

Form 9-275F
(Apr. 2001)

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 Onyx @ L. Braunwith - Lower Wright
Date Jan 2, 2003 Party PAS, JDG 10:00-12:00
Width 17.00 Area 11.70 Vel. 0.54 G.H. _____ Disch. 6.36
Method 0.6, S No. secs. 17 G.H. change _____ in _____ hrs.
Method coef. 1.0 Horiz. angle coef. 1.0 Susp. Rod Tags checked OK
Meter Type pygmy 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 _____

GAGE READINGS				Inside	Outside
9:47				1.58	0.338
	Start				
11:38				1.66	0.360 ± 0.02
11:57				1.65	0.360 ± 0.02
12:05				1.66	0.360 ± 0.01
	Finish				
13:30				1.66	0.365 ± 0.02
Weighted MGH					± 0.02
GH correction					
Correct MGH					

Samples collected: water quality @ 13:00
sediment, biological, other _____

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

Rain gage serviced/calibrated _____

Weather: <10% CC - cirrocumulus; wind 10 mph from east then west
Air Temp. _____ °C at _____
Water Temp. 7.5 °C at 13:05

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

Wading, cable, ice, boat, upstr., downstr., side bridge, 60 (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: cobble, gravel, sand

Gage operating: yes Record Removed _____
Battery voltage: _____ Intake/Orifice cleaned/purged: _____
Bubble-gage pressure, psi: Tank 2000, Line 8; Bubble-rate 60 /min.
Extreme-GH indicators: max _____, min _____
CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____
HWM inside/outside: _____
Control: good condition

Remarks: Changed out storage module

GH of zero flow = GH _____ - depth at control _____ = _____ ft., rated _____
Sheet No. _____ of _____ sheets

11:47 HAVE DISRUPTED STORAGE MODULE READINGS

→ changed out storage module

9-275-F
(Rev. 10-81)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Meas. No.
Comp. by AQC

WATER RESOURCES DIVISION

Trans # 2
Checked by

Sta. No. 015 DISCHARGE MEASUREMENT NOTES

ONYX - Lower Wright Valley, nr. Brownsboro, Va.

Date Jan 2, 1920.3 Party PAS, JCG

Width 17.0 Area 11.7 Vel. 0.54 G.H. Disch. 6.36

Method 6, S No. secs. 1.7 G.H. change. in hrs. Susp. Mod.

Method coef. 1.0 Hor. angle coef. 1.0 Susp. coef. Meter No. 90265

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. last year

GAGE READINGS				WATER QUALITY MEASUREMENTS	
Time	Inside	ADR	Graphic	Outside	No. Yes. <input checked="" type="checkbox"/> Time
<u>0947</u>	<u>1.58</u>			<u>0.338m</u>	<u>Samples Collected</u>
					No. Yes. Time
<u>1138</u>	<u>1.66</u>			<u>0.360</u>	<u>Method Used</u>
<u>1157</u>	<u>1.65</u>			<u>0.360</u>	EDI EWI Other.
					<u>SEDIMENT SAMPLES</u>
<u>1205</u>	<u>1.66</u>			<u>0.362</u>	No. Yes. Time
<u>1330</u>	<u>1.66</u>			<u>0.365</u>	<u>Method Used</u>
					EDI EWI Other.
Weighted M.G.H.				<u>BIOLOGICAL SAMPLES</u>	
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. 60 (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 ...

Cross section ... cobbles, gravel, sand ...

Control ... good condition ...

Gage operating ... yes ... Weather Sunny, slight breeze

Intake/Orifice cleaned ... Air ... °C@ ... Water 3.26 °C@ 99.50

Record removed ... Extreme Indicator: Max. Min.

Manometer N₂ Pressure Tank 2000 Feed ... 8 ... Bbl rate 60 ... per min.

CSG checked ... Stick reading

Observer

HWM ... from inside ... outside, in well

Remarks Spec = 31.7 Bath = 13.1 @ 99.50

Spec meter = 31.37 @ 13.27 Temp = 7.6

G.H. of zero flow ... 20.8 ft. Sheet No. of ... sheets

	.75	.70	.60	.50	.40
.80					
.85					
.90					
.92					
.94					
.96					
.97					
.98					
.99					
1.00					

channel @ 0950
 01 = 1.58
 02 = 3.26
 03 = 31.7
 04 = 13.1

@ 1330
 01 = 1.66
 02 = 7.97
 03 = 31.7
 04 = 14.0

Calc 5000 (tm) by JBS Instruments
 Software Version AQCUSH8c (c)1995-2000

GAGE ID# 000000015
 DATE 01/02/2003
 TRANSECT 02
 USER ID# 3152
 SH BEGIN 0.35
 SH END 0.00
 GH BEGIN 1.62
 GH END 0.00
 EST. DISCHARGE 0.00
 EST. Q (ADJ) 6.36
 METER ID# 90256
 AQUACALC ID# 671
 SOUNDING WT. 0
 START MEAS. AT REW
 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 18
 TOTAL STATIONS 18
 TOTAL WIDTH 17.00
 TOTAL AREA 11.70
 TOTAL DISCHARGE 6.360
 PCT DIFFERENCE 0.0
 MEAN VELOCITY 0.54
 WETTED PERIMETER 25.85
 HYDRAULIC RADIUS 0.45
 MANNING FACTOR 0.00

OB	DIST	DEPTH	ICE	REVS	TIME	COS:VF	LOC	COEF	CLOCK	VEL	AREA	FLOW(Q)
1	0.00	0.00	0.00	0	0.0	1.00	S	1.00	11:22	0.000	0.000	0.000
2	1.00	0.10	0.00	0	4.7	1.00	S	1.00	11:22	0.000	0.100	0.000
3	2.00	0.25	0.00	3	42.8	1.00	S	1.00	11:25	0.098	0.250	0.025
4	3.00	0.42	0.00	13	40.0	1.00	S	1.00	11:27	0.343	0.420	0.144
5	4.00	0.54	0.00	24	40.8	1.00	S	1.00	11:30	0.596	0.540	0.322
6	5.00	0.62	0.00	15	42.0	1.00	S	1.00	11:31	0.374	1.040	0.389
7	6.00	0.62	0.00	31	40.7	1.00	S	1.00	11:35	0.763	0.520	0.397
8	7.00	0.55	0.00	25	40.6	1.00	S	1.00	11:36	0.623	2.020	1.258
9	8.00	0.72	0.00	25	41.9	1.00	S	1.00	11:50	0.604	0.720	0.435
10	9.00	0.78	0.00	30	40.9	1.00	S	1.00	11:48	0.736	0.780	0.574
11	10.00	0.82	0.00	8	42.3	1.00	S	1.00	11:45	0.213	0.820	0.175
12	11.00	0.85	0.00	29	20.4	1.00	S	1.00	11:54	1.396	0.850	0.119
13	12.00	0.90	0.00	13	19.5	1.00	S	1.00	11:57	0.671	0.900	0.604
14	13.00	0.90	0.00	34	40.6	1.00	S	1.00	11:58	0.835	0.900	0.752
15	14.00	0.85	0.00	18	21.5	1.00	S	1.00	11:59	0.835	0.850	0.710
16	15.00	0.60	0.00	24	40.3	1.00	S	1.00	12:00	0.603	0.600	0.362
17	16.00	0.42	0.00	9	46.6	1.00	S	1.00	12:01	0.217	0.420	0.091
18	17.00	0.00	0.00	0	0.0	1.00	S	1.00	12:02	0.000	0.000	0.000

Remarks: ~~Spec = 31.7 Bath = 13.1 C = 0.50~~ outside, in well
~~Spec meter = 31.37 C 13.27 Temp = 7.6~~

G.H. of zero flow 20.85 ft. Sheet No. of sheets

Gauge: *Chyx @ Oms...*

Date	10/12/2003	11/15/2003	11/15/2003
time of visit (start & finish)	10:12	11:15	11:15
party	Top	Top	Top
cloud cover (% type)	100	50	50
wind (spd, dir)	~10 mph from West	10 mph from E	10 mph from E
air temp	warm		
surveying?	No	No	No
photo? (#, which camera)			
to do items? (y/n)			
which field notebook?	weather cond. check data		
Flow measurements (times)	0950		
condition of control, probes	OK, ok	ok, ok	ok, ok
method (meter, flume, visual)	Flowing	Flowing	Flowing
discharge (units)	0.338	0.48	0.48
outside stage (staff or top-down)	1.58	1.84	1.83
CR10 stage reading	1.58	1.84	1.83
Inside Box	\$50		
CR10 Channels (times)	01	01	01
stage	1.58	1.84	1.83
water temp	3.26	7.97	7.1
conductivity	31.7	31.7	31.5
battery voltage	13.1	13.0	13.5
air temp			-10°C
Year, Day, Time	03, 02, 13:24	03, 02, 13:24	03, 02, 13:24
settings o.k.?	Yes	Yes	Yes
N2 tank pressure (psi)	2000	2000	2000
N2 feed pressure (psi)	8	8	8
purge? orifice block?	bubbles seen from air		
bubble rate (per min)	00	00	00
Stream Chemistry (times)	~1305-1320	1330	1330
water temp. (units)	7.5	7.6	7.6
sp. cond. (units)	31.2/20.9		
pH and temp of probe	4.8 @ 5.5°C in bottle		
instrument notes (i.e. cal. time)	calibrated just before		
water samples collected?	Yes @ 1300		

Changed s/m

incp

Gauge: Onyx @ Browns center NOT ~~ERR~~ ORIGINAL - orig is misplaced
CLOSE OUT
ORIGINAL WITH JAN 2 FOR

Date	2-Jan-2002		12:25		
time of visit (start & finish)	10:00-12:00				
party	JG PS		38, JB, LH, EVM, KC		
cloud cover (% type)	< 10%		80% shade		
wind (spd, dir)	from E then W		pretty clean		
air temp	< 32°F				
surveying?	No		yes		
photo? (#, which camera)	Yes JG				
to do items? (y/n)	check slm - not ok.				
which field notebook?	JG				
Flow measurements (times)	o.k., ok				
condition of control, probes	PJSing				
method (meter, flume, visual)					
discharge (units)					
outside stage (staff or top down)					
CR10 stage reading					
Inside Box	* changed slm				
CR10 Channels (times)					
	Ch. 1	stage	12:30 PM	12:41	13:20
	Ch. 2	water temp	1.435	1.469	1.4693
	Ch. 3	conductivity	7.000	7.209	9.3433
	Ch. Y	battery voltage	-1942.4	-1923.4	32.168
		air temp	13.675	13.596	13.800
	Year, Day, Time	settings o.k?	2003, 02, 10 13 @ 10:12 AM	02-2003	03 ✓, 12:30 ✓
			Yes		
N2 tank pressure (psi)	o.k.		1500		
N2 feed pressure (psi)	o.k.		8		
purge?	No b.t.o.k.		92 bubbled/min		
bubble rate (per min)	N60?				
Stream Chemistry (times)					
water temp. (units)	(marked inside)				
sp. cond. (units)	4.6 @ 5.8°C				
pH and temp of probe					
Instrument notes (i.e. cal. time)	Yes				
water samples collected?	Yes				

*put in "Extra" slm 13.38V, 13.26V @ 13:50

104
Alone @ 1304
@ 1534

2/ Jan/ 2003
Onyx R. @ Brunswick

1.58 m inside

0.338 m outside on staff

1.25

Changed s/m tank out "Vanda" LWRTB"
put in "Extra - formerly F21"
downloaded program from CR10
checked s/m settings - all o.k.

time = 2003, 02, 10:13 @ 10:12 on JGS
water

pH

Before calibration 4.3 @ 6.0°C

4.6 @ 5.8°C

calibrated @ 1310

pH = 4.8 @ 5.5°C @ 1312

Sample collected in bottle @ 1305

pH in Lab = 7.5 @ 19.2°C

has shovel and extra N₂ Tank
took empty N₂ tank back to F6

cond matched inside & outside
on one of readings

Lost Seal

fixed leak on f.
Weir looks good
- small leak
- other small
very minor
- weir was
lower

chemistry

measured pH
but pH meter

Cond. Measure
SC
Cond

Tim

does not match
maybe
ch