

**DEPARTMENT OF THE INTERIOR**  
**Geological Survey**  
**WATER RESOURCES DIVISION**  
**DISCHARGE MEASUREMENT AND**  
**GAGE INSPECTION NOTES**

Meas. No. (44)  
 Comp. by Aquacale  
 Checked by \_\_\_\_\_  
 Files: Anderson A 123101  
Anderson B 123101

Sta. No. \_\_\_\_\_  
 Sta. Name Anderson D H 1  
 Date DEC 31, 2001 Party CJ, JT, JW  
 Width 13.0 / 5.80 Area 2.31 / 0.84 Vel. 0.76 / 1.43 G.H. \_\_\_\_\_ Disch. 1.74 + 1.20 = 2.94  
 Method 4 No. secs. \_\_\_\_\_ G.H. change \_\_\_\_\_ in \_\_\_\_\_ hrs.  
 Method coef. 1.0 Horiz. angle coef. 1.0 Susp. ROD Tags checked \_\_\_\_\_  
 Meter Type pygmy Meter No. 8009223 Meter \_\_\_\_\_ ft. above bottom of wt.  
 Rating used 6199 Spin test before meas. 1.19"; after 0.16  
 Meas. plots \_\_\_\_\_ % diff. from rating no. \_\_\_\_\_ Indicated shift \_\_\_\_\_

**GAGE READINGS**

Time	WT	WT (m)	SL	SCAD (m)	Inside	Outside
<u>10:20</u>	<u>0.61</u>	<u>0.2</u>	<u>25.6</u>	<u>28.7</u>	<u>1.60</u>	<u>0.45</u>
	Start		<u>SC<sub>m</sub> = 51.6</u>			
	Finish					
Weighted MGH						
GH correction						
Correct MGH						

Samples collected: water quality, sediment, biological, other \_\_\_\_\_  
 Measurements documented on separate sheets: water quality, aux./base gage, other \_\_\_\_\_  
 Rain gage serviced/calibrated \_\_\_\_\_  
 Weather: overcast, 70-80  
 Air Temp. 11.0 °C at 10:20  
 Water Temp. 0.61 °C at 10:20  
 Check bar/chain found \_\_\_\_\_  
 Changed to \_\_\_\_\_ at \_\_\_\_\_  
 Correct \_\_\_\_\_

Wading, cable, ice, boat, upstr., downstr., side bridge, @ overflow construction + 20' d.s. ft., mi. upstr., downstr. of gage.  
 Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%), based on following conditions: Flow: irregular - uneven  
 Cross section: 2 measurements made, 1 @ overflow, 1 d.s. of control. Added two together for total / Will make another Qm as  
 Gage operating: control is stage near this p.m. Record Removed \_\_\_\_\_  
 Battery voltage: 13.64 Intake/Orifice cleaned/purged: \_\_\_\_\_  
 Bubble-gage pressure, psi: Tank 1850, Line 10; Bubble-rate 70 /min.  
 Extreme-GH indicators: max \_\_\_\_\_, min \_\_\_\_\_  
 CSG checked: \_\_\_\_\_ HWM height on stick \_\_\_\_\_ Ref. elev. \_\_\_\_\_ HWM elev. \_\_\_\_\_  
 HWM inside/outside: \_\_\_\_\_  
 Control: \* SEE MISC NOTES

Remarks: LINE PRESS. IS HIGH ~ 50 PSI, CLOSE CONTROL AND ADJUT. RESET TO 10 PSI \* SEE MISC NOTES

GH of zero flow = GH \_\_\_\_\_ - depth at control \_\_\_\_\_ = \_\_\_\_\_ ft., rated \_\_\_\_\_







GAGE ID# 00000009  
 DATE 12/31/2001  
 TRANSECT 01  
 USER ID# 7237  
 SH BEGIN 0.00  
 SH END 0.00  
 GH BEGIN 0.00  
 GH END 0.00  
 EST. DISCHARGE 0.00  
 EST. Q (ADJ) 1.76  
 METER ID# 000000  
 AQUACALC ID# 671  
 SOUNDING WT. 0  
 START MEAS. AT LEW  
 METER TYPE Pygmy ST2  
 METER CONST. C1 0.9604  
 METER CONST. C2 0.0312  
 METER CONST. C3 0.9604  
 METER CONST. C4 0.0312  
 METER CONST. C5 0.0  
 MEASUREMENT TIME 40  
 MEAS. SYSTEM SAE  
 PERCENT SLOPE 0.00  
 TOTAL VERTICALS 24  
 TOTAL STATIONS 25  
 TOTAL WIDTH 13.00  
 TOTAL AREA 2.31  
 TOTAL DISCHARGE 1.760  
 PCT DIFFERENCE 0.0  
 MEAN VELOCITY 0.76  
 WETTED PERIMETER 13.04  
 HYDRAULIC RADIUS 0.18  
 MANNING FACTOR 0.00

1st Qm

OB	DIST	DEPTH	ICE	REVS	TIME	COS:VF	LOC	COEF	CLOCK	VEL	AREA	FLOW(Q)	FLAGS
1	18.50	0.00	0.00	0	0.0	1.00	6	1.00	10:30	0.000	0.000	0.000	
2	17.50	0.12	0.00	21	40.1	1.00	6	1.00	10:30	0.534	0.090	0.048	3
3	17.00	0.12	0.00	25	40.2	1.00	6	1.00	10:32	0.628	0.060	0.038	3
4	16.50	0.12	0.00	25	41.3	1.00	6	1.00	10:33	0.613	0.060	0.037	3
5	16.00	0.20	0.00	28	41.2	1.00	6	1.00	10:34	0.684	0.100	0.068	3
6	15.50	0.24	0.00	20	40.8	1.00	6	1.00	10:35	0.502	0.120	0.060	3
7	15.00	0.26	0.00	17	42.6	1.00	6	1.00	10:36	0.414	0.143	0.059	3
8	14.40	0.20	0.00	22	40.8	1.00	6	1.00	10:37	0.549	0.120	0.066	3
9	13.80	0.20	0.00	31	40.7	1.00	6	1.00	10:39	0.763	0.120	0.092	1 3
10	13.20	0.20	0.00	35	40.3	1.00	6	1.00	10:41	0.865	0.120	0.104	1 3
11	12.60	0.20	0.00	6	46.2	1.00	6	1.00	10:42	0.156	0.120	0.019	34
12	12.00	0.18	0.00	35	40.1	1.00	6	1.00	10:43	0.869	0.099	0.086	3
13	11.50	0.20	0.00	53	40.4	1.00	6	1.00	10:45	1.291	0.100	0.129	1 3
14	11.00	0.30	0.00	44	40.4	1.00	6	1.00	10:46	1.077	0.150	0.162	1
15	10.50	0.16	0.00	30	41.1	1.00	6	1.00	10:47	0.732	0.072	0.053	3
16	10.10	0.20	0.00	40	40.7	1.00	6	1.00	10:48	0.975	0.080	0.078	3
17	9.70	0.20	0.00	54	40.2	1.00	6	1.00	10:49	1.321	0.080	0.106	1 3
18	9.30	0.36	0.00	52	40.4	1.00	6	1.00	10:50	1.267	0.144	0.182	1
19	8.90	0.30	0.00	33	41.1	1.00	6	1.00	10:51	0.802	0.135	0.108	1
20	8.40	0.20	0.00	9	21.3	1.00	6	1.00	10:52	0.437	0.110	0.048	3
21	7.80	0.16	0.00	32	40.8	1.00	6	1.00	10:53	0.784	0.104	0.082	3
22	7.10	0.12	0.00	19	20.3	1.00	6	1.00	10:54	0.930	0.102	0.095	1 3
23	6.10	0.10	0.00	40	40.9	1.00	6	1.00	10:55	0.970	0.080	0.039	3
24	6.10	0.10	0.00	0	0.0	1.00	6	1.00	0:00	0.000	0.000	0.000	34
25	5.50	0.00	0.00	0	0.0	1.00	6	1.00	0:00	0.000	0.000	0.000	

1. USER EXCEEDED SINGLE SUBSECTION 05% EST. Q.
2. THE PRODUCT OF VELOCITY AND DEPTH EXCEEDED THE SELECTED SOUNDING WEIGHT.
3. INCORRECT METER USED FOR DEPTH OF STREAM.
4. INCORRECT METER USED FOR VELOCITY OF STREAM.
5. ABNORMAL VELOCITY PROFILE CALCULATED.
6. DEPTH ESTIMATED BY USER.
7. VELOCITY ESTIMATED BY USER.
8. TURBULENT VELOCITY MEASURED



GAGE ID# 00000009  
 DATE 12/31/2001  
 TRANSECT 02  
 USER ID# 7237  
 SH BEGIN 0.00  
 SH END 0.00  
 GH BEGIN 0.00  
 GH END 0.00  
 EST. DISCHARGE 0.00  
 EST. Q (ADJ) 1.20  
 METER ID# 80092  
 AQUACALC ID# 671  
 SOUNDING WT. 0  
 START MEAS. AT LEW  
 METER TYPE Pygmy ST2  
 METER CONST. C1 0.9604  
 METER CONST. C2 0.0312  
 METER CONST. C3 0.9604  
 METER CONST. C4 0.0312  
 METER CONST. C5 0.0  
 MEASUREMENT TIME 40  
 MEAS. SYSTEM SAE  
 PERCENT SLOPE 0.00  
 TOTAL VERTICALS 13  
 TOTAL STATIONS 13  
 TOTAL WIDTH 5.80  
 TOTAL AREA 0.84  
 TOTAL DISCHARGE 1.200  
 PCT DIFFERENCE 0.0  
 MEAN VELOCITY 1.43  
 WETTED PERIMETER 5.89  
 HYDRAULIC RADIUS 0.14  
 MANNING FACTOR 0.00

*2nd Am*

OB	DIST	DEPTH	ICE	REVS	TIME	COS:VF	LOC	COEF	CLOCK	VEL	AREA	FLOW(Q)	FLAGS
1	6.50	0.00	0.00	0	0.0	1.00	6	1.00	11:10	0.000	0.000	0.000	
2	6.80	0.26	0.00	50	21.1	1.00	6	1.00	11:10	2.307	0.091	0.210	1 3
3	7.20	0.18	0.00	35	41.0	1.00	6	1.00	11:11	0.851	0.072	0.061	1 3
4	7.60	0.20	0.00	60	40.6	1.00	6	1.00	11:12	1.450	0.080	0.116	1 3
5	8.00	0.20	0.00	36	40.3	1.00	6	1.00	11:12	0.889	0.090	0.080	1 3
6	8.50	0.14	0.00	6	19.1	1.00	6	1.00	11:13	0.333	0.070	0.023	3
7	9.00	0.16	0.00	48	40.3	1.00	6	1.00	11:15	1.175	0.084	0.099	1 3
8	9.55	0.20	0.00	96	40.2	1.00	6	1.00	11:16	2.325	0.100	0.233	1 3
9	10.00	0.18	0.00	94	40.2	1.00	6	1.00	11:16	2.277	0.086	0.196	1 3
10	10.50	0.10	0.00	43	40.5	1.00	6	1.00	11:18	1.051	0.050	0.053	3
11	11.00	0.10	0.00	41	41.1	1.00	6	1.00	11:19	0.989	0.060	0.059	3
12	11.70	0.10	0.00	46	40.4	1.00	6	1.00	11:21	1.125	0.065	0.073	1 3
13	12.30	0.00	0.00	0	0.0	1.00	6	1.00	0:00	0.000	0.000	0.000	

1. USER EXCEEDED SINGLE SUBSECTION 05% EST. Q.
2. THE PRODUCT OF VELOCITY AND DEPTH EXCEEDED THE SELECTED SOUNDING WEIGHT.
3. INCORRECT METER USED FOR DEPTH OF STREAM.
4. INCORRECT METER USED FOR VELOCITY OF STREAM.
5. ABNORMAL VELOCITY PROFILE CALCULATED.
6. DEPTH ESTIMATED BY USER.
7. VELOCITY ESTIMATED BY USER.
8. TURBULENT VELOCITY MEASURED