

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 F21 - Upper Von Guerard
Date Jan 17, 2003 Party JG, PAS, KDC arrive at 13:50
Width _____ Area _____ 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	PS Volume	PS Volume		Inside	Outside
14:10	ft	cfs		0.8459	
Start					
227	0.11	0.051			
YES FLOW - orifice line above current flow					
Finish					
Weighted MGH					
GH correction					
Correct MGH					

Samples collected: water quality @ 14:45
sediment, biological, other _____

Measurements documented on separate sheets: water quality, aux./base gage, other _____

Rain gage serviced/calibrated _____

Weather: 100% CC

Air Temp. _____ °C at _____

Water Temp. 2.2 °C at 14:45

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: 13.884 Intake/Orifice cleaned/purged ok!

Bubble-gage pressure, psi: Tank 600, Line 11; Bubble-rate 24 /min.

Extreme-GH indicators: max _____, min _____

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

HWM inside/outside: _____

Control: _____

Remarks: added oil to conoflow → conoflow WORKING
orifice line is too high to measure low flows → above current flow

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

Sheet No. _____ of _____ sheets

Time
Wtr temp 14:45
Sp Cond 14:45

IG	OG
	2.2°C
	980 μS

BAD TEMP ⇒ Temp probe was not in water
→ @ 14:45 moved probe into water
→ @ 14:54 CR10 temp rdg = 2.28°C OK ✓

~14:45

WRONG
STG
RDGS

F21 - Upper Von Guericke

1/17/03

Start time: 13:50

100% cloud cover

N₂ tank = 600 psi

N₂ reg press = 11 psi

Control bubbling rate = 64 bubbles/min

@ 14:10 Ch. 1 = 13.884 = battery

Ch. 2 = 3.179 = air temp

Ch. 25 = 1.6829 = ~~stage~~ W/T temp

Ch. 31 = 0.8459 = ~~W/T temp~~ stage

Ch. 32 = 14.948 = Sp cond

03 ✓, 0017 ✓ 14:20 ✓

does not
corresp
to CRTD
data

Photos - Pete's camera

Successful pump
Added emulsion oil

New con of flow bubbling rate = 64 bubbles/min

To Do

- Sandbags to cargo str line

Sandbags shovel

- Tap
Pilecap wire
Extra rebar

Condition of pipe

Orifice line is too high to measure
low flows, currently above bed

Channel aggraded over top of cut

stone i.e. sediment deposits

^{moved}
~~to move~~ entire ch. up

orifice is 1.24" below top of pipe

orifice is 0.39" above bed

Q measured in portbl flume 0.11" top 0.06" back

~ 0.078 cfs

SC = 98.0 MS, conductance = 55.3⁰ MS

temp = 2.2°C

H₂O samples collected

temp probe was not in water

moved it down @ ~ 1445

@ 1454 CR10 temp reading was **2.29°C**

Now it works fine!

Pete changed overflow bubble rate to
241 bubbles/min