

DEPARTMENT OF ENVIRONMENT
WATER RESOURCES BRANCH WATER SURVEY OF CANADA
Miscellaneous Water Levels
DISCHARGE MEASUREMENTS

R 56 (12/81)

Station Name Columbia Lake at Canal Flats

Station No. BNA-64

For the Year 19 84

Date	DISCHARGE MEASUREMENTS		Temperature		Width m	Area m ²	Mean Velocity m/s	Mean Gauge Height m	Discharge m ³ /s	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/Weight	Air °C	Water °C						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
Jan. 20	Hurst				W.L.	2651.	99	@	15:00	M.S.T.				
Feb. 23	Hurst				W.L.	2651.	83 ^s	@	13:50	"				
Mar. 27	Hurst				W.L.	2651.	75 ^s	@	12:50	"				
May 24	Hurst				W.L.	2652.	04	@	11:20	"				
June 26	Hurst				W.L.	2654.	52	@	14:00	"				
June 28	Hurst				W.L.	2654.	80	@	13:10	"				
Aug. 1	Hurst				W.L.	2653.	38	@	10:10	"				
Sept. 6	Hurst				W.L.	2652.	40	@	10:00	"				
Oct. 15	Hurst				W.L.	2652.	17	@	13:00	"				
Dec 6	Hurst				W.L.	2651.	90	@	10:50	"				

W = Wading
C = Cableway
Bo = Boat
Br = Bridge

Ice = Ice cover
.2 = 2/10 method
#50C = 50 lb. weight
S.C. = Shift corr.

Computed by: W. Hurst Date: Dec. 20, 1984

Checked by: mm Date: FEB. 11, 85

DEPARTMENT OF THE ENVIRONMENT
 WATER RESOURCES BRANCH - WATER SURVEY OF CANADA
 Miscellaneous Water Levels
~~DISCHARGE MEASUREMENTS~~

Station Name Columbia Lake at Canal Flats

Station No. BNA-64

For the Year 1983

Date	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
Jan. 5	Hurst				W.L.	2651	98	@	12:20	M.S.T.				
Feb. 1	Hurst				W.L.	2651	98	@	14:30	"				
Mar. 1	Hurst				W.L.	2651	97	@	14:10	"				
Apr. 6	Hurst				W.L.	2651	73 ⁵	@	11:35	"				
May 3	Hurst				W.L.	2651	99	@	13:15	"				
June 7	Hurst				W.L.	2654	68	@	13:50	"				
July 15	Hurst				W.L.	2654	03	@	11:45	"				
Aug. 8	Hurst				W.L.	2653	00	@	13:30	"				
Oct. 5	Hurst				W.L.	2652	23	@	12:40	"				
Nov. 3	Hurst				W.L.	2651	97	@	12:10	"				
Dec. 9	Hurst				W.L.	2651	92	@	13:10	"				

W = Wading Ice = Ice cover
 C = Cableway .2 = 2/10 method
 Bo = Boat #50C = 50lb. weight
 Br = Bridge S.C. = Shift corr.

Computed by: W. J. Hurst Date:

Checked by: S. Robson Date: 84-03-29

DEPARTMENT OF THE ENVIRONMENT
WATER RESOURCES BRANCH - WATER SURVEY OF CANADA
Miscellaneous Water Levels.
DISCHARGE MEASUREMENTS

Station Name Columbia Lake at Canal Flats

Station No. BNA-64

For the Year 1982

Date	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
Jan. 15	Hurst				W.L.	2651.	91	@	11:30	M.S.T.	.....	.....	.....
Feb. 12	Hurst				W.L.	2651.	94	@	10:10	"	.....	.....	.....
Mar. 17	Hurst				W.L.	2651.	86	@	14:10	"	.....	.....	.....
Apr. 22	Hurst				W.L.	2651.	55	@	15:00	"	.....	.....	.....
May 12	Hurst				W.L.	2651.	77	@	12:30	"	.....	.....	.....
June 8	Hurst				W.L.	2653.	80	@	13:40	"	.....	.....	.....
June 23	Hurst				W.L.	2656.	25	@	09:30	"	.....	.....	.....
July 16	Hurst				W.L.	2654.	32	@	09:30	"	.....	.....	.....
Aug. 11	Hurst				W.L.	2652.	86	@	14:30	"	.....	.....	.....	From B.M. 3
Sept. 14	Hurst				W.L.	2652.	63	@	09:30	"	.....	.....	.....
Oct. 5	Hurst				W.L.	2652.	54	@	12:30	"	.....	.....	.....
Nov. 4	Hurst				W.L.	2652.	08	@	11:20	"	.....	.....	.....
Dec. 1	Hurst				W.L.	2652.	07	@	13:45	"	.....	.....	.....

W = Wading Ice = Ice cover
C = Cableway .2 = 2/10 method
Bo = Boat #50C = 50lb. weight
Br = Bridge S.C. = Shift corr.

Computed by: W. J. Hurst Date:

Checked by: W. J. Hurst Date: Feb. 07, 1983

DEPARTMENT OF THE ENVIRONMENT
 WATER RESOURCES BRANCH - WATER SURVEY OF CANADA
Miscellaneous Water Levels.
 DISCHARGE MEASUREMENTS

Station Name Columbia Lake at Canal Flats Station No. BNA-64

For the Year 1981

Date	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
19 <u>81</u> Jan. 21	Hurst				W.L.	2652.07	@	10:10	M.S.T.	.....	.....	.....	.....
Feb. 18	Hurst				W.L.	2652.03	@	14:20	"	.....	.....	.....	.....
Mar. 18	Hurst				W.L.	2651.94	@	13:45	"	.....	.....	.....	.....
Apr. 14	Hurst				W.L.	2651.65	@	14:30	"	.....	.....	.....	.....
May 13	Hurst				W.L.	2652.58	@	14:20	"	.....	.....	.....	.....
June 2	Hurst				W.L.	2654.90	@	15:00	"	.....	.....	.....	.....
July 8	Hurst				W.L.	2654.62	@	10:00	"	.....	.....	.....	.....
Aug. 4	Hurst				W.L.	2654.30	@	14:50	"	.....	.....	.....	.....
Sept. 15	Hurst				W.L.	2652.84 ⁵	@	10:30	"	.....	.....	.....	.....
Oct. 14	Hurst				W.L.	2652.49 ⁵	@	14:10	"	.....	.....	.....	.....
Nov. 18	Hurst				W.L.	2652.19	@	14:45	"	.....	.....	.....	.....
Dec. 9	Hurst				W.L.	2651.88 ⁵	@	14:45	"	.....	.....	.....	.....
										
										

W = Wading Ice = Ice cover
 C = Cableway .2 = 2/10 method
 Bo = Boat #50C = 50lb. weight
 Br = Bridge S.C. = Shift corr.

Computed by: W. J. Hurst Date:

Checked by: Date:

DEPARTMENT OF THE ENVIRONMENT
 WATER RESOURCES BRANCH - WATER SURVEY OF CANADA
Miscellaneous Water Levels
 DISCHARGE MEASUREMENTS

Station Name Columbia Lake at Canal Flats

Station No. 8NA-64

For the Year 1980

Date 19 <u>80</u>	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
Jan. 8	Hurst				W.L.	2651	73	@	15:50	M.S.T				
Feb. 13	Hurst				W.L.	2651	76	@	12:40	"				
Mar. 17	Hurst				W.L.	2651	57	@	15:00	"				
May 1	Hurst				W.L.	2652	83	@	10:50	"				
June 11	Hurst				W.L.	2654	44 ^s	@	10:10	"				
July 8	Hurst				W.L.	2653	64	@	13:30	"				
Aug. 13	Hurst				W.L.	2652	86	@	12:15	"				
Sept. 19	Hurst				W.L.	2652	16	@	12:05	"				Strong sth. wind.
Oct. 15	Hurst				W.L.	2652	40	@	10:30	"				Light nth. wind.
Nov. 20	Hurst				W.L.	2652	03	@	11:40	"				
Dec. 10	Hurst				W.L.	2652	25	@	12:00	"				

W = Wading Ice = Ice cover
 C = Cableway .2 = 2/10 method
 Bo = Boat #50C = 50lb. weight
 Br = Bridge S.C. = Shift corr.

Computed by: W. J. Hurst Date:

Checked by: Oliver S. [unclear] Date: ... FEB 2 1981

DEPARTMENT OF THE ENVIRONMENT
 WATER RESOURCES BRANCH - WATER SURVEY OF CANADA
Miscellaneous Water Levels
DISCHARGE MEASUREMENTS

Station Name Columbia Lake at Canal Flats

Station No. 8NA-64

For the Year 1979

Date	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
19 <u>79</u>														
Jan. 17	Hurst				W.L.	2652	.10	@	13:20	M.S.T.				
Feb. 16	Hurst				W.L.	2651	.88	@	10:10	"				
Mar. 21	Hurst				W.L.	2651	.63	@	16:00	"				
Apr. 11	Hurst				W.L.	2651	.58	@	11:00	"				
May 10	Hurst				W.L.	2651	.80	@	14:00	"				
June 7	Hurst				W.L.	2653	.88	@	11:05	"				
July 9	Hurst				W.L.	2653	.55	@	12:30	"				
Aug. 3	Hurst				W.L.	2652	.93	@	14:40	"				
Sept. 12	Hurst				W.L.	2652	.38	@	15:00	"				
Oct. 11	Hurst				W.L.	2652	.05	@	11:15	"				
Nov. 15	Hurst				W.L.	2651	.80	@	15:30	"				

W = Wading Ice = Ice cover
 C = Cableway .2 = 2/10 method
 Bo = Boat #50C = 50lb. weight
 Br = Bridge S.C. = Shift corr.

Computed by: Date:

Checked by: Date:

Miscellaneous Water Levels

~~DISCHARGE MEASUREMENTS~~

Station Name Columbia Lake at Canal Flats

Station No. 8NA-64

For the Year 1978

Date	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
19 <u>78</u>														
Jan. 18	Hurst				W.L.	2651.97	@	14:50	M.S.T.	.....	.....	.....	.....
Feb. 15	Hurst				"	2651.83	@	13:50	"	.....	.....	.....	.....
Mar. 14	Hurst				"	2651.63	@	13:40	"	.....	.....	.....	.....
Apr. 21	Hurst				"	2651.64	@	11:00	"	.....	.....	.....	.....
May 17	Hurst				"	2652.36	@	08:50	"	.....	.....	.....	.....
June 15	Hurst				"	2654.72	@	09:10	"	.....	.....	.....	.....
July 13	Hurst				"	2654.85	@	08:30	"	.....	.....	.....	.....
Aug. 14	Hurst				"	2652.74	@	14:45	"	.....	.....	.....	.....	B.M. 2 from B.M. 149-D 2656.61
Sept. 12	Hurst				"	2652.59	@	14:00	"	.....	.....	.....	.....
Oct. 17	Hurst				"	2652.33	@	10:40	"	.....	.....	.....	.....
Nov. 15	Hurst				"	2652.00	@	11:15	"	.....	.....	.....	.....
Dec. 14	Hurst				"	2651.85	@	11:00	"	.....	.....	.....	.....

W = Wading
C = Cableway
Bo = Boat
Br = Bridge
Ice = Ice cover
.2 = 2/10 method
#50C = 50lb. weight
S.C. = Shift corr.

Computed by: Date:

Checked by: Date:

Miscellaneous Water Levels

~~DISCHARGE MEASUREMENTS~~

Station Name Columbia Lake at Canal Flats Station No. 8NA-64

For the Year 1977

Date	DISCHARGE MEASUREMENTS		Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
	Made by	Method/weight	Air	Water						Diff. Disch.	% Dev. S.C.	Diff. Disch.	% Dev. S.C.	
19 <u>77</u> Jan. 14	Hurst				W.L.	2651.79	@	10:10	Mist	.....	.....	.....	.....
Feb. 9	Hurst				W.L.	2651.70	@	13:30	"	.....	.....	.....	.....
Mar. 10	Hurst				W.L.	2651.60	@	14:20	"	.....	.....	.....	.....
Apr. 21	Hurst				W.L.	2651.51	@	12:15	"	.....	.....	.....	.....	sth. wind.
May 17	Hurst				W.L.	2652.26	@	14:15	"	.....	.....	.....	.....
June 10	Hurst				W.L.	2653.59	@	10:10	"	.....	.....	.....	.....	Light north wind
July 11	Hurst				W.L.	2652.76	@	14:30	"	.....	.....	.....	.....	Colm.
Aug. 12	Hurst				W.L.	2652.68 ^s	@	09:10	"	.....	.....	.....	.....	"
Sept 20	Hurst				W.L.	2652.28 ^s	@	14:45	"	.....	.....	.....	.....	sth. w. !
Oct 14	Hurst				W.L.	2652.17	@	09:15	"	.....	.....	.....	.....	Light nth. wind.
Nov. 21	Hurst				W.L.	2651.85	@	14:50	"	.....	.....	.....	.....
Dec. 21	Hurst				W.L.	2651.83	@	15:30	"	.....	.....	.....	.....
										
										

W = Wading Ice = Ice cover
 C = Cableway .2 = 2/10 method
 Bo = Boat #50C = 50lb. weight
 Br = Bridge S.C. = Shift corr.

Computed by: Date:

Checked by: Date:

DEPARTMENT OF THE ENVIRONMENT
WATER RESOURCES BRANCH - WATER SURVEY OF CANADA

Miscellaneous Water Levels.

~~DISCHARGE MEASUREMENTS~~

Station Name Columbia Lake at Canal Flats.

Station No. 08NFA064

For the Year 1976

Date	Made by	Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
1976													
Jan. 14	Hurst			W.L.	2651.81	@	14:40	M.S.T.					
Feb. 17	Hurst			W.L.	2651.67	@	11:30	"					
Mar. 18	Hurst			W.L.	2651.67	@	12:20	"					
Apr. 21	Hurst			W.L.	2651.77	@	14:10	"					
May 18	Hurst			W.L.	2653.65 ⁵	@	14:10	"					
June 15	Hurst			W.L.	2654.39	@	12:10	"					
July 2	Hurst			W.L.	2655.28	@	9:10	"					
July 14	Hurst			W.L.	2655.43	@	11:15	"					
Aug. 13	Hurst			W.L.	2653.80	@	08:45	"					
Sept. 10	Hurst			W.L.	2652.90	@	14:30	"					
Oct. 14	Hurst			W.L.	2652.44	@	12:45	"					
Nov. 16	Hurst			W.L.	2651.89	@	16:45	"					
Dec. 9	Hurst			W.L.	2651.77	@	10:20	"					

DEPARTMENT OF ENERGY, MINES AND RESOURCES - INLAND WATERS BRANCH - WATER SURVEY OF CANADA

Miscellaneous Water Levels

~~DISCHARGE MEASUREMENTS~~

ion Name Columbia Lake at Canal Flats

Station No. 08NA064

For the Year 1975

Date	Made by	Tem-perature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
1975													
Jan. 16	Hurst			W.L.	2652.00	@		10:30	M.S.T.				
Feb. 14	Hurst			W.L.	2651.84	@		10:15	"				
Mar. 20	Hurst			W.L.	2651.67	@		10:10	"				
Apr. 17	Hurst			W.L.	2651.64	@		10:00	"				
May 21	Hurst			W.L.	2652.35	@		13:00	"				
June 18	Hurst			W.L.	2654.34	@		08:50	"				
July 10	Hurst			W.L.	2654.77	@		09:20	"				
July 30	Hurst			W.L.	2653.51	@		09:15	"				
Sept. 16	Hurst			W.L.	2652.55	@		13:30	"				
Oct. 9	Hurst			W.L.	2652.25	@		12:45	"				
Nov. 19	Hurst			W.L.	2651.93	@		12:00	"				
Dec. 16	Hurst			W.L.	2651.86	@		14:45	"				

DEPARTMENT OF ENERGY, MINES AND RESOURCES - INLAND WATER, BRANCH - WATER SURVEY OF CANADA

Miscellaneous Water Levels.

~~DISCHARGE MEASUREMENTS~~

Station Name Columbia Lake at Canal Flats

Station No. 08NA064

For the Year 1974

Date	Made by	Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
1974													
Jan. 9	Hurst			W.L.	2651.	79	@	11:50	M.S.T				
Feb. 6	Hurst			W.L.	2651.	75	@	14:15	"				
Mar. 13	Hurst			W.L.	2651.	58	@	11:30	"				
Apr. 25	Hurst			W.L.	2651.	50	@	11:30	"				
May 22	Hurst			W.L.	2652.	40	@	14:00	"				
June 21	Hurst			W.L.	2656.	99	@	09:00	"				
June 27	Hurst			W.L.	2657.	27	@	13:50	"				
July 19	Hurst			W.L.	2654.	62	@	08:50	"				H.W.M. 2657.58
Aug. 21	Hurst			W.L.	2653.	13	@	14:30	"				
Sept. 24	Hurst			W.L.	2652.	46 ^S	@	13:00	"				
Oct. 21	Hurst			W.L.	2652.	16	@	14:50	"				
Nov. 28	Hurst			W.L.	2651.	91	@	10:30	"				
Dec 12	Hurst			W.L.	2651.	81	@	14:00	"				Calm.

DEPARTMENT OF ENERGY, MINES AND RESOURCES - INLAND WATERS BRANCH - WATER SURVEY OF CANADA

Miscellaneous Water Levels.

~~DISCHARGE MEASUREMENTS~~

Station Name Columbia Lake at Canal Flats

Station No. 08NA064

For the Year 1973

Date	Made by	Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
1973													
Jan. 3	Hodge				Lake level	only	W.L.	2652.03 @	11:05	M.S.T			
Feb. 8	Hodge				"	"	W.L.	2651.90 @	11:15	"			
Mar. 5	Hodge & Mackay				"	"	W.L.	2651.87 @	10:25	"			B.M.s. 2 & 3 OK.
Apr. 10	Hodge & Mackay				"	"	W.L.	2651.71 @	12:00	"			
May 17	Hurst				"	"	W.L.	2652.32 @	16:00	"			
June 13	Hurst				"	"	W.L.	2653.82 @	11:00	"			
July 3	Hurst				"	"	W.L.	2654.49 @	10:30	"			
Aug. 14	Hurst				"	"	W.L.	2652.82 @	10:00	"			
Sept. 19	Hurst				"	"	W.L.	2652.24 @	10:00	"			
Oct. 23	Hurst				"	"	W.L.	2652.00 @	9:30	"			
Nov 21	Hurst				"	"	W.L.	2651.91 @	15:00	"			
Dec. 17	Hurst				"	"	W.L.	2651.78 @	10:45	"			

DISCHARGE MEASUREMENTS

Station Name COLUMBIA LAKE AT CANAL FLATS Station No. 08NAC64

For the Year 1972

Date	Made by	Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
1972													
JANUARY 25	M. PROVENZANO L. HODGE					LEVELS		ONLY					W.L. = 2651.99' @ 1200 M.S.T.
FEBRUARY 15	M. PROVENZANO L. HODGE					"		"					W.L. = 2651.87' @ 1355 M.S.T.
MARCH 15	L. HODGE					"		"					W.L. = 2651.94' @ 1045 M.S.T.
MAY 15	L. HODGE					"		"					W.L. = 2652.33' @ 1520 M.S.T.
JUNE 20	L. HODGE					"		"					W.L. = 2656.49' @ 1010 M.S.T.
JULY 7	L. HODGE					"		"					W.L. = 2655.40' @ 0920 M.S.T.
AUGUST 11	L. HODGE					"		"					W.L. = 2653.98' @ 1235 M.S.T.
SEPTEMBER 5	L. HODGE					"		"					W.L. = 2653.08' @ 1510 M.S.T.
OCTOBER 3	L. HODGE					"		"					W.L. = 2652.65' @ 1110 M.S.T.
NOVEMBER 2	L. HODGE					"		"					W.L. = 2652.38' @ 1525 M.S.T.
DECEMBER 13	L. HODGE					"		"					W.L. = 2652.25' @ 1205 M.S.T.
WATER ELEVATIONS ARE G.S.C. DATA REF: G.S.C. BM N ^o 149-D ('47)													
ZERO OF GAUGE = 0.00 G.S.C.													
CHECKED BY: <i>[Signature]</i>													
ADD TO 1973													

DEPARTMENT OF ENERGY, MINES AND RESOURCES - INLAND WATERS BRANCH - WATER SURVEY OF CANADA

LEVELS ONLY
~~DISCHARGE MEASUREMENTS~~

Station Name COLUMBIA LAKE AT CANAL FLATS

Station No. 08NA064

For the Year 1971

Date	Made by	Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
1971													
JANUARY 8	LH												W.L. = 2,652.210' AT 1510 M.S.T.
FEBRUARY 2	LH & L.W.					"	"						W.L. = 2652.035' AT 1340 M.S.T.
MARCH 16	LH & L.W.					"	"						W.L. = 2,651.790' AT 1345 M.S.T.
APRIL 30	LH					"	"						W.L. = 2,651.760' AT 1325 M.S.T.
MAY 21	LH					"	"						W.L. = 2,653.25' AT 1550 M.S.T.
JULY 16	LH					"	"						W.L. = 2,654.25' AT 1450 M.S.T.
AUGUST 12	LH					"	"						W.L. = 2,653.40' AT 1225 M.S.T.
SEPT. 27	LH					"	"						W.L. = 2,652.21' AT 1105 M.S.T.
OCT 28	L.H.					"	"						W.L. = 2,652.07' AT 1030 M.S.T.
DEC. 9	L.H.					"	"						W.L. = 2,651.92' AT 1215 M.S.T.

DAILY GAUGE HEIGHTS

Station Name COLUMBIA LAKE AT CANAL FLATS

Station No 08NA064

Daily Elevations or Gauge Heights in Feet for the Year 1970

Day	January	February	March	April	May	June	July	August	September	October	November	December	Day
1													1
2													2
3													3
4													4
5			2651.96										5
6													6
7													7
8													8
9													9
10													10
11													11
12						2654.82							12
13					2652.00		2653.47						13
14													14
15													15
16													16
17													17
18													18
19								2652.53			2651.90		19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29	2652.11	X	X										29
30		X	X							2652.04			30
31		X	X	X		X					X		31
Summary For the Year For the Period (JANUARY to DECEMBER)		Maximum instantaneous elevation, daily gauge height, ft at on						Computed by LH Date		Checked by J.G Date			
		Minimum daily elevation, gauge height, ft at on						JUNE 22, 1971		JULY 5, 1971			

NOT FOR PUBLICATION

WATER LEVELS DETERMINED BY LEVEL INSTRUMENT

Add 0.00 to obtain elevation in feet. Reference: GEODETIC SURVEY OF CANADA B.M. 149-D (47)

APPROVED BY: *[Signature]*
JULY 18 1971

Columbia Misc.

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES — WATER RESOURCES BRANCH

R56
(1-62)

Discharge Measurements of Columbia Lake near Canal Flats Station No. _____

From _____ 19____ To _____ 19____

Date	Made by	Temperature		Width ft	Area sq ft	Mean Velocity fps	Mean Gauge Height ft	Discharge cfs	From Stage-Disch. Table No.		From Stage-Disch. Table No.		Remarks
		Air °F	Water °F						Shift or B.W. Corr. ft	Diff.	Shift or B.W. Corr. ft	Diff.	
<u>1967</u>													
<u>Dec. 23, 1966</u>							<u>2652.16</u>						<u>Levels only</u>
<u>APRIL 27, 67</u>	<u>GILBERT</u>	<u>51</u>	<u>49</u>	<u>LEVELS ONLY</u>									<u>W.L. 2651.80</u>
<u>MAY 19</u>	<u>"</u>	<u>-</u>	<u>66</u>	<u>"</u>	<u>"</u>								<u>W.L. 2652.26</u>
<u>MAY 29</u>	<u>"</u>	<u>-</u>	<u>-</u>	<u>"</u>	<u>"</u>								<u>W.L. 2653.57</u>
<u>JUNE 6</u>	<u>"</u>	<u>-</u>	<u>-</u>	<u>"</u>	<u>"</u>								<u>W.L. 2655.20</u>
<u>NOV 6</u>	<u>"</u>	<u>-</u>	<u>-</u>	<u>"</u>	<u>"</u>		<u>2655.07 For July 19, 1967</u> <u>2652.36 For Oct 17, 1967</u> <u>2652.24 For Nov. 6, 1967</u>						<u>see notes</u>
<u>DEC 23</u>	<u>"</u>	<u>-</u>	<u>-</u>	<u>"</u>	<u>"</u>								<u>W.L. 2652.16</u>
<u>1968</u>													
<u>July 11</u>	<u>LH</u>	<u>-</u>	<u>-</u>				<u>2655.76</u>						<u>Levels Only</u>
<u>Sept 27</u>	<u>LH</u>	<u>-</u>	<u>-</u>				<u>2652.68</u>						<u>Levels Only</u>
<u>Oct 18</u>	<u>LH</u>	<u>-</u>	<u>-</u>				<u>2652.31</u>						<u>Levels Only</u>
<u>Nov 8</u>	<u>LH</u>	<u>-</u>	<u>-</u>				<u>2652.18</u>						<u>" "</u>
<u>Dec 10</u>							<u>2652.10</u>						
<u>1969</u>	<u>LH</u>	<u>-</u>	<u>-</u>										<u>Levels only</u>
<u>APR 19</u>	<u>"</u>	<u>-</u>	<u>-</u>				<u>2652.36</u>						<u>LEVELS ONLY</u>
<u>MAR 7</u>	<u>"</u>						<u>2651.94</u>						<u>" "</u>
<u>APR 23</u>	<u>"</u>						<u>2652.01</u>						<u>" "</u>

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

WATER RESOURCES BRANCH

R-40A
(5-59)

STATION No. 8NA 64

DESCRIPTION OF STATION

On Columbia Creek
Lake
River
at Canal Flats near B.C. Prov. B.C.
Located in _____ Sec. _____ Tp. _____ Rge. _____
Latitude 50°09'53" Longitude 115°50'47"
Established December 23, 1966 by J. Gilbert
Name of observer _____ P.O. Address _____
pay \$ _____ distance _____ frequency of observation _____

Location of station with respect to towns, bridges, highways, railroads, tributaries, islands, falls, dams, etc.: 1.8 miles W.N.W. of the post office in Canal Flats. 1.1 miles N.N.W. of the Canal Flats railway Station

Description and location of the gauge. If chain gauge or wire weight, give length from end of weight to the first marker: No gauge. Water levels are taken by level instrument.

Description of the equipment from which measurements are made:
N/A

Location and description of initial point for soundings:
N/A

Channel above the station: straight or curved for about N/A feet, water swift, sluggish, etc.
Channel below the station: straight or curved for about N/A feet, water swift, sluggish, etc.
Right bank: high, rocky, or low, liable to overflow, clean or wooded, etc.:
N/A

Left bank: high, rocky, or low, liable to overflow, clean or wooded, etc.:
N/A

Bed of the stream: rocky, gravel, sandy, clean or vegetation, shifting:
N/A

Number of channels at low and high water, approximate depth of water, etc.:

N/A

Note any condition which may affect the measurement, etc.:

Levels should be taken when the Lake is calm.

Bench-marks: Describe fully, give elevation above zero of the gauge and above sea-level or other datum, if possible; make sketch bringing out the principal features:

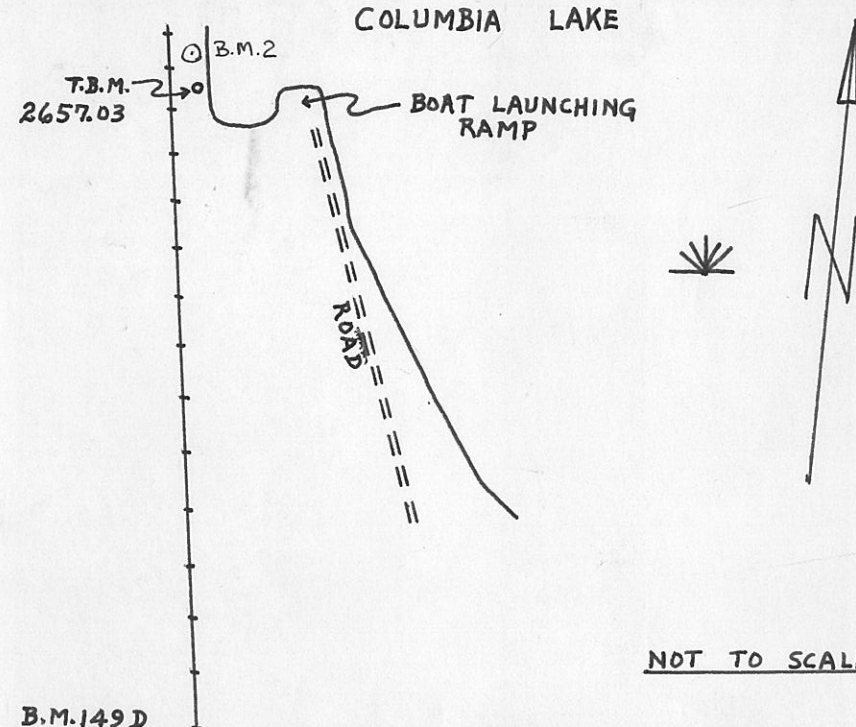
B.M. 149D Elev. 2662.592,⁽⁴⁷⁾ located 1.1 miles North of CPR station; 230 ft. South of a rock cut; 20 feet West of centre of track; in East face of rock, 8 inches above ground; bolt set horizontally.

T.B.M., Elev. 2,657.03, located on the lake shore opposite to the boat-launching ramp, between the R.R. tracks and the ramp; a nail driven ~~horizontally~~ VERTICALLY into a small poplar tree root

Take sufficient soundings to develop a cross-section of stream bed and, by use of level, develop banks to above high-water mark. Refer all elevations to gauge datum.

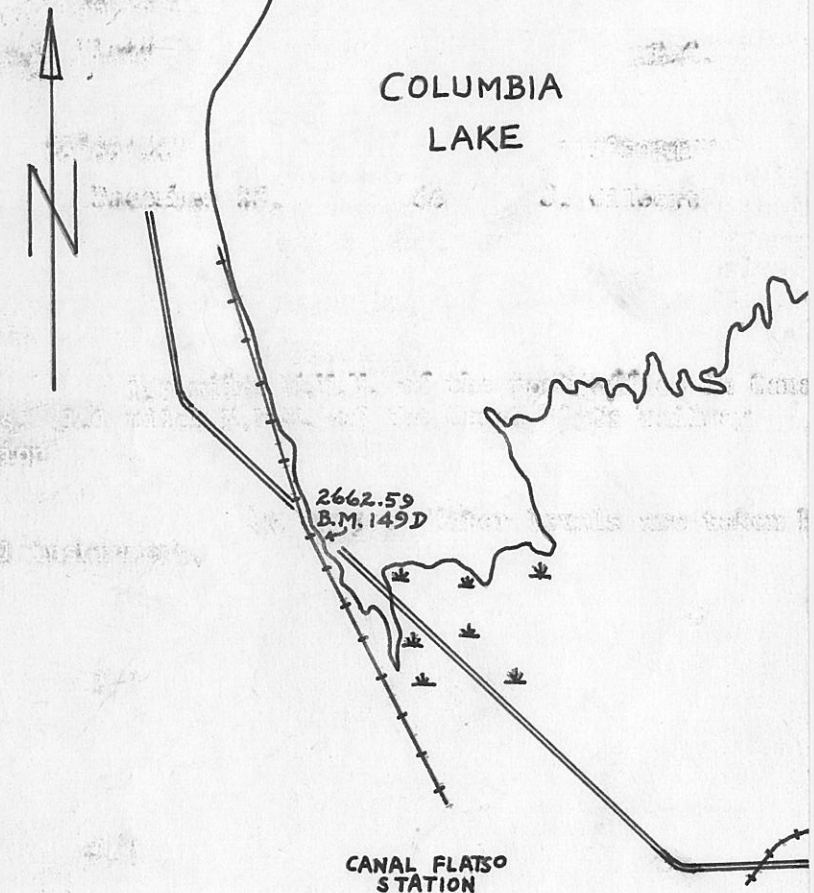
B.M. 2. ELEV. 2656.665 (70) LAG BOLT DRIVEN HORIZONTALLY IN BASE OF 7 INCH DIA. COTTONWOOD, BETWEEN RAILROAD & BOAT LAUNCHING RAMP AND 40 FT. N OF T.B.M.

SKETCH OF BENCH-MARK LOCATIONS



NOT TO SCALE

SKETCH OF STATION LOCATION



SCALE:- 1" = 1/2 MILE

SHEET M.S. 60

Make a sketch showing the relative location of the station, gauge, bench-marks, tributaries, towns, etc.

PREPARED OR REVISED BY	DATE
LH	20-10-69
LH	JUL/70