

" The Inflow to the Factory Race"

Memorandum, observation and discharge of the Factory Race November 27 and 28, 1915.

November 27, 1915:

4:00 p.m. at head Haws Drain, 60 feet below penstock Poulsen Mill, small stream not to exceed 0.10 sec.ft, entering drain from branch of City East Union. (This drain enter the Factory race below the Provo Ice & Cold Storage Plant.)

5:20 to 5:50 p.m., with Walter Peay, shut off Factory Race at head, ( 60 feet below penstock of Provo Pressed Brick Company Plant.) turned larger portion of stream down channel to river, west of Railway track, put gate boards in gate, covered with canvass, and made tight with clay, at 5:50 p.m., there is not to exceed 0.05 sec.ft. leaking through gate.

Tested stop watch No. 3364B, 7:10 p.m. to 8:10 p.m., one hour, running precise.

November 28, 1915:

Party Mr. Wentz, Meter, Mr. Pratt- Notes.

9:35 a.m. at head Haws drain, from branch of City East Union entering drain, stream .1 x .7 x velocity 1.25 = Discharge . . . . . 0.09 s.f.

9:49 a.m. at head Factory Race, leakage through gate measured 15 feet below headgate, stream .05 x .6 x vel. 1.25 = discharge . . . 0.04 s.f. Set gage point #1, flush with water surface, one foot below gate.

Channel is examined by walking along bed and bank.

100 feet below head, springs in bed along West side.

At Factory Race rating flume, 200 feet below head, discharge approximately 0.5 second foot.

250 feet below head, springs along West side.

400 feet below head, springs along East and West sides.

Gate to Ice Plant by-pass leaking approx. 0.5 sec.ft.

Drain from Brick Yard lands, entering Factory Race 150 feet below Ice Plant headgate, .3 x 1. x vel. 1.4; discharge . . . . . 0.42 s.f.

10:20 a.m. through head gate to wheel of Ice Plant . . . . . 1.50s.f. ( At this measurement T.C.Thomptson joins the party) Set gage point #2 on post of Ice Plant head gate, flush with water surface.

100 feet above Ice Plant penstock, Smith's Springs, along East side of channel, seeping through gravel 12 feet along bank.

50 feet below Ice Plant, discharge approximately 3. sec.ft.

Diversion 200 feet below Ice Plant, discharge 0.0

11:00 a.m., 150 feet above penstock Hoover Bros. Mill, set gage point #3 flush with water surface, discharge . . . . . 4.43s.f. From head to this point channel is through a clay loam with a heavy clay subsoil.



(3)

4:45 P.M. gage point # 7 reads 0.0-no change.  
 4:48 p.m. " " #6 " 0.0 " "  
 (Mr. Pratt quits the party at Center Street.)  
 4:57 p.m. Gage point # 3 reads 0.0 -no change.  
 5:13 p.m. " " # 1 " 0.0 " " . ( In presense Mr. Peay)  
 5:26 p.m. " " at Poulsens Mill inflow to drain reads 0.0 no-  
 change.

6:33 pm. to 7:33 p.m.,one hour, tested stop watch No.3364B, running  
 precise.

On this work Meter No.1350 was used, Rating,individual, November 24,  
 1914,by Bureau of Standards,U.S.Government. Meter in perfect condition,  
 mounted on standard equipment,timed with stop watch No.3364B,tested  
 before and after use and running precise.

The whole channel from head to First Ward Pasture was carefully examined  
 by walking the entire distance along bed and banks,there is no inflow  
 or outflow other than is herein noted.

The field work on all these measurement and gagings,was done with the  
 greatest care and precision,and the calculations were made by both  
 Mr.Wentz and Mr. Pratt.

DEDUCTIONS:

Inflow from head and East Union (River Water) . . . . .	0.13	sec.ft.
Rising in channel from head to gates of Provo Ice & Cold Storage Plant and available for use to plant . . . . .	1.87	" "
Available at Hoovers Bros. Mill exclusive river water. . . . .	4.30	" "
Available at Woolen Mills,exclusive river water . . . . .	5.49	" "
Available at Ward & Sons Mill,exclusive river water . . . . .	5.44	" "
Available Smoot Lumber Co Mill,exclusive river water. . . . .	5.61	" "
Available at head gate first Ward Pasture from Factory Race,exclusive river water . . . . .	5.65	" "
Total Inflow from flowing wells. . . . .	0.47	" "
Sewage inflow below First Ward Pasture Diversion . . . . .	5.26	" "
Total volume at Sewer Inflow near North-west corner 1st Ward Pasture,exclusive river water:		
By-pass Smoot Lumber Co.Plant,Main Race. . . . .	5.65	" "
Sewage . . . . .	5.26	" "
Arising in Smoot Lumber Co. Tail Race . . . . . (Est)	0.75	" "
Total . . . . .	11.66	" "

Resp Submitted.

Signed

