

The M01RAW System

There are 2 LCW Systems in the Meson area, MS2 & MS6 and one RAW System at M01.

The MS2 LCW system supplies cooling water for the power supplies at MS1, MS2, MS3 & MS4, in addition to the magnets from F2 through M05 & MC6. And let's not forget it supplies water to heat exchange with the M01 RAW system.

The M01 Raw System

We do not fill the expansion tank, the Fluids Group will fill the tank with prior permission from the RSO. All we do is turn it on.

The M01 RAW System is needed to cool the M01 dump and is an input to the Meson Primary CDC, without it on we can not run beam to Meson.

Also, to run the M01 RAW System we need the MS2 LCW System on, the LCW System acts as a heat exchanger for the RAW System.

PB S53 DIGITAL STATUS

S53 DIGITAL STATUS ♦Pgm_Tools♦ AGG CONTRL
parm *SA♦ X-A/D X=I:VTRPOS Y=I BEAM ,I BEL ,I:PS60LV,I VTRPOS *RESET
*save Eng-U I=-2 I= 0 0 120 -2 *ON
s_MI AUTO F= 0 F= 50 3.33333 180 0 *OFF
.global. .linac. .booster ...mi... ..tev... ..sy... .p-bar... .misc... collider

F:M01RAW M01 Raw Water System ♦See Alarm Log♦

♦More Info♦

♦Ctrl-Menu♦

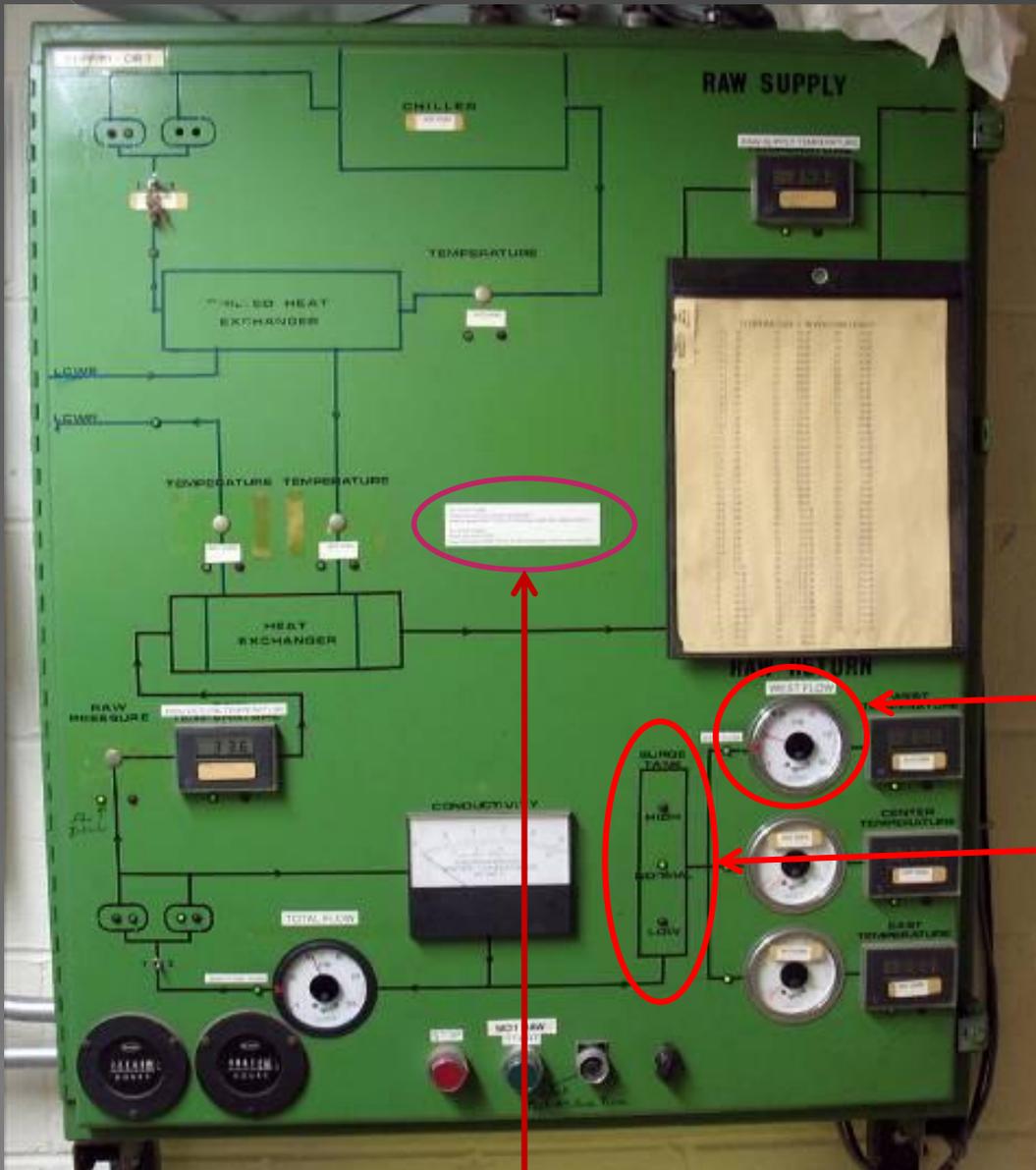
bit-15	0	bit-31	0
bit-14	0	bit-30	0
bit-13	0	bit-29	0
bit-12	0	bit-28	0
bit-11	1	bit-27	0
bit-10	1	bit-26	0
Return Temperature	OKAY	1 bit-25	0
Supply Temperature	OKAY	1 bit-24	0
Raw Flow	ALARM	0 bit-23	0
LCW Flow	ALARM	0 bit-22	0
ICW Flow	OKAY	1 bit-21	0
Make-up	OKAY	1 bit-20	0
Surge Tank Lo	OKAY	1 bit-19	0
Surge Tank Hi	OKAY	1 bit-18	0
Pump #2	OFF	0 bit-17	0
Pump #1	OFF	0 bit-16	0

Here we see that the 2 pumps are off. Pump #2 is Red, so that's the pump we are currently using.

Note: The Fluids may change which pump is running.

Messages





Here is the M01 RAW Controller. You notice that it's green to show it is a different controller than the blue boxes which are used for the LCW Systems.

Flow Gauge

Surge or Expansion Tank level status.

Instructions on how to turn the system on.



Note: If the MS2 LCW System tripped you will need to restart the RAW system, see next slide, but if the RAW System tripped and the Surge Tank is in alarm on "Low", it probably means that the expansion tank is low and we will need RSO permission to call someone in from the Water Group to add water. This will require an access into M01.

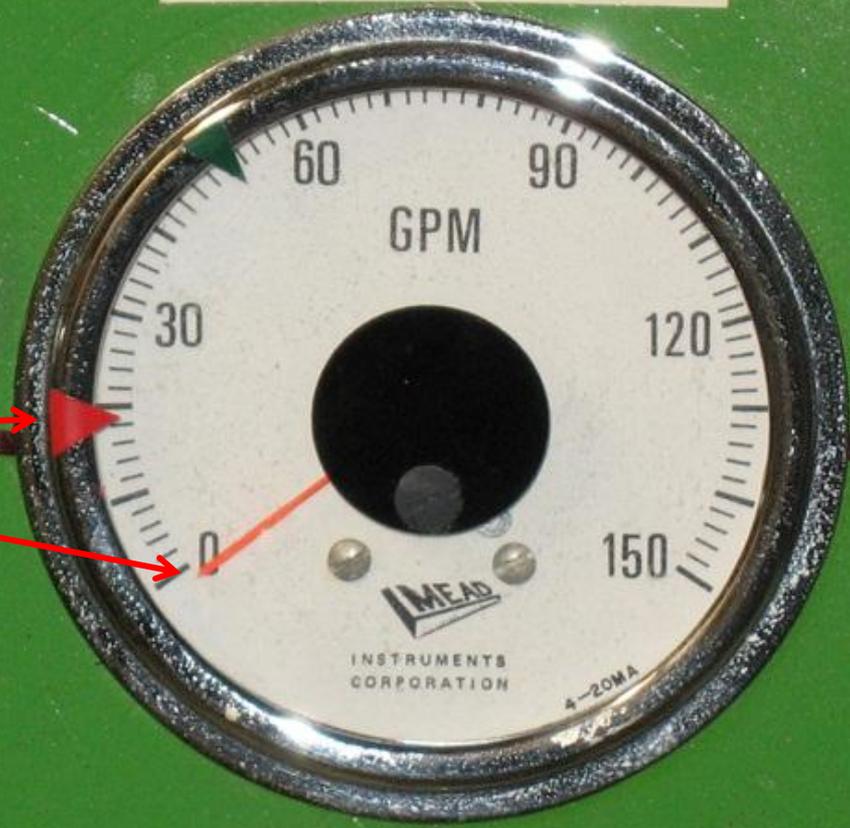


To turn on the RAW system, you will need to press “Start” and “Reset” at the same time. Instructions are on the middle of the Green Box, in addition a message is written on the chassis by the Start and Reset buttons.

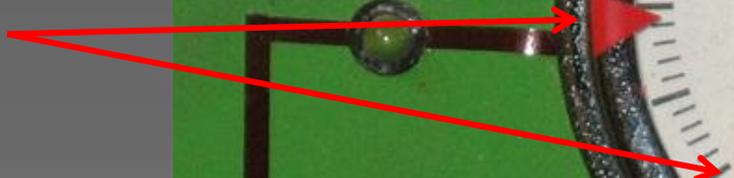
RAW RETURN

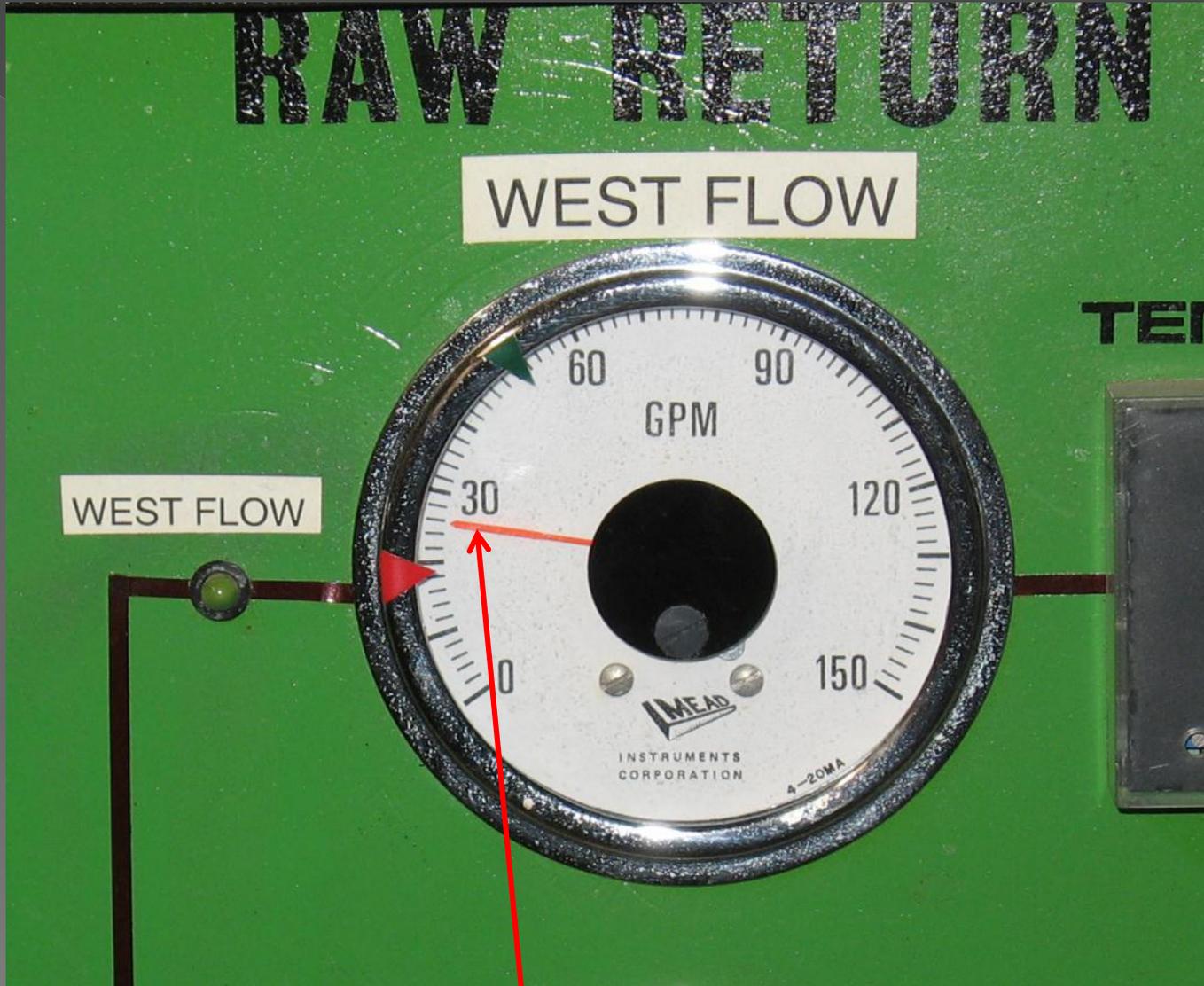
WEST FLOW

WEST FLOW



You can see the flow meter is at 0, below the red triangle.





When you turn the RAW System on, hold the Reset and Start buttons until the flow gauge is above the red triangle. Otherwise the water system will not stay on

PD S53 DIGITAL STATUS

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S53 DIGITAL STATUS                               ♦Pgm_Tools♦ AGG CONTRL
parm *SA♦ X-A/D X=TIME      Y=I:BEAM  ,I:LI607B,I:LI608A,I:HP608  *RESET
*save BL-- Eng-U I= 0      I= 0      0      0      -20      *ON
      s_MI AUTO  F= 1.6    F= 48     40     40     -50      *OFF
.global .linac.. .booster ...mi... ..tev.. ...sy... .p-bar.. .misc... COLLIDER
B0 e778 raw ps 4 betaquad separatr fxt trgt collider feeddown
F:M01RAW M01 Raw Water System ♦See Alarm Log♦
♦More Info♦                                     ♦Ctrl_Menu♦
bit-15 ..... 0 bit-31 ..... 0
bit-14 ..... 0 bit-30 ..... 0
bit-13 ..... 0 bit-29 ..... 0
bit-12 ..... 0 bit-28 ..... 0
bit-11 ..... 1 bit-27 ..... 0
bit-10 ..... 1 bit-26 ..... 0
Return Temperature OKAY 1 bit-25 ..... 0 Alarm is
Supply Temperature OKAY 1 bit-24 ..... 0 ACTIVE-OK
Raw Flow OKAY 1 bit-23 ..... 0 Speech is
LCW Flow OKAY 1 bit-22 ..... 0 ENABLED
ICW Flow OKAY 1 bit-21 ..... 0 Edit
Make-up OKAY 1 bit-20 ..... 0
Surge Tank Lo OKAY 1 bit-19 ..... 0
Surge Tank Hi OKAY 1 bit-18 ..... 0
Pump #2 ON 1 bit-17 ..... 0
Pump #1 OFF 0 bit-16 ..... 0
```

We now see Pump #2 is on

Messages

da End, stay cool