

U.S. DEPARTMENT OF THE INTERIOR  
U.S. Geological Survey  
WATER RESOURCES DIVISION  
DISCHARGE MEASUREMENT AND  
GAGE INSPECTION NOTES

Meas. No. \_\_\_\_\_

Comp. by \_\_\_\_\_

Checked by \_\_\_\_\_

Sta. No. \_\_\_\_\_  
Sta. Name CL- Commonwealth  
Date Juni 23, 2002 Party JG, JB, KC 9:45/10:45  
Width \_\_\_\_\_ ea Vel. \_\_\_\_\_ G.H. \_\_\_\_\_ Disch. \_\_\_\_\_  
Method \_\_\_\_\_ No. secs. \_\_\_\_\_ G.H. change \_\_\_\_\_ in \_\_\_\_\_ hrs.  
Method coef. \_\_\_\_\_ Horiz. angle coef. \_\_\_\_\_ Susp. \_\_\_\_\_ Tags checked \_\_\_\_\_  
Meter Type \_\_\_\_\_ Meter No. \_\_\_\_\_ Meter \_\_\_\_\_ ft. above bottom of wt.  
Rating used \_\_\_\_\_ Spin test before meas. \_\_\_\_\_, after \_\_\_\_\_  
Meas. plots \_\_\_\_\_ % diff. from rating no. \_\_\_\_\_ Indicated shift \_\_\_\_\_

GAGE READINGS					
Time	Down			Inside	Outside
	in				ft
	Start				
<u>9:53</u>				<del>8.338</del>	
<u>10:35</u>				<del>8.328</del>	
	Finish				
<u>34.5</u>				<u>8.356</u>	<u>8.148</u>
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: 100%cc - stratus; wind = 5-10 mph

Air Temp. 3.4/4.6 °C at 9:53/10:35 IG

Water Temp. 4.4 °C at 9:45

Check bar/chain found \_\_\_\_\_

Changed to \_\_\_\_\_ at \_\_\_\_\_

Correct \_\_\_\_\_

Wading, cable, ice, boat, upstr., downstr., side bridge, \_\_\_\_\_ ft., mi. upstr., downstr. of gage.

Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%); based on following

conditions: Flow: \_\_\_\_\_

Cross section: \_\_\_\_\_

Gage operating: \_\_\_\_\_ Record Removed \_\_\_\_\_

Battery voltage: 13.315 Intake/Orifice cleaned/purged: \_\_\_\_\_

Bubble-gage pressure, psi: Tank ~50 → 2000, Line 13 → 10; Bubble-rate 28 /min.

Extreme-GH indicators: max \_\_\_\_\_, min \_\_\_\_\_

CSG checked: \_\_\_\_\_ HWM height on stick \_\_\_\_\_ Ref. elev. \_\_\_\_\_ HWM elev. \_\_\_\_\_

HWM inside/outside: \_\_\_\_\_

Control: orifice slightly above PZF

Remarks: LEVELS; installed new N<sub>2</sub> tank

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

Sheet No. \_\_\_\_\_ of \_\_\_\_\_ sheets

Time 10:23 → 10:25

MATBE  
INFLC ST6  
RD65

→ turned N<sub>2</sub> tank off @ 10 AM

	Time	2G	0G
Wtr temp	<u>29.45</u>	N/A	<u>4.4 °C</u>
Sp. Cond	<u>29.45</u>	N/A	<u>65.7 μS</u>

Top of rebar elevation from today's levels = 11.024 ft

Tapedown =  $34.5 \text{ in } \left( \frac{1 \text{ ft}}{12 \text{ in}} \right) = 2.875 \text{ ft} \rightarrow 11.024 - 2.875 = 8.149 \text{ ft}$   
11.023 8.148

↳ NO TIME! AGAIN!

Yes flow

from ponded wtr @ 9:45

Gauge:

Commonwealth

Date	11 - Jan - 2003		23 - Jan - 2003	
time of visit (start & finish)	9:20		9:45 / 10:45	
party	JG, PS, KC		JB, JG, KC	
cloud cover (% type)	0%		100% stratus	
wind (spd, dir)	< 1 mph		5-10 mph	
air temp	~		7.2°C	
surveying?	No		Yes	
photo? (#, which camera)			Louise Canon	
to do items? (y/n)			N	
which field notebook?			Karen	
Flow measurements (times)	9:30		YES FLOW	
condition of control, probes			good, on ice slightly above PLF	
method (meter, flume, visual)			visual	
discharge (units)			< 0.25 L/sec	
outside stage (staff or top down)	2.3			
CR10 stage reading				
<b>Inside Box</b>				
CR10 Channels (times)	9:30		9:53 10:35	
ch1 stage	8.94		8.338 8.328	
water temp				
conductivity				
ch5 battery voltage	13.32		13.315 13.369	
ch2 air temp	9.3		3.416 4.6047	
Year, Day, Time	05		03✓, 23✓, 10:23 → 10:25✓	
settings o.k?	✓		✓	
*0?	✓		✓	
N2 tank pressure (psi)	500		~500 // 2000	
N2 feed pressure (psi)	11		13 // 10	
purge?	-		-	
conoflow bubble rate (per min)	40		28 bubbles/min	
Stream Chemistry (times)	10:10 AM		Yes from pond water	
water temp. (units)	4.3°C			
sp. cond. (units)	sc. 41.4 μS		cond. 25.1 μS	
pH and temp of probe			65.7 @ 4.4°C (flask), 39.9 @ 4.4°C of	
instrument notes (i.e. cal. time)				
water samples collected?			Yes	

101 - COMMONWEALTH

1/23/02

Commonwealth 23-Jan JGA EVM L

10 AM - Turned off N<sub>2</sub> tank

Downloaded prog from CR10 onto a new storage module

Station	BS	HI Inst	F.S	Elev	Remarks
RM1	3.421	13.421		10.000	30 DSR
RP2			4.159	9.262	11 US
RP3			2.396	11.025	top of rebar
orifice			5.230	8.191	orifice nut
PZF			5.377	8.044	
BM1	3.420				

	BS	HI Inst	FS	Elev	Remarks
RM1	3.321	13.321			
RP2			4.055	9.266	
RP3			2.297	11.024	
orifice			<del>5.180</del> 5.129	<del>8.144</del> 8.192	
PZF			5.280	8.041	
BM1	3.322				

Tape down from H<sub>2</sub>O surface  
34.5 inches

Inside Gage 8.356 on CR10

1/23/2003

Station	BS	HI	FS	Elev.
RM1	3.421	13.421		<b>10.000</b>
RP2			4.159	9.262
RP3			2.396	11.025
orifice			5.230	8.191
PZF			5.377	8.044
TP			4.159	9.262
	4.055	13.317		
PZF			5.280	8.037
orifice			5.129	8.188
RP3			2.297	11.020
RP2			4.055	9.262
RM1			3.322	9.995

Station	Ave Elev
RM1	9.998
RP2	9.262
RP3	11.023
orifice	8.190
PZF	8.041



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WATER RESOURCES DIVISION  
WYOMING DISTRICT

SUMMARY OF LEVELS

Sta. ID \_\_\_\_\_ Sta. Name \_\_\_\_\_

Party \_\_\_\_\_ Date \_\_\_\_\_

Purpose of Levels \_\_\_\_\_

Chain/Wire Weight found (not needed) at \_\_\_\_\_ HR.

Chain/Tape Length found (not needed) at \_\_\_\_\_ HR.

Corrected to (not needed) at \_\_\_\_\_ HR.

Instrument Type \_\_\_\_\_ S/N \_\_\_\_\_

Rod Length Checked Y N Two-Peg Test Date \_\_\_\_\_

Point	Elevation given	Mean elev. found	Diff
RM			
RM			
RM			
RM			
CK Bar <u>(not needed)</u>			

Time	OG	IG				WS	Diff

Levels computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_

LEVELS

1/23/02

Commencement 23-Jan JGA-EVMI

10 AM - Turned off N<sub>2</sub> tank

Downloaded prog from CR10 onto a new storage module

Stn	BS	HL Inst	F.S	Elev	Remarks
RM1	3.421	13.421		10.000	30 DSR
RP2			4.159	9.262	11 US
RP3			2.396	11.025	top of rebar
orifice			5.230	8.191	on fire nut
PZF			5.377	8.044	
BMI	3.422				

	BS	HL Inst	FS	Elev	Remarks
RM1	3.321	13.321			
RP2				4.055	9.266
RP3				2.297	11.024
orifice				<del>5.180</del> 5.129	<del>8.191</del> 8.192
PZF				5.280	8.041
BMI	3.322				

Tap down from H<sub>2</sub>O surface  
34.5 inches

Inside Gage 8.356 on CR10