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 F21 - Upper Von Guerard
Date Jan 03 , 2003 Party JG, EC arrive @ 18:25
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 | | Mgmt Est | | | Inside | Outside |
| | | cfs | | | | |
| 18:56 | | | | | 25.0 | |
| | Start | | | | | |
| ?? | | 1-3 | | | | |
| | | YES FLOW | | | | |
| | | | | | | |
| | Finish | ORIFICE LINE | | | | |
| | | FROZEN | | | | |
| Weighted MGH | | | | | | |
| GH correction | | | | | | |
| Correct MGH | | | | | | |

Samples collected: water quality, @ 18:55
sediment, biological, other _____

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

Rain gage serviced/calibrated ____

Weather: 30% CC - cirrus, cumulus ; wind: 5-10 mph
Air Temp. 34 °F at _____
Water Temp. 0.1 °C at 18:55
Check bar/chain found _____
Changed to _____ at _____
Correct _____

Flow too high for portable flume

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: 13.637 Intake/Orifice cleaned/purged: _____
Bubble-gage pressure, psi: Tank 1650 , Line 11 ; Bubble-rate _____ /min.
Extreme-GH indicators: max _____ , min _____ .
CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____
HWM inside/outside: _____
Control: _____

FLOW RDGS WRONG ⇒

Remarks: Flow is bypassing orifice line by 2 meters downstr left; LEVELS ← flow 5 ft to left of orifice line

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

Sheet No. _____ of _____ sheets

- Tried to purge conoflow but unable to do so ⟶ ORIFICE LINE FROZEN
- orifice line is encased in snow + ice - cleared path of snow to orifice line to reveal ice ⟶ put dirt on top of ice to hopefully melt ice more quickly

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Year 2003 ✓
J-day 3 ✓
Time 13:12 ⟶ 18:58

| | Time | IG | OG |
|---|---|---|---|
| Sp Cond | 18:55 | | 25.6 µS |
| Wtr temp | 18:55 | | 0.1 °C |
| Sp Cond | 19:08 | | 29.9 µS |
| Wtr temp | 19:08 | | -0.1 °C |

Gauge: F21 - Upper VG ✓ ✓

| Date | Jun - 3 - 03 | 10 - Jun - 03 | - - |
|---|---|---|---|
| time of visit (start & finish) | 18:25 | 17:45 | |
| party | JG, KC | KC | |
| cloud cover (%, type) | 30%, cirrus, cumulus | 5% cumulus | |
| wind (spd, dir) | 5-10 mph | 10-15 mph ? | |
| air temp | 34°F | | |
| surveying? | yes | no | |
| photo? (#, which camera) | , JG | | |
| to do items? (y/n) | yes | yes | |
| which field notebook? | yes (KDC) | KC | |
| ***Flow measurements*** (times) | | 18:16 | |
| condition of control, probes | frozen under ice, flow 5' to left of active hole | see NB | |
| method (meter, flume, visual) | Visual | | |
| discharge (units) | 1-3 cfs | | |
| outside stage (staff or top down) | N/A | 2.22 | |
| CR10 stage reading | N/A | 0.90890 | |
| ***Inside Box*** | | messed up conoflow | |
| CR10 Channels (times) | | | |
| Ch. 31 stage | 25.0 @18:56 | 0.90890 | |
| Ch. 25 water temp | -2.31 | 3.0137 | |
| Ch. 32 conductivity | -2278.6 | 55.562 | |
| Ch. 1 battery voltage | 13.637 | 14.080 | |
| Ch. 2 air temp | 7.62 | 8.4206 | |
| Year, Day, Time | 03 ✓, 3 ✓, 13:12 → 18:58 | 2003 ✓, 0010 ✓, 18:25 ✓ | |
| settings o.k? | ✓ | ✓ | |
| *0 ? | / | ✓ | |
| N2 tank pressure (psi) | 1650 | 1650 | |
| N2 feed pressure (psi) | 11 | 0 → changed to 10 | |
| purge? | tried but could not purge line, Rocks Frozen | — | |
| bubble rate (per min) | 2 → now screwed up | 0 - be screwed up | |
| ***Stream Chemistry*** (times) | | | |
| water temp. (units) | 0.0 - 0.1 | | |
| sp. cond. (units) | 25.6 mS | | |
| pH and temp of probe | | | |
| instrument notes (i.e. cal. time) | | | |
| water samples collected? | Yes | | |

Is flow present or not

flow present stage = 0.6ft
anchor ice present

F21 - VG upper

1/03/03

JG, KC

18:5-

Flow is present

Flow is bypassing orifice line by 2m

DS left

Conoflow ~~is~~ bubbling

Purge unsuccessful

orifice line is capped in ice

Cleared path of snow to orifice line to ~~ice~~ revealed ice

Put dirt on top of ice - hope this will help ice melt more quickly

<10X

Gauge contains portable flume but flow is too high for flume

To Do Next Time

Bring more conoflow o.l

Bring new conoflow

Spcond = 29.9 MS  -0.1°C

1908

VG upper  Level notes

| Station | BS | HI | FS | Remarks |
|---|---|---|---|---|
| RM1 | 3.415 | | | 25' south |
| RM2 | | | 3.260 | |
| RP1 | | | 4.862 | |
| orifice — buried in snow | | | | |
| RM1 | 3.414 | | | |

1/3/2003

| Station | BS | HI | FS | Elev. |
|---|---|---|---|---|
| RM2 | 3.26 | 7.851 | | **4.591** |
| RM1 | | | 3.415 | 4.436 |
| RP1 | | | 4.862 | 2.989 |
| orifice | | | | |
| PZF | | | | |
| | | | | |
| TP | | | | |
| | | | | |
| PZF | | | | |
| orifice | | | | |
| RP1 | | | | |
| RM1 | | | | |
| RM2 | | | | |

| Station | Ave Elev |
|---|---|
| RM1 | 4.436 |
| RP1 | 2.989 |
| orifice | |
| PZF | |

9-276
(Rev. 7-67)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

Station Number ----------

# LEVEL NOTES

Stream F21-UPPER VON GUERARD

Locality

Party JG, KDC Date Jan 03, 2003

| STATION | B. S. | HT. INST. | F. S. | ELEVATION | REMARKS |
|---|---|---|---|---|---|
| RM2 | 3.415 | 8.006 | | 4.591 | 25' South (saying it corresponds to Bolt B 20' upstream of gage box) ELEV GIVEN |
| RP1 | | | 4.862 | 3.144 | top of rebar |
| orifice | | | — | — | buried in snow |
| RM2 | | | 3.414 | 4.592 | 0.001 |

Think this is BOH B

No ____ of ____ sheets ____ Comp. by ____ Chk. by ____

☆ GPO 1984 O-452-826

5cm snow depth = 4cm

3cm snow depth = 13cm

2cm by rock snow = 15cm (DS left)

flow (higher vel.) 22.4

of water 16.10 m and 24.2

snow was all sand and gravel 10m - 9m

t is ~40-~~50~~ m downstream of

mummified seal

on line crosses at 35.8

and desert pavement to

sand & gravel from 27 m to end

from 51.5 to end and

ements near (b) snowbank are moist

l seem like they were recently covered with snow

mp = 44 °F

mp = °F

# FZI - VG upper

LEVELS

1/03/03

JG, KC

18:5-

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DS left

Conoflow ~~is~~ bubbling

Purge unsuccessful

orifice line is encased in snow

ie

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Put dirt on top of ice - hope this will help ice melt more quickly

Q ≥ 10X

Gauge contains portable flume but flow is too high for flume

To Do Next Time

Bring more conoflow oil

Bring new conoflow

Spcond = 29.9 MS -0.1°C

1908

VG upper

Local notes

| Station | BS | HI | ES | Remarks |
|---|---|---|---|---|
| RM1 | 3.415 | | | 25' south |
| RM2 | | | 3.260 | |
| RP1 | | | 4.862 | |
| orifice | — buried in snow | | | |
| RM1 | 3.414 | | | |