should be done 7/07/08

Loss is still large compared
- Will use channel 2 for
  40 km, single ended
  O bath, FiberGain
  Set clock to Jul 7 6:21
  PST 18:23
  Clock set wrong on PC 6.4
  Little T loss on Jul 8
  Sheelke July 7.

Set Thermowax @ 0.002
  on 5 pm PST July 7, 2002
  blue fiber still shows small
  loss @ 4 km
  Fixed at bath 7 18:52
  7/7/08
7/8/08

To do:
1. Repair blue unit
2. Compare temps of tubes
   longer, Unit 2
dump water up
   to head
3. Run new calibration
4. Calibrate
   Channel 1: 8.1
   Channel 2: 9.7
   Channel 3: 10.3
5. Fix lines
6. Calibrate unit
   1: 8.06, 9.34, 10.2
   2: 3.48, 10.23

Check:
- Channel 1: blue
- Channel 2: orange

7/8/08 7:57 PST
- Temp bath: 0.614
- No stirring

No liquid water, tubes
+ draw, plus open/ closed

Today temp to 0.1°C

Independent thermocul

Download Pr100 data
Mont 7-7 to 7/8 @ 8:02 PST
Data incorrectly used data
by 7-8 from 7-7

Reset device
Starts new 8:12 PST

Device check

<table>
<thead>
<tr>
<th>Time</th>
<th>Tpri</th>
<th>Twa1</th>
<th>Twa2</th>
<th>Bath</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.03</td>
<td>0.000</td>
<td>0.000</td>
<td>-0.005</td>
<td>0.000</td>
</tr>
<tr>
<td>14.57</td>
<td>14.516</td>
<td>14.517</td>
<td>0</td>
<td></td>
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</tbody>
</table>
7/8/08 9:20 AM
Chealed blue concrete at 0° bath and replaced barrel concrete to try to improve.

Bath T = 0.002

Improvised...return to

Test bath 10:10 AM PS 7/8 "0.001 Vmix"

Still lossy - appeared to be lossy across all spheres

Not concrete.

Stopped lossy at 10:25 AM

16.53 T 0° Y17r -5.259

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Sheet Flow #1</th>
<th>on GF #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>294m</td>
<td>SHEET FLOW</td>
<td>SMALL FLOW SMALL SMALL FT POOL</td>
</tr>
<tr>
<td>306m</td>
<td></td>
<td>WILLOW #1</td>
</tr>
<tr>
<td>335m</td>
<td></td>
<td>WILL OUT #1</td>
</tr>
<tr>
<td>418m</td>
<td></td>
<td>OUT #1</td>
</tr>
<tr>
<td>425m</td>
<td></td>
<td>JUST BELOW</td>
</tr>
<tr>
<td>435</td>
<td></td>
<td>WILLO/OUT</td>
</tr>
<tr>
<td>460m</td>
<td></td>
<td>CABLE IS IN THE LODGE POLES</td>
</tr>
<tr>
<td>500m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>535m</td>
<td></td>
<td>WILLO/OUT #2</td>
</tr>
<tr>
<td>555m</td>
<td></td>
<td>WILLO/OUT #3</td>
</tr>
<tr>
<td>570m</td>
<td></td>
<td>SF #2</td>
</tr>
<tr>
<td>615m</td>
<td></td>
<td>SF #3</td>
</tr>
<tr>
<td>750m</td>
<td></td>
<td>POOL #2</td>
</tr>
<tr>
<td>922m</td>
<td></td>
<td>A5</td>
</tr>
</tbody>
</table>

832 | SF #4 |
275 | INTO STREAM FROM BATH |
250 | BEGIN ICE BATH |
270 | END ICE BATH |

* Cable distance is 5 stream 250m

7/8/08 10:30 PST
4:31 PM PST
Team noted 90 degree water was quite unusual. Water was warm, with
4:39 PST
Moved camera #9 (812 m)
Near top of upper pool. - Temp of core using
7/8/08 T = 17.28 at 04:42 PST

VWR#2 T = 16.805
7/8/08 3:04 PST

7/9/08 - Added ice to lower core - 8:00AM PST.
7/9/08 - Double over
Dis DATA 7/4-8-9 09 AM PST

This data set is the first set with full calibration.

and temperature data started to be
Collected - 13:24 7/8/08
Note that the upper end of
the core in head of pool was
being repositioned until ~ 5PM
on 7/8/08.

7/10 + Martine working 7/9
on pools
Pool downstream & Lodge pool
Shaping, big drop in T; we thought
could be overheat - does not appear.
Pool upstream of Lodge pool ~
be overheat but

Real: 
15.15°
15.78°
19.35°

Surface
Vertical profile
30.8 m

Cable Length At This pool is
5052 m

Pool
Cable marker is:
02730

Pool 9000 r. 02730 - 2
7/9/08 14:40 PST

Sample site: MEPINE
Cable marker: 02753
Distance: 4.87 m

Discussion:
Just walked over river at Lodgepole pool. Pool shows large variance in temp, both laterally and vertically. Discussed just upstream of pool. Incoming stream temperature is almost 19°C, or 5°C warmer.

Thermistor in bottom of pool 14:46, still 8°C is a Martha in bottom of Lodgepole pool. Coldest reading to date!
BNAD Sample site

NAME: Willow
Cable marker: 0270S4
Cable length: 5'7.2 M

NAME: Shooting: 3/4 M
Cable marker: 02515
Cable length: 713.5 M

7/9/08 3:11 PM
Turbidity: Upper pool
Where we originally did our
Upstream calibration is no longer
a constant (in length) T.
There is about a 1°
Change from incoming cables.
Loop up to the end: Likely
due to changes that occurred
when the cable was spaced
to be placed in the Upper
part of pool.

Upper Calib. pool

- depth =

- depth =

60°ir/hour/meter x 24

1.850 g/hr/meter²

kg/day/meter² =

Area A = 4.6 m²

g = 150 g/hr/m²

x 24 hours = 3 kg/day/meter²

= 3 ml/day - Low!

4/17/08

both using UWM1#1 8:00 PM
As a check T = 0.040
2/10/08 10:12 PST
Locating the 4 pools that now have Ticket Vertical profiler.

Site Name: Cable Mark
02813 Low 02813 407
02725 Loopyless 02725 505-502
02696 02656 572-575
02435
Finished at 10:31 PST 2/10/08

Data Download 4/15/08 PST
Nord that ice back is on OTS is +0.7°C will check Cooler possible that ice back is now stratified.

3/8/08: Shading Operates 3m long shade erected in 300m in Cable area

Cable marking entry 02929

Cable marker oxther 02934

Shallow water: Ox
Deep

$ 3rd Upstream pool will get coordinates from monitor got them.
Design was to see if shifting impacted cable temper.

Cable marker 6/exit 4/exit 3
First = B 29 f 7 0
Entry depth = 0797 18.50

Average 8 6 16
DT 100 Temperature at 6:4:54 7/10/08 0.03

Download DT 100
<7:10 pm. excel>

In bath 9 0 m & up 7/10:
5:07 18.55
1.15º f. - 0.11 18.55

Drawed out water & mixed
At 8:07 18.55

VNA now going to 0.00 !
went back to DTS. showed
That was 0.3º c

5:50 am - Downloaded P100
NFL HACO Data File
Located 7-8 C. From all calibrated data thru July 9th.
July 11th. Backed up on Toshiba Drive + Dell laptop

✓ ed - DT100 is using
Pacific Standard Time. Yes
At down corner. 7:25 PDT
As logged shows 6:25 PST

7/11/08
Ice Trace Test
- Changed DTS program
to Single 10 sec sweep
on Channel 2 only.

Long Oct. 7-11 Ice
Cable marker 4/0.842 cm
ICE Test @ 9:12:00 AM
3.
Aded ~ 4 gal of ice