

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

Meas. No. 25
Comp. by Aguacala
Checked by _____

Sta. No. _____
Sta. Name F10-Delta
Date Jan 3, 2003 Party PAS
Width 8.00 Area 1.36 Vel. 0.26 G.H. _____ Disch. 0.36
Method 0.6 No. secs. _____ G.H. change _____ in _____ hrs.
Method coef. 1.0 Horiz. angle coef. 1.0 Susp. rod Tags checked OK
Meter Type pygmy Meter No. _____ Meter _____ ft. above bottom of wt.
Rating used 6-99 Spin test before meas. 1:15; after OK
Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

GAGE READINGS					
Time	Tdown	Tdown			
		Inside	Outside		
16:40	1.09	4.38	4.432		
	Start				
16:52		4.38			
18:00	1.11		4.412		
18:04		4.30			
	Finish				
Weighted MGH					
GH correction					
Correct MGH					

Samples collected: water quality @ 17:10
sediment, biological, other _____

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

Rain gage serviced/calibrated _____

Weather: clear; 15 mph SSW
Air Temp. 30 °F at 16:52
Water Temp. 6.90 °C at 17:10 OG

Check bar/chain found _____
Changed to _____ at _____
Correct _____

Wading, cable, ice, boat, upstr., downstr., side bridge, 80 ft., mi. upstr., downstr. of gage.
Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%); based on following conditions: Flow: even flow lines
Cross section: gravel, sand, cobble

Gage operating: _____ Record Removed _____
Battery voltage: _____ Intake/Orifice cleaned/purged: _____
Bubble-gage pressure, psi: Tank 1800, Line 10; Bubble-rate 32 /min.
Extreme-GH indicators: max _____, min _____
CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____
HWM inside/outside: _____
Control: Sediment depositing near PZF, probes slightly buried in sand
- could use maintenance

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

Sheet No. _____ of _____ sheets

Time 16 06
Wtr Temp 17:10 6.90 °C

Top of rebar elevation from 1/9/03 levels = 5.522

- ① Tape down @ 16:40 = 1.09 → 5.521 - 1.09 = 4.431 ft
② Tape down @ 18:00 = 1.11 → 5.521 - 1.11 = 4.411 ft

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Meas. No. _____
Comp. by AOC
Trans # 4
Checked by _____

Sta. No. _____
Sta. Name ~~_____~~ F10 Delta
Date Jan 3, 2003 Party PAS
Width 8.00 Area 1.36 Vel. 0.26 G.H. _____ Disch. 0.36
Method 1.6 No. secs. _____ G.H. change _____ in _____ hrs.
Method coef. 1.0 Horiz. angle coef. 1.0 Susp. Rod Tags checked OK
Meter Type Army Meter No. 90265 Meter _____ ft. above bottom of wt.
Rating used 6-99 Spin test before meas. 1.15; after OK
Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

✓ corresponds
to F10
Delta

GAGE READINGS					
Time				Inside	Outside
<u>1640</u>				<u>4.38</u>	<u>4.40</u>
	Start				
	Finish				
<u>1800</u>				<u>4.30</u>	<u>4.38</u>
Weighted MGH					
GH correction					
Correct MGH					

Samples collected: water quality,
sediment, biological, other _____
@ 1710
Measurements documented on
separate sheets: water quality,
aux./base gage, other _____
Rain gage serviced/calibrated _____
Weather: Sunny, Breezy
Air Temp. 30 F at 1639
Water Temp. _____ °C at _____
Check bar/chain found _____
Changed to _____ at _____
Correct _____

Wading, cable, ice, boat, upstr., downstr., side bridge, 50 @, mi. upstr., downstr. of gage
Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%); based on following
conditions: Flow: Even flow lines
Cross section: gravel sand cobble

Gage operating: yes Record Removed _____
Battery voltage: _____ Intake/Orifice cleaned/purged: _____
Bubble-gage pressure, psi: Tank 1800, Line 10; Bubble-rate 32 /min.
Extreme-GH indicators: max _____, min _____
CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____
HWM inside/outside: _____
Control: sed depositing near PZF - could use maintenance.

Remarks: @ 1640 Top of bar = 5.49 (12/2000) - 1.09' TPD = 4.40
maule address is 09.01 when using 9x9a
GH of zero flow = GH 4.40 - depth at control 0.35 = 4.05 ft., rated _____

	.75	.70	.60	.50	.40	.30	.20	
	⊙ 1652			⊙ 1804				
.80	01 = 4.38	02 = 0.000	stage	01 = 4.30			17 = 157.28	
	03 = 5.56		WT	02 = 0.00			21 = 687	
	04 = 12.8		Bst V.	03 = 6.10			22 = 130.5	
.85	06 = 0.41			04 = 12.8			31 = 136	
	07 = 26.7			06 = 0.32				
	17 = 157.3			07 = 26.2				
.90	21 = 687		⊙ 1640 = Top of Rebar = 5.49 (Given)					
.92	22 = 413						- 1.09 TPD	
.94	31 = 136						<u>4.40</u>	

⊙ 1720 Spc = 20i
 132
 0.1
 Temp = 6.90

⊙ 1800 = Top of Rebar = 5.49
 - 1.11
4.38

River at -
 .75 .70 .60 .50 .40 .30 .20 .10 .0
 DISCHARGE .80 AREA ADJUST. HOR. ANGLE OR MEAN IN VER. TICAL AT POINT IN SEC. ONDS IN TIME REVO. LUTIONS OBSERVA- TION DEPTH DEPTH WIDTH DIST. FROM INITIAL POINT ANGLE COEF- FICIENT

Gauge.

~~Delta~~ Delta ✓

Date	3 - Jan - 03	3 - Jan - 03	
time of visit (start & finish)	11:40	1804	
party	PAS		
cloud cover (% , type)	clear		
wind (spd, dir)	breezy, 15mph, SSW		
air temp	30 F		
surveying?	NO		
photo? (#, which camera)			
to do items? (y/n)			
which field notebook?	USGS Front sheet		
Flow measurements (times)			
condition of control, probes	sed. building - could use maintenance, ^{probes} slightly buried in sand		
method (meter, flume, visual)			
discharge (units)			
outside stage (staff or top down)	Rebar = 5.49 (given) - 1.09 = 4.40	= 4.38	
CR10 stage reading	4.38		
Inside Box			
CR10 Channels (times)	1650	1804	
stage	4.38 - corresponds to F10 Delta	4.30	
water temp	5.56	6.10	
conductivity	136 136	136	
battery voltage	12.8	12.8	
air temp	30 F	30 F	
Year, Day, Time	03, 3, 1640		
settings o.k?	ok but address is 09:01		
*0?	OK		
N2 tank pressure (psi)	1800		
N2 feed pressure (psi)	10		
purge?	yes @ 1700		
bubble rate (per min)	32		
Stream Chemistry (times)			
water temp. (units)	6.90	6.10	
sp. cond. (units)	201 201, 132, 0.1	136	
pH and temp of probe			
instrument notes (i.e. cal. time)			
water samples collected?	yes @ 1710		