

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

Meas. No. 40
Comp. by Aguacala
Checked by _____

Julian Day
364

Sta. No. _____
Sta. Name B1-Prisca
Date Dec 30, 2002 Party PAS, KDC
Width 7.90 Area 1.20 Vel. 0.31 G.H. _____ Disch. 0.37
Method 0.6 No. secs. _____ G.H. change _____ in _____ hrs.
Method coef. _____ Horiz. angle coef. 1.0 Susp. _____ Tags checked OK
Meter Type pygmy Meter No. 6-99 Meter _____ ft. above bottom of wt.
Rating used _____ Spin test before meas. 1:15 after OK
Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

GAGE READINGS						
Time				05:10	Inside	Outside
13:00				1.44	1.89	0.44 ± 0.02
	Start					
13:40					1.8859	
14:27				1.41		0.41 ± 0.02
15:48	Finish			1.34		0.34
16:40				1.31	1.669	0.31 ± 0.02
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: 70° CC, 5-10 mph

Air Temp. 4.82 °C at 13:30 IG

Water Temp. 9.99 °C at _____ IG

Check bar/chain found _____

Changed to _____ at _____

Correct _____

Wading, cable, ice, boat, upstr., downstr., side bridge, 500 ft, mi. upstr., downstr. of gage.

Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%); based on following
conditions: Flow: even, steady flow lines

Cross section: sand, gravel

Gage operating: yes Record Removed _____

Battery voltage: 13.865 Intake/Orifice cleaned/purged: _____

Bubble-gage pressure, psi: Tank 750, Line 14; Bubble-rate 20 /min.

Extreme-GH indicators: max _____, min _____

CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____

HWM inside/outside: _____

Control: good condition - sandbag, cobble, tarp

Remarks: Leak detected in N₂ tank, need new N₂ tank

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

Sheet No. _____ of _____ sheets

Time Old 13:38 → New 13:41

Time Old _____

WT 14:17 5.0 °C

SPC 77.7 or 126.1 - not sure which is which

PH 6.36

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Meas. No.

Comp. by. AQC

WATER RESOURCES DIVISION

Trans # 7

Checked by

Sta. No. 011 DISCHARGE MEASUREMENT NOTES

B1 - Priscu
Date Dec 30, 2002 Party PAS KAC
Width 7.90 Area 1.20 Vel. 0.376 G.H. Disch. 0.31
Method 6, S No. secs. G.H. change. in hrs. Susp. Red
Method coef. 1.0 Hor. angle coef. 1.0 Susp. coef. Meter No. 90256
Type of meter Pygmy Date rated 6-99 Tag checked OK
Meter ft. above bottom of wt. Spin before meas. 1:15 after OK
Meas. plots. % diff. from. rating. Levels obtained.

GAGE READINGS					WATER QUALITY MEASUREMENTS		
Time		Inside	ADR	Outside	No	Yes	Time
1300	*	1.89		1.44 ± .02		✓	
	S					✓	
1425	F			1.41 ± .02			
1427							
1548				1.34			
Weighted M.G.H.					SEDIMENT SAMPLES		
G. H. correction					Yes Time		
Correct M.G.H.					No Type		

Check bar. chain found changed to at
Wading cable, ice, boat, upstr., downstr., side bridge. 50 feet, mile, above, below gage.

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%); based on the following cond:

Flow. Even, steady flow lines
Cross section sand, gravel
Control sand bag, cobble, tarp - looks good
Gage operating yes Weather Partly Cloudy, light breeze
Intake/Orifice cleaned yes Air 4.82 °C @ 1330 Water 9.99 °C @
Record removed Extreme Indicator: Max. Min.
Manometer N₂ Pressure Tank 750 Feed 14 Bbl rate 20 per min.
CSG checked Stick reading

Observer
HWM NA outside, in well
* Remarks need new N2 - leaking @ head
not sure of the unit values being logged in CR10
Batt = 13.9 ✓ reset clock from 1338 to 1341
G.H. of zero flow ft. Sheet No. of sheets

BI-Priscu

12/30/02

RAD, KDC

start time: 13:00

Flow is present

0.44 ± 0.02 Stage @ 13:00 ft

Control struc looks good

Weather: ^{partly} 70% cloudy, wind 5-10 mph

N₂ tank press = 700 psi

N₂ regulator = 12 psi

Snoop revealed leak $\frac{C}{H}$
↑
leak

Control bubbling - 20 bubbles/min

Ch. 1 = stg = 1.8859 } ~ 13:40
Ob. rdg = 0.44

Ch. 2 - AT = 4.82

Ch. 3 - WT = -99999

Ch. 4 - Rubbing volty = 13.865 V

old time: 13:39 → 13:41

collected stream chem samples

To Do Next time

Bring new regulator

Bring new N₂ tank

Request more pH conductivity meters so team can split up

Email Chris

Inside gauge rdgs don't match OG
Look for little bubble level
WT probe does not appear to function

Q = 0.37 cfs N = 0.31 bps

14:27 41 ± 0.02 stg

pH	Time	Temp	pH
6.15	13:59	4.7°C	6.30 14:17 5.7°C
76.5 μS	14:04	4.9°C	
"	"	"	
126.0 μS	"	"	
0.1 ppt	"	"	
77.5 μS	14:10	4.7°C	77.7 μS 14:17 5.0°C
0.1 ppt	↓	↓	0.1 ppt ↓ ↓
126.6 μS	↓	↓	126.1 ↓ ↓

cont'd →

Permafrost Transect

Start time: 15:40

0 11.5 } edge of dr. looking S

1.5 13 } sandy terrain so
hard to tell where
the S

3 22

4.5 19

6 ~~22~~
12

1st measmt - hit rock

7.5 22

9 22

9.5 - 18.5 cm

10.5 20

9.8 - 18 cm - in ^{main} flow
in stream channel

12 19.5 ^{v.} sandy

10.9 - 19.5 cm
11.22 - 19 cm

13.5 14.0

11.8 - 19 cm

15 24.5
10.0

1st measmt hit rock

16.5 20

18 21

19.5 10

~~0.6 - ? WT? = 0.63923~~

Ch. 24 = ? WT? = 5.8881

Ch. 25 = ? WT? = 5.8865

do not change when make scan
rate 10 sec

width 7.90

area 1.20

0.1640 O.G. = .31 ± .05

Ch. 1 I.G. = 1.6669

Ch. 2 Temp = 6.38

Ch. 3 WT = -999

Ch. 4 Batt v. = 13.9

Gauge: R1 - Triscu



12130102

			13:00
Start time of visit			
Weather			
Air temp.			70 ^{no}
Type of cloud & % cloud cover			
Type of cloud			5-10
Wind speed (mph)			gpa
Flow present (yes/no)			900 ±
Condition of control (snow, debris, etc.)			
Inside gauge box			
N2 tank pressure (psi)			700 *
N2 regul. press. (psi)			12
Conoflow bubblg rate ok (Y/N)			
Storage module settings			
Fill and stop			
Battery level OK			
Old year, Julian day, time			
New year, Julian day, time			
Stage			
Water temp			
Conductivity			
Battery voltage			
Air Temp 20			
Stream chemistry			
Water temp and time			
pH and time			
Sp. Conductivity and time			
Get stream chem sampls (Y/N)			
Flow measurements			
Inside stage level rdg and time			
Outside stage level rdg and time			
Outsd flow rdg, start/stop times			
Portbl flume, pygmy, or AA			
Spin test (yes/no)			
Rating of measurement			
Point of zero flow			
Outside stage level rdg and time			
Inside stage level rdg and time			
*0 on keypad (Y/N)			
Stop time of visit			

Outside
Inside

pH calibration line AM