

9-275-F  
(Rev. 10-81)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Meas. No. ....  
Comp. by. **ARB**

WATER RESOURCES DIVISION

Sta. No. **P10** DISCHARGE MEASUREMENT NOTES Checked by .....

**Delta Stream**  
Date **29 Dec 08** **TD 364** Party **ARB & PW**  
Width **19.5** Area **7.89** Vel. **1.985** G. H. .... Disch. **15.662**  
Method **.6** No. secs. .... G. H. change. .... in .... hrs. Susp. **Red**  
Method coef. **0.6** Hor. angle coef. **1** Susp. coef. **1** Meter No. **Sci. Inst.**  
Type of meter **Pygmy** Date rated **6/99** Tag checked .....  
Meter **-** ft. above bottom of wt. Spin before meas. **2'20"** after **-**  
Meas. plots. .... % diff. from. .... rating. Levels obtained. **NO**

| GAGE READINGS    |               |     |         |             | WATER QUALITY MEASUREMENTS    |                                     |
|------------------|---------------|-----|---------|-------------|-------------------------------|-------------------------------------|
| Time             | Inside        | ADR | Graphic | Outside     | No. .... Yes. <b>X</b> ...    | Time <b>2000</b>                    |
| <b>1840</b>      | <b>5.0246</b> |     |         | <b>0.61</b> | <b>.02</b>                    | Samples Collected                   |
|                  |               |     |         |             | No. .... Yes. <b>X</b> ...    | Time <b>2000</b>                    |
|                  |               |     |         |             | Method Used                   |                                     |
| <b>1945</b>      | <b>5.141</b>  |     |         | <b>.543</b> | <b>.02</b>                    | EDI .... EWI .... Other. <b>DIP</b> |
|                  |               |     |         |             | SEDIMENT SAMPLES              |                                     |
|                  |               |     |         |             | No. <b>X</b> ... Yes. ....    | Time ....                           |
|                  |               |     |         |             | Method Used                   |                                     |
|                  |               |     |         |             | EDI .... EWI .... Other. .... |                                     |
|                  |               |     |         |             | BIOLOGICAL SAMPLES            |                                     |
| Weighted M.G.H.  |               |     |         |             | Yes. ....                     | Time ....                           |
| G. H. correction |               |     |         |             | No. <b>X</b> ...              | Type ....                           |
| Correct M.G.H.   |               |     |         |             |                               |                                     |

Check bar. chain found ..... changed to ..... at ..... **Control**  
Wading, cable, ice, boat, upstr., downstr., side bridge. **10** feet, mile, **above** below gage.  
Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%); based on the following cond:  
Flow. **Even, moderately turbulent**  
Cross section **Un: form, Cobble, Gravel, SAND**  
Control **Free & Clear**  
Gage operating **Yes** Weather **Clear, warm, breeze**  
Intake/Orifice cleaned ..... Air ..... °C@ ..... Water **11.17** °C@ .....  
Record removed **NO** Extreme Indicator: Max. .... Min. ....  
Manometer N<sub>2</sub> Pressure Tank **1240** Feed **14** Bbl rate **OK** per min.  
CSG checked ..... Stick reading .....  
Observer .....  
HWM ..... outside, in well  
Remarks **SC: 88.75, AT: 9.8°C, BV: 13.6 v**

G.H. of zero flow ..... ft. Sheet No. .... of ..... sheets

.0 .10 .20 .30 .40 .50 .60 .70 .75  
 F10 taken River at— 29 Dec 08

| Angle coef-<br>ficient | Dist.<br>from<br>initial<br>point | Width | Depth | Observa-<br>tion depth | Rev-<br>olu-<br>tions | Time<br>in<br>sec-<br>onds | VELOCITY    |                          | Adjusted<br>for hor.<br>angle or | Area  | Discharge |      |
|------------------------|-----------------------------------|-------|-------|------------------------|-----------------------|----------------------------|-------------|--------------------------|----------------------------------|-------|-----------|------|
|                        |                                   |       |       |                        |                       |                            | At<br>point | Mean<br>in ver-<br>tical |                                  |       |           |      |
|                        | 3.5                               | 1.25  | 0     | REL                    | 0                     | 1858                       |             |                          |                                  |       |           | .80  |
|                        | 6.0                               | 1.75  | .25   | .6                     | 40                    | 48                         |             | .832                     |                                  | 0.438 | 0.364     | .85  |
|                        | 7.0                               | 1.75  | .38   |                        | 40                    | 46                         |             | .866                     |                                  | 0.665 | 0.576     |      |
|                        | 7.8                               | 0.9   | .50   |                        | 50                    | 42                         |             | 1.17                     |                                  | 0.45  | 0.527     | .90  |
|                        | 8.6                               | 0.8   | .50   |                        | 100                   | 64                         |             | 1.53                     |                                  | 0.4   | 0.612     | .90  |
|                        | 9.4                               | 0.8   | .40   |                        | 35                    | 45                         |             | .778                     |                                  | .32   | 0.249     | .92  |
|                        | 10.2                              | 0.8   | .60   |                        | 50                    | 63                         |             | .793                     |                                  | .48   | .3806     | .94  |
|                        | 11.0                              | 0.8   | .68   |                        | 150                   | 58                         |             | 2.51                     |                                  | .544  | 1.365     |      |
|                        | 11.8                              | 0.8   | .70   |                        | 150                   | 53                         |             | 2.75                     |                                  | .56   | 1.54      | .96  |
|                        | 12.6                              | 0.8   | .55   |                        | 150                   | 52                         |             | 2.80                     |                                  | .44   | 1.232     | .97  |
|                        | 13.4                              | 0.8   | .60   |                        | 150                   | 48                         |             | 3.03                     |                                  | .48   | 1.454     | .98  |
|                        | 14.2                              | 0.8   | .60   |                        | 150                   | 47                         |             | 3.10                     |                                  | .48   | 1.488     | .99  |
|                        | 15.0                              | 0.8   | .62   |                        | 150                   | 48                         |             | 3.03                     |                                  | 0.496 | 1.503     |      |
|                        | 15.8                              | 0.8   | .58   |                        | 150                   | 56                         |             | 2.60                     |                                  | .464  | 1.2064    |      |
| o                      | 16.6                              | 0.8   | .52   |                        | 100                   | 41                         |             | 2.37                     |                                  | .416  | 0.986     | 1.00 |
|                        | 17.4                              | 0.8   | .50   |                        | 100                   | 40                         |             | 2.43                     |                                  | .4    | 0.972     |      |
|                        | 18.2                              | 0.8   | .40   |                        | 100                   | 43                         |             | 2.26                     |                                  | .32   | .7232     |      |
|                        | 19.0                              | 0.8   | .40   |                        | 80                    | 60                         |             | 1.31                     |                                  | .32   | .4192     | .99  |
|                        | 19.8                              | 0.8   | .15   |                        | 20                    | 42                         |             | .489                     |                                  | .12   | 0.0587    | .98  |
|                        | 21.0                              | 1.0   | .20   |                        | 40                    | 42                         |             | .946                     |                                  | 0.2   | .1892     | .97  |
|                        | 22.0                              | 2.2   | .22   |                        | 25                    | 46                         |             | 1.22                     |                                  | .484  | .5905     | .96  |
|                        | 23.0                              | 2     | 0     | LEW                    | 0                     | 1942                       |             |                          |                                  |       |           |      |
|                        | 19.5                              |       |       |                        |                       |                            |             | 1.985                    |                                  | 7.89  | 15.667    | .94  |
|                        |                                   |       |       |                        |                       |                            |             |                          |                                  |       |           | .92  |
|                        |                                   |       |       |                        |                       |                            |             |                          |                                  |       |           | .90  |
|                        |                                   |       |       |                        |                       |                            |             |                          |                                  |       |           | .85  |
|                        |                                   |       |       |                        |                       |                            |             |                          |                                  |       |           | .80  |

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