.564	3.7218	1.00	3.7218	1.410	5.2481	5.7
14	20:14	15.70	0.6	1.370	0.6	0.548	3.7405	1.00	3.7405	1.370	5.1248	5.5
15	20:16	16.70	0.6	1.400	0.6	0.560	3.4229	1.00	3.4229	1.400	4.7918	5.2
16	20:17	17.70	0.6	1.260	0.6	0.504	3.4469	1.00	3.4469	1.260	4.3425	4.7
17	20:18	18.70	0.6	1.000	0.6	0.400	3.7175	1.00	3.7175	1.000	3.7175	4.0
18	20:20	19.70	0.6	1.320	0.6	0.528	2.3232	1.00	2.3232	1.320	3.0663	3.3
19	20:22	20.70	0.6	1.280	0.6	0.512	1.5873	1.00	1.5873	1.280	2.0315	2.2
20	20:23	21.70	0.6	1.050	0.6	0.420	2.1896	1.00	2.1896	1.050	2.2988	2.5
21	20:25	22.70	0.6	0.900	0.6	0.360	1.2953	1.00	1.2953	0.900	1.1657	1.3
22	20:26	23.70	0.6	0.900	0.6	0.360	1.6234	1.00	1.6234	0.900	1.4609	1.6
23	*20:28*	*24.70*	*0.6*	*0.780*	*0.6*	*0.312*	*0.9715*	*1.00*	*0.9715*	*0.663*	*0.6439*	*0.7*
24	20:28	25.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

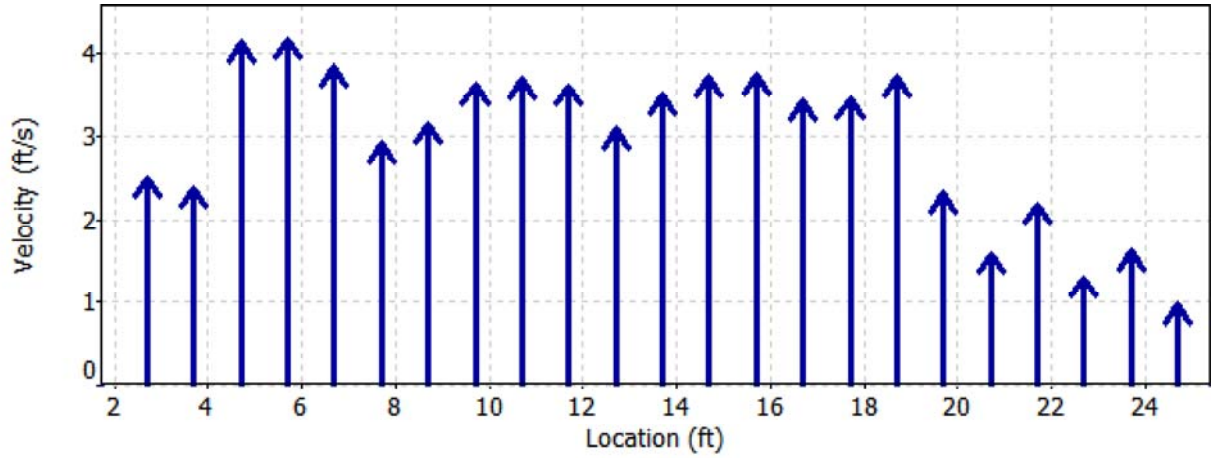
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

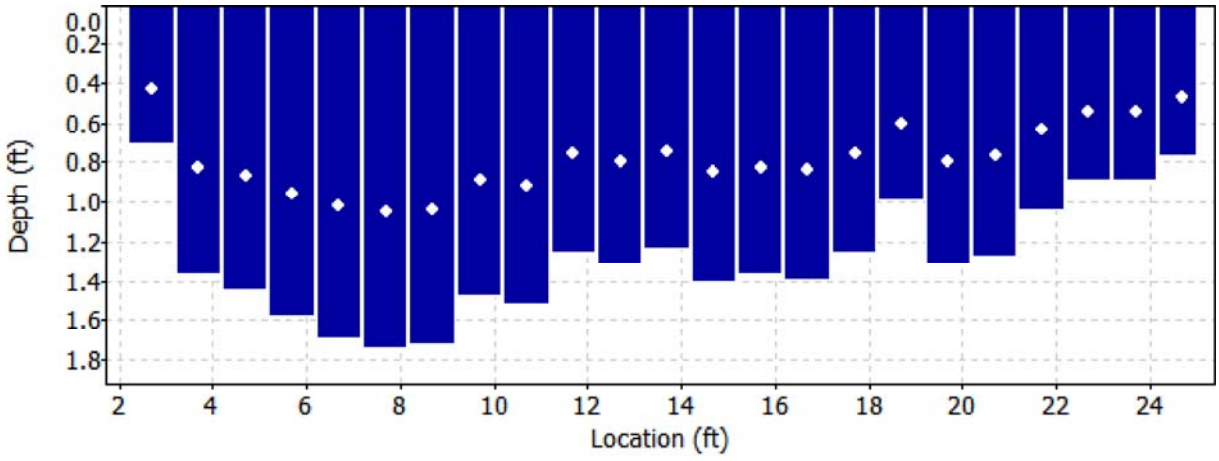
Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.001.WAD	Site Name	LTL CIMARN A SPG LN
Start Date and Time	2014/06/19 19:54:54	Operator(s)	BJE







Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.001.WAD	Site Name	LTL CIMARN A SPG LN
Start Date and Time	2014/06/19 19:54:54	Operator(s)	BJE

Quality Control

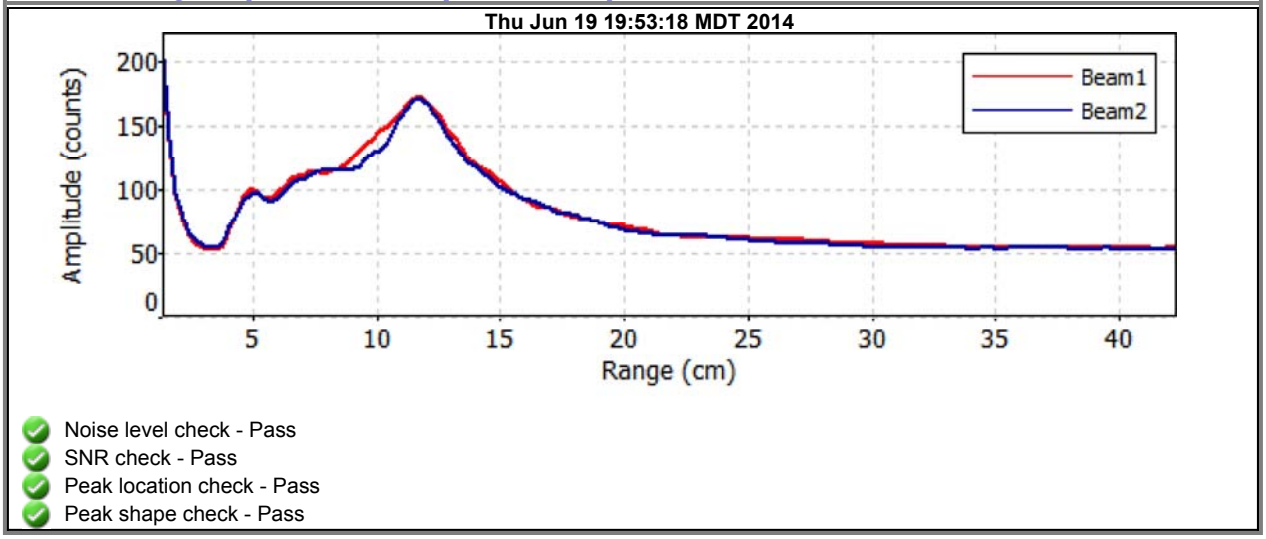
St	Loc	%Dep	Message
23	24.70	0.6	High angle: -21

Discharge Measurement Summary

Date Generated: Tue Nov 4 2014

File Information		Site Details	
File Name	LCRASLTG.001.WAD	Site Name	LTL CIMARN A SPG LN
Start Date and Time	2014/06/19 19:54:54	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass

Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information

File Name	LTCIMBPD.001.WAD
Start Date and Time	2014/05/08 10:06:27

Site Details

Site Name	LT CIMARRON B PERN
Operator(s)	BJE

System Information

Sensor Type	FlowTracker
Serial #	P2355
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	3.8%
Velocity	1.0%	4.9%
Width	0.1%	0.1%
Method	1.9%	-
# Stations	2.6%	-
Overall	**3.6%**	**6.3%**

Summary

Averaging Int.	40	# Stations	19
Start Edge	LEW	Total Width	27.900
Mean SNR	44.3 dB	Total Area	26.159
Mean Temp	36.99 °F	Mean Depth	0.938
Disch. Equation	Mid-Section	Mean Velocity	3.2964
		Total Discharge	**86.2288**

Measurement Results

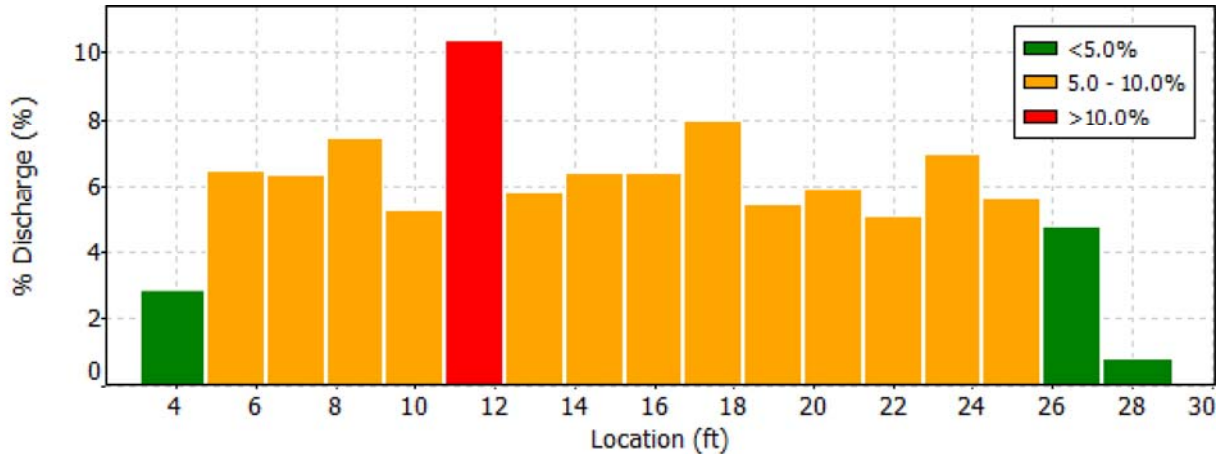
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	10:06	30.10	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	*10:06*	*28.00*	*0.6*	*0.250*	*0.6*	*0.100*	*1.6037*	*1.00*	*1.6037*	*0.450*	*0.7217*	*0.8*
2	*10:08*	*26.50*	*0.6*	*0.970*	*0.6*	*0.388*	*2.8409*	*1.00*	*2.8409*	*1.455*	*4.1341*	*4.8*
3	10:09	25.00	0.6	1.000	0.6	0.400	3.2375	1.00	3.2375	1.500	4.8563	5.6
4	10:10	23.50	0.6	1.360	0.6	0.544	2.9367	1.00	2.9367	2.040	5.9904	6.9
5	10:12	22.00	0.6	0.900	0.6	0.360	3.2316	1.00	3.2316	1.350	4.3624	5.1
6	10:13	20.50	0.6	1.080	0.6	0.432	3.1673	1.00	3.1673	1.620	5.1313	6.0
7	10:15	19.00	0.6	1.100	0.6	0.440	2.8392	1.00	2.8392	1.650	4.6850	5.4
8	10:16	17.50	0.6	1.340	0.6	0.536	3.4295	1.00	3.4295	2.010	6.8927	8.0
9	10:18	16.00	0.6	1.030	0.6	0.412	3.5617	1.00	3.5617	1.545	5.5020	6.4
10	10:20	14.50	0.6	0.990	0.6	0.396	3.7336	1.00	3.7336	1.485	5.5453	6.4
11	10:21	13.00	0.6	1.110	0.6	0.444	2.9948	1.00	2.9948	1.665	4.9858	5.8
12	10:22	11.50	0.6	1.390	0.6	0.556	4.2979	1.00	4.2979	2.085	8.9617	10.4
13	*10:24*	*10.00*	*0.6*	*1.280*	*0.6*	*0.512*	*2.3665*	*1.00*	*2.3665*	*1.920*	*4.5431*	*5.3*
14	10:25	8.50	0.6	1.200	0.6	0.480	3.5499	1.00	3.5499	1.800	6.3905	7.4
15	10:26	7.00	0.6	1.040	0.6	0.416	3.5020	1.00	3.5020	1.560	5.4632	6.3
16	10:28	5.50	0.6	0.810	0.6	0.324	4.5896	1.00	4.5896	1.215	5.5766	6.5
17	10:29	4.00	0.6	0.490	0.6	0.196	3.0748	1.00	3.0748	0.809	2.4867	2.9
18	10:29	2.20	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

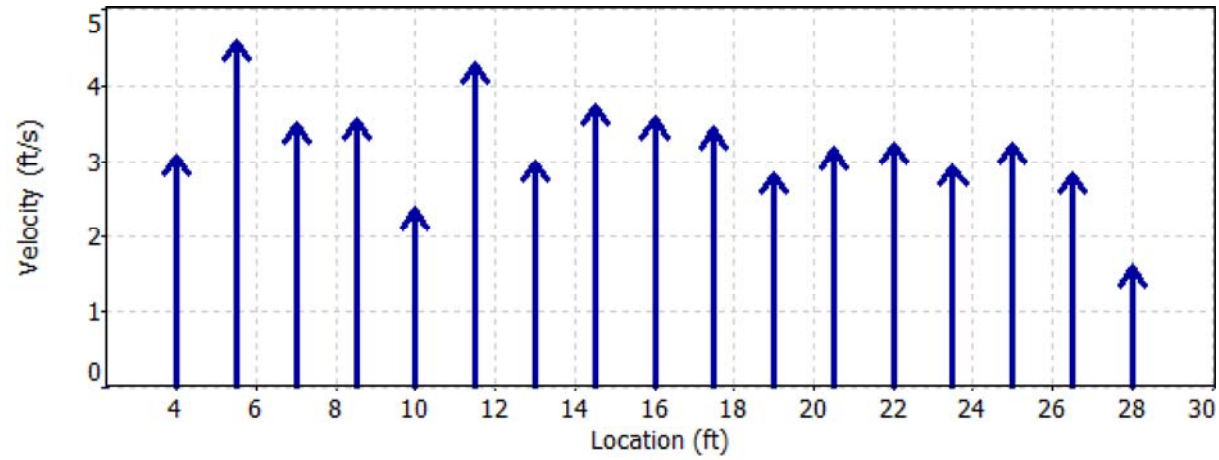
Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

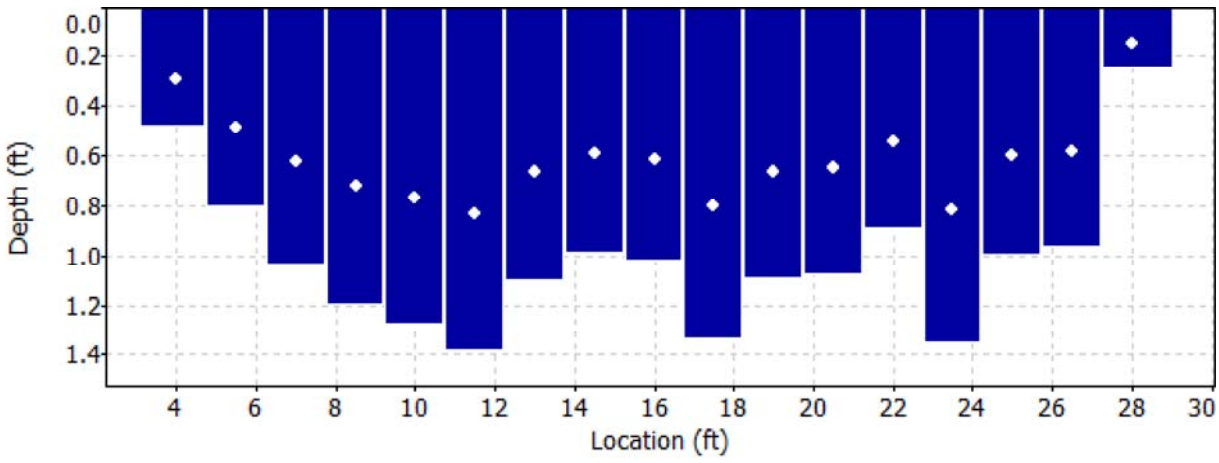
Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LTCIMBPD.001.WAD	Site Name	LT CIMARRON B PERN
Start Date and Time	2014/05/08 10:06:27	Operator(s)	BJE







Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LTCIMBPD.001.WAD	Site Name	LT CIMARRON B PERN
Start Date and Time	2014/05/08 10:06:27	Operator(s)	BJE

Quality Control

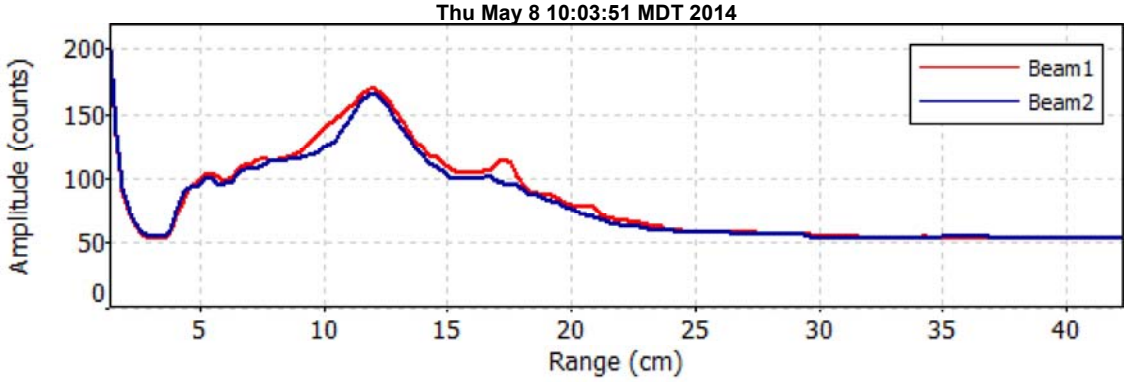
St	Loc	%Dep	Message
1	28.00	0.6	High angle: 28
2	26.50	0.6	High standard error: 0.179
13	10.00	0.6	High standard error: 0.159

Discharge Measurement Summary

Date Generated: Tue Jul 15 2014

File Information		Site Details	
File Name	LTCIMBPD.001.WAD	Site Name	LT CIMARRON B PERN
Start Date and Time	2014/05/08 10:06:27	Operator(s)	BJE

Automatic Quality Control Test (BeamCheck)



- Noise level check - Pass
- SNR check - Pass
- Peak location check - Pass
- Peak shape check - Pass