

TSG / Seawater

Loop LOG

Sept 2007 LSSL

July 2008

Duty Engineer:

Call 117 X X

X X X X X X X

Control vor der 3

Minimum 18.4 PSI.

19.450 out for
4 guests 35
need to clean filter
or slush
cut off by ^{in hole 13.8} engers.

SEASAVE Program
SEASAVE V7 TO Restart

1 a week
Real time looks "stop"
" " " " SMT

Schiet uit het dola
file van
eertj@pac.dfo-mpo.
gc.ca
Jane Eert

person mentioned above.
 personne ci-dessus mentionnée.
 a persona mencionada arriba.

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¡Gracias!

Size - Dimensions - Dimensión

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4" x 7 1/4" (23.5 cm x 18.4 cm)	9 5/8" x 7 7/8" (24.4 cm x 20 cm)
4" x 7 1/4" (23.5 cm x 18.4 cm)	9 5/8" x 7 7/8" (24.4 cm x 20 cm)

e[®] / NotePro[™] : couverture rigide avec reliure spirale double, breveté
n espiral doble, patentado (U.S. Des Patent No. D463,487) por Blueline[®]

POSANTES RECYCLÉES - CONTENIDO RECICLADO

- o 30% postconsumer fiber.
- o 30 % de fibres postconsommation.
- o 30% de fibras postconsumas.

43 - E-mail: rediform@rediform.com - www.rediform.com
1-877-773-1097 - E-mail: blueline@bluelineinc.com - www.bluelineinc.com
ada - Hecho en Canadá

* NotePro™: hard copy (U.S. Des Patent N

2007 LSSL UNCLOS

2008

Date

~~2008~~
Aug 30

022A

Pump running 18.4 Psi with output 17.9%
Seasave restarted - GPSCate was not showing
icon in taskbar

Restarted both Seasave & Hyperterm files. JE.

to Stop & Start Hyperterminal:

Under Transfer, click on Capture Text, then
Stop.

Under Transfer, click on Capture Text, then
~~Start~~. fill in new filename with
current date & time, then click on Start

to Stop & Start Seasave:

Under Real-time Data, click on Stop.

Under Real-time Data, click on Start
In window that comes up, click on
Select Output File Name & enter
new filename with current date & time.
Click on Save.

Back in big window, click on Start.
In the ~~to~~ header window that shows up,
click on OK.

Acquisition should start.

R²

PS1

Set point PS1

Date 2007

0655	1838	17.9
0940	183.9	17.8

31 AUG

1902

18.40 psi, output 17.8

Seasave updating, logging

Hyperterm updating, logging JE.

LT

1502

18.40 psi, output 17.8

Both systems logging

LT

1800

18.42 / 17.7 Both Systems logging

CLOCK
+ 1ms

2:48 AM

18.40 / 17.7 Both Systems logging 2040

LOCAL TIME

1 Sept 2007

256 PM

18.38 / 17.6

"

"

"

0900

0605 PM

1839 / 17.7

"

"

"

1206

1024 PM

1834 / 17.3

"

"

"

1624

2 SEPT

247 PM

1842 / 17.3

"

"

"

0847

523 PM

1842 / 17.2

1123

1025 PM

1842 / 17.9

1625

3 SEPT

1154 AM

1841 / 17.8 Both Systems OK

9/10 ICE

0554

419 PM

1833 / 18.2

"

"

8/10 "

1019

142 AM

1842 / 17.0

"

"

8/10 ICE

1942

304 AM

1839 / 17.2

"

"

"

"

2105

Page 3

CompuLink ⁴Sept

Date

4:17PM	1836	17.8	Bob's Systems	OK-	6/10/7/10	10:11
9:08PM	1840	17.8	"	"	"	1509
2:54AM	1840	17.8	"	"	5/10	14:54

⁵Sept

12:13PM	1841	17.9	"	"	7/10	14:13
10:16PM	1846	17.8	"	"	3/10	16:16
1:57AM	1841	17.8	"	"	4/10	19:57
1:57PM	1839	17.8	"	"	5/10	07:51

C:\LLSL\TSG\DATA\LSSL 2007-19:
START 30 AUG 2007 0233.HEX

⁴⁸
She ~~38~~ port.

- ① still logging - attempt to close
- ② where no logg functioning
unplay reply mouse.
- 1) Should we leave running as present
- 2) to boot machine
- 3) any old files

can't access some items for keyboard
as other windows are open

and have

" but I ap to stop 18 bit logging

6 Sept 07 = 1400 Email re/ core East
 CLOCUTIME 18.40 18.0 cellsp012 Local line
 8.56 PM 1839 17.8 except mouse. 1456
 7 Sept 2:25 AM 1839 17.9 " " 2024
 2:00 PM 1840 17.9 " " 0800

Recore Email for East - led sys.
 run - do not shut down

Try USB + PS/2 mouses - cursor still frozen
 why in Selinity PSU 25289? is this in range

830 PM 1839 17.9 " " 1430

Re secure for computer unit to work
 221 AM 1840 17.9 Both systems logging 2021

8 Sept

1245 PM 1839 / 18.0 " " " 0645

123 AM 1841 / 17.9 " " " 1835

9 Sept

1207 PM 18.39, 17.8 0607

204 AM 1842 17.9 Landward end of 2004

seismic Line I - 74° 05.8790 N
 (Eastlin end) 130 31.8810 W

10 Sept

200 PM 18.55 17.7 0800

1258 AM 1840 12.5 - m Heavy ice 1858

OUT - ? shut off by Engineers - NO

but set point PS I is down "OUT" on screen

11 Sept

STOPPED overnight

1220 PM 1841 12.5 10/100 0620

444 PM 089 / 35.0 " Engineer's shut off pump. 1144

NO water running

Compu 11 Sept

Date

Loco
TIME

215 PM	1835	16.5	Syphn broken	1315
814 PM	18.38	16.2	open water for a change	1414
254 AM	18.39	16.1	heading west	2054
	1840	16.1		

12 Sept

150 PM	1840	16.1	- pulling in slusmic gear	0750
--------	------	------	---------------------------	------

13 Sept

151 PM	1840	16.2	- open water no overcast	0751
335 AM	1840	16.2	- " " cool OK	2135

14 Sept

142 PM	1845	16.6	5/10 ice roller	0742
--------	------	------	-----------------	------

15 Sept

1:36 PM	18.60	16.2		0736
302 AM	1845	16.1		2102

16 Sept

203 PM	18.39	16.7	9/10 roller vel	0803
240 AM	18.39	16.7	Sunny " " 2/10	2046

17 Sept

208 PM	18.41	16.7	9/10 roller ice	0808
107 AM	1832	16.9	" " " Sunny	2007

18 Sept

156 PM	1841	16.5	fog 9/10 ice - roller	0756
538 AM	1841	15.8	clear 9/10 ice - new ice this yr	2338

19 Sept

144 PM	1835	15.7	9/10 big fives	0744
404 AM	1841	15.6	9/10 " " fog	2204

His rate here on dates

Date Local
TIME

Check 20 Sept
TIME

202 PM 1844 14.1 10/10 ice fog
21 Sept

144 PM 1838 15.8 10/10 ice fog

143 AM 1853 16.4 Stuck in ice.

0744

1944

~~1839~~ 16.4

22 Sept

144 PM 1839 16.4 9/10 ice fog

0744

314 AM 1836 16.14 heavy fog thin ice

2114

23 Sept

150 PM 1843 15.8 9/10 light ice no fog

0758

24 Sept

136 PM 1840 15.9 9/10 STUCK IN ICE

0736

124 5 AM 1839 15.1

open water

1845

347 AM 1840 16.1

" " overcast 2147

25 Sept

154 PM 1840 16.1 7/10 old ice

0754

26 Sept

155 PM 1848 14.9 ∇ TURTLEBACK

0755

126 AM 3142 13.3

" "

1926

* FIRST TIME I NOTICED MOUSE IS MISSING
→ reads INP 1 RING?

28 Sept - MINISTERIAL VISIT

146 PM 31.46 13.3 - See Sr Engineer

0746

140 AM 27.87 10.8 "OUT" see chief

1946

TOMORROW

GMT,
CLOCK
TIME

28

27 Sept 07

Date

LOCAL
(MT)
TIME

210PM 2852 10.6 lookfor SR Eregium 0810

SR chert Eng scarp pressures

303AM 30107 14.15 below 30psi & cool 2103

appears to be working & hopping

29 Sept

150PM -027 | 17.3 NO water running 0750

229PM 31.490 | 11.5 pump nets to life 0829

1103PM 29.93 | 11.6 1703

145AM 1283 | 11.5 - low pressure 1945

30 Sept

139PM 11.08 | 11.9 - low pressure. 0738

1050PM 20200 | 13.3 OK 1657

318AM 11.93 | 13.3 "OUT" again 2119

10 Sept

152PM 1207 | 13.3 OK (H2O) 0752

641PM 2650 | 14.5 1341

1214AM 2690 | 14.5 head N to line 5 1814

24 Oct

MISTAKE ON DATES REALIZED BY R2,

149AM 2654 | 14.15 dark 0749

NEXT WATCH WILL
HAVE A DATE WINDOW.

210PM 3030 0809

-038 | 14.5 Sys off in heavy ice

lighter ice - head chert - no start - see OK 1620

1056PM 13.79 | 15.6 Seems OK. 1656

40 Oct

206PM 1686 | 15.8 low pressure - but lots of H2O 806

running through

1113PM 2756 | 16.2 - OK very hot new ice 1713

COMPUTER
Cwell TIME
(GMT)

5 Oct 2007

Local
Date TIME

1:42 PM 28.00 / 16.2

1042

8:30 PM 27.38 / 16.2

1438

2:19 PM

6 Oct 2007

2:19 PM 27.80 / 16.2

0819

9:35 PM 23.69 / 16.2

1535

7 Oct 2007

2:08 PM 27.79 / 16.2

0545 end session LINE 0808

1:58 AM 27.36 / 16.2

1958

8 Oct 2007

2:00 PM 28.15 / 16.2 headed Sweden

0800

3:07 PM 28.75 / 16.2

~~fe~~ ^{TURN} ~~THE~~ SE today 2107

9 Oct 2007

12:28 PM 29.20 / 16.2

0628

10 Oct 2007

2:06 PM 31.48 / 16.2

0806

9:27 PM 31.47 / 16.2

1527

at ANCHOR KUGLURTOR

SHOT OFF PUMP - NOTIFY

SENIOR ENGINEER

Scan Count 704810

{ 9:30 push button computer
shut down

1530

Jane -

If you can not
read my book

Remembrance

e-mail

BROWLAND @USGS.GOV

or

rbrowland1@attglobal.net

10.

15: 4000

L Forey @ pscollins.com

LSSL 2008

Date July 1 2008

GPS Gate

On Advanced Tab

Instance Ship's GPS

Input Tab

COM9 9600 Baud

Outputs Tab

COM10 4800 Baud

Virtual COM2 (for GFD)

Virtual COM15 (for Hyperterm logging)

Advanced Tab

Instance SBE38

Input Tab

COM13 9600 Baud

Output Tab

COM10

Desktop icons for Ship's GPS - capture
SBE48 - capture

Computer: 10.1.20.57 28/Jul/08

Date July 4 2008

Honeywell Controller setup

Cycle through Lower display by repeatedly clicking on it.

Check SP ~~18.4~~ 20.0 ← target pressure
leave on OUT (pump % output) ← shows what pump is doing

If all is well, no need to change anything under Function or Setup

If Man, ^(man in upper display) you can set pump output by cycling through Lower Display to OUT & then changing it with arrow keys

If Auto ^{(A) in upper display} pump output will automatically change to keep target pressure, but with a maximum output of 33% to avoid startup transients.

PUMP STARTED 08:45 July 5/08

SP = 18.46

5 July 1255 increase SP to 20.0 JE

6 July 0730 all running fine

7 July 2100 Pump was stopped, controller in manual - restarted by pressing stop, start red/green buttons.

2400 Local time changes to GMT-4 from GMT-3

8 July 1203^{UTC} 63 20.13 56 37.41 Loop Sal \$

Date July 8

UTC 1815 TSG Laptop had rebooted itself.

COM Port setup

Serial feed from ~~Novatel~~ Novatel GPS in
on COM9

GPSSGate feeds this to

COM2 used to log w/ hyperterm

COM1 filtered for GPRMC

COM15 filtered for GPRMC → COM11 → TSG

TCP/IP port 20175

Vlinux COM ports

10.1.20.15:4000 12 - Novatel on LAN

10.1.20.5:4000 { 13 - SBE38, fed out to COM10
:4001 { 14 - SBE48, fed out to

Need to use hyperterm to log SBE48, GPS on COM2

COM8 - Input to Sensus from TSG 9600, 8, None

TSG outputs to TCP/IP

Computer address (seen by NOAA server) ^{to be}

10.1.10.57 Jul 28 2008

Setup GTDLog.exe program

→ Com Port Setup.

GPS → COM1 4800, No, 8, 1, No

Pressure → No input

Optode → COM6 9600, No, 8, 1, No

GTD → COM4 9600, No, 8, 1, No

Data directory: C:\2008-LSL\gty-data\

IF POWER FAILURE FOR SOME REASON

→ GTD must be restarted.

→ Go to Digiquantz Interactive v. 1.2

Program

→ Select Com 4 A detect instrument.

→ Go to commands (Far left tab).

→ Press start.

→ Select: "Continuously sample & send pressure"

> wait for initialization.

→ Once they come up on screen, quit program.

July 9 All running well SP 20 PSI
output 18.4%

10 1156 Loop SAL #9 73°25 10'N 68°56.98'W

10 2126 Pump discovered off. Hit stop/start to
get it going.
Went off ~ 1900 ±

2340 Debubbler working poorly - adjusted waste
value & Kates to get rid of bubbles &
then reset flow to gas box & gas cooler

11 0020 Loop 10 73 47.10 72 26.40

0021 lots of zooplankton to see in debubbler

11 1345 Loop 12 73 56.275 83 23.67

1503 Turned on water for deep by organisms alarm

2317 Pump shut down by ice? Stopped Seaview
to try reinstalling & see if that fixes
odd NMEA behaviour - Lat/Lon seconds
only show 000 in decimal digits

Leave pump off - ice conditions

Restarted hyper-term text capture of GPS & SBE48

Date July 15

Honeywell tuning

Setup → ~~Function~~ SETUP
TUNING

press FUNCTION

GAIN 0.330

RATE MW 0.01

RSET MIN 0.20

Security 0, etc

settings

Setup → SP RAMP nothing set

Setup → ~~Alg~~ CONTROL BUT HI LIM 35.7%
SP HI LIM 30 PSI

maximum pump % output

NOAA Sensor

Date

7/28/2008

TSG - Parent

HEHDT - Parent

SDDBT - Parent

SBE-48 - Parent

GPRMC - Parent

GPGGA - Parent

True-Wind-Speed - Parent

AVOS-Sentence - Parent

8 Types of RAW File

and

ACQLOG-LOG

These should

START

2008-30

Canada Basin Program

others:

Fugawi system

~~PAR~~ PAR data logger

Knudsen log

List Inst: Black Box cycling?

Blue Box

TSG

① Log? every 24 hrs?

	Time UTC	Date UTC	Pump PV	Inst	Comment	Initial!
ex	0200	18 Jul 08	20.0 psi	at site	all ok	SE
	0400	18 Jul 08	20.2 psi	GTD	not working everything else ok	SE

② Water sample: ^{2x} Salt, ^{2x} Oxygen daily
~~2x~~ ~~tx ch1~~ 1x ch1?

③ Flush rate on each system daily

Inst to be checked every 2 hrs

1. Pump - record process value
(actual value)

include units: psi or %

IF NOT ~~20%~~

OR (20) psi +/- 2

then Fix OR ~~all eng~~ notify
duty engineer → I expect
Norman will be the person to
help us? or the senior?

and OUT ## % (% effort)

2. Black Box

should cycle on the
hour to 20 min past

3. Blue Box

check pump is running
Flow is flowing
data is being recorded

4. T36

check flow + data

5. NOAA: 8 files should have
~~date~~ ~~time~~ current date + time

UTC

Page

A

MCR I Tel 117

UTC

Date

2008

Time	Date	Pump	Sea Ice	Black	Blue Box	TSG	
hh:mm	mm:dd	PV psi	OUT %	(x/10)	Box	Pump Box	Date

NOAA Server
Files (Z:)

Pump started ~ 23 40 16 July

Black Box

G-TD

TSG

} all turned on
~ 2350 UTC

2350 16 Jul 20.05 18.9 10 ✓ ✓ ✓ ✓ ✓

0530 17 July no flow through system
called MCR I to check strainer
~~17 July 0.7~~

0536 Flow started again

7.50 35% 9 ✓ ✓ ✓ ✓

lots of air in debubler - low water level.
de bubbler working well

0542 17 July 20.89 23.9 9 ✓ ✓ ✓ ✓

0544 Iced up again

17 July 7.42 35.0 9 ✓ ✓ ✓ ✓

Flow intermittent lots of bubbles.

0550 shut down pump until ice condition
permit

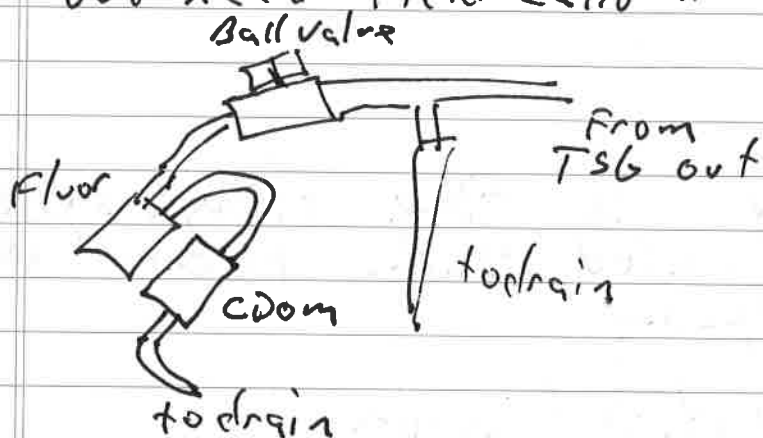
Page

20

0834 closed TSG & GTJ log.
SAC48 still running 1.2568C

plumbed in Seapoint Fluorometer s/n
SCF2745 on V0 and Wet/4bs CDM
Fluorometer s/n WSCD 1281 on V1.

New con file TSG-JULI7TEST. con
both sensors look OK using bench tests
but need Field calibration.



Seapoint recommends 7 l/min so
ball valve needs to be adjusted to
change flow.

1110 TSG pump @ 35%, 0.1 PSI - turned off.
Black box still on

1405 Black Box still pumping - gave it
ships water to chew on -
turn off after cycle.

July 20
UTC

Date

David Griffith (w/101) plumbed in large 293mm ϕ Filter with gallon gauge into spare output on seawater manifold. Ice appears better than approach to Cambridge Bay so will try turning seawater pump on.

0515

Control room checking strainers - OK. Can not start pump with lab control or mck control. Will have electrician check in Amstar.

July 20



↓ Frozen pump

Norm says this was because Manual setting was too low?
Chief says this was because ~~not enough~~ pump was stuck

UTC

1729

Pump turned on, 20 PSI set point

- TSC started (w/out cdom + Fluor connected)
- Black Box turned on
- QTD on

Saved Sensure setting: Sensure 2008-30 20 July 2008

Page

22

July 21

0234Z

↓ PSI

20.06

↓ SP PSI

20.00

0/10

Date

Add cDom and Floor back to loop but on separate outlet on manifold because of concerns about antifouling plugs on C cell in TSG

0237

PSI 20.82

SP PSI 20.00

0246

PSI 20.01

SP PSI 20.00

Adjusted cDom/Floor Flow to 7.3/min

0714

PSI 19.95

SP 20.00

0/10

0901

PSI 20.03

and 28% output effort

on station ~ midnight local (0400 UTC)
and waiting to meet w/ Amundsen

1400

20

28.93%

standing by for Amundsen.

1900 SE

PSI 20.03

28.2%

still standy by

Stopped and restarted TSG File acquisition.

New file: TSG-Jul-21-1915_hex

Date July 21

The last file:

TSG-Jul-20 test. hev

is a good file (not a test)

Voltage 1: either has too
low a value (ϕ) or
is not working.
↓
CDOM

2011

Pull intake off CDOM
sensor to insert blue plastic
calibration wand

before 0.07937 V
after in intake 0.1111 V
in outlet 5.000 V
TOK.

2014
↓

0814

CDOM Flow hooked back up.
Seapoint should see 7 l min^{-1}
CDOM ideal flow 1.8 l min^{-1}

0820

↑

2020
↑

Reset Flow to CDOM floor to
 3.1 l min^{-1} no change in CDOM.

UTC

Jul 22

Date

04:54

Pump

PV 20

SP 20

06:29

EE

PV 20.02

SP 20

09:09

PV 20

SP 20

14:36

TV 19.99

20.00

1805

20.00

20.00

2200

20.00

26 %

Jul 23

00:29

20.00

26 %

03:26

MK4

20.00

23 %

1327

~~MKS~~ 20.0

23.2 open water

CDOM 1.24054 follows
T, E, F, I changes - River water
streaming between MK5 & 4

1541

SE

=> Rick Nelson found the

Green Hose was NOT in
Black Box Bucket + may
have been out for some
time ??

Approach to Mac Shelf

- ~~to find amp~~Farthest south 2 ~~845~~

0145 July 24

Page

25

Flow Rate =

0245

TSG

$$125 \text{ } 2.770 \text{ l} = 10.85 \text{ l/min}$$

WB

Blue Box

$$355 \text{ } 2.170 \text{ l} = 3.72 \text{ l/min}$$

~~WB~~

Fluor/CDom

$$525 \text{ } 2.170 \text{ l} = 2.50 \text{ l/min}$$

PV 19.97

(SP) 26.3

I think this is % output

Jul 24

0526

PV 20

OUT 25.6

0700

PV 20

OUT 23.2

EF

TSG

$$115 \text{ } 2.170 \text{ l} = 11.84 \text{ l/min}$$

Blue Box

$$285 \text{ } 2.170 \text{ l} = 4.65 \text{ l/min}$$

Fluor/CDom

$$405 \text{ } 2.17 \text{ l} = 3.25 \text{ l/min}$$

Black Box works properly.

0900

PV 20

OUT 23.2

EF

TSG

$$115 \text{ } 2.17 \text{ l}$$

Blue Box

$$285 \text{ } 2.17 \text{ l}$$

Fluor/CDom

$$405 \text{ } 2.17 \text{ l}$$

Black Box works properly.

0920

PV

19.98

OUT 23.2

EF

TSG

85

1 l trips

$$7.5 \text{ l/min}$$

Blue Box

125

1 l

$$8 \text{ l/min}$$

CDom

255

1 l

$$2.4 \text{ l/min}$$

Use loose and wide mouth container more accurate

$$12 \text{ l} = 5 \text{ l/min}$$

UTC

Date

Jul 24

13:30

PV 20

OUT 23.0

EF

TSG

8 s/l

7.5 l/min

Blue Box

12 s/l

5.8 l/min

CDOM / Fluor.

20 s/l

3 l/min

19:45-

~~Underway chla sample taken
& on route to BL-1 from STA-A~~

~~GPS: 72° 27.8731 N 146° 25.8988~~

~~sample ID: underway #1~~

added to LOOP log at ~~end~~ ^{back of} book

Jul 25

0232

PV 20.0

23.0

^{9/10 out}

GA

08:14

PV 20

OUT 23

EF

TSG

6 s/l

16 l/min

Blue Box

13 s/l

9 l/min

4.6

CDOM / Fluor.

19 s/l

3-16 l/min

Jul 26

06:06

PV 20

OUT 22.9

EF

TSG

6 s/l

10 l/min

Blue Box

18 s/l

4 l/min

CDOM / Fluor

18 s/l

3-3 l/min

3.3 l/min

Page

27

Sat 27

07:23

PV 20

OUT 22.9

EF

TSG

6 s/l

10.2 l/min

Blue Box

14 s/l

4.3 l/min

CDOM/Fluor

19 s/l

3.2 l/min

14:40

PV 20

OUT 25.6

EF

TSG

7 s/l

8.6 l/min

Blue Box

15 s/l

4.0 l/min

CDOM/Fluor

20 s/l

3.0 l/min

16:21

PV 20

OUT 26.9

EF

TSG

6 s/l

10.2 l/min

Blue Box

15 s/l

4.0 l/min

CDOM/Fluor

18 s/l

3.3 l/min

System was down on 19:11 (Jul 27)

GTDly Restart @ 20:15

GTDly Stop @ 22:17 to recheck configuration

2017?

GTDly Restart @ 20:33

See TSG has NOT been picked up by
SCS : did PC address change?

Jul 28

15:01 Pump - 0-10. PV

Out 35%

call engineer
works again at 15:02.

PV 20. OUT 24%

2/22

computer crashed - rebooting

2/26

TSB restarted using
com12 for GPS & Franson
gate not working.

PV 20.00 SP 23.6

no GTD

2237

GTD started with optode
File 2008-072822-GTD,

29 July

0048

PV 20.00 ^{out} ~~SP~~ 23.6

29 July

09:58

PV 20 OUT 23.7

10:51

PV 20 OUT 23.7

15:47

PV 20 OUT 23.8

29 July

1635

PV 20.00 SP. 23.8

Date

July 30

06:25

PV 20.00 OUT 23.7

12:49

PV 20.00 OUT 23.7

14:14

PV 20.00 OUT 23.7

2037

PV 20.00 SP 23.9 in weathered ice 10/10

Jul 31

09:46

PV 20 OUT 23.6 ice 10/10

10:39

PV 19.98 OUT 23.7 ice 10/10

12:00

PV 20 OUT 23.7 ice 10/10

13:15

PV 20 OUT 23.6 ice 10/10

14:06

PV 20 OUT 23.6 ice 10/10

1705

PV 20 OUT 25.8 8/10 cleared

for morning

drop-outs on C - watch for ice up.

2306

20.0 25.6.

Aug 1

16:24

20.00 OUT 25.7

1801

20.00 25.1

2225

20.03 23.6

Aug 2

1810 2x POM samples (6L each) 03:30

Page

30

1637	19.98	23.8
2106	20.00	23.8
Aug 3 0211		
	20.00	23.8
09:50	20.00	23.30
12:14	20.00	23.30
14:38	20.00	23.30
18:42	20.00	23.30
2129	20.00	23.6

2247	20.00	23.0
------	-------	------

Aug 4

0302	20.00	23.7
------	-------	------

0555	20.02	23.6
------	-------	------

1136	20.00	23.8
------	-------	------

1416	20.00	23.8
------	-------	------

1647	19.96	23.9
------	-------	------

some C deposits
7/10 ice

Aug 5

11:58	20.00	24.0
-------	-------	------

13:54	20.00	23.9
-------	-------	------

1730

Computer crashed re-started
appears to have crashed at

TS6 restarted
data logging to C:\2008-LSSL\TS6\TS6-AUG-5.
hex

1736

Ship's GPS logging to

C:\2008-LSSL\GPS\ship-gps-2008-08-05.TXT

2027

SBE48 logging to

C:\2008-LSSL\GPS\SBE48\hull temp
LSSL 2008-08-05.TXT

COM14

2030

GTD & Optode logging to file

C:\2008-LSSL\gtd-data\2008-08-0520.GTD
parascientific sensor in GTD is slow
to start in Digiquartz slw and GTD
only read every 40s, so be patient when
starting.

2036

PV 19.99 SP. 23.9

Aug

6 2008 0016

Noted that TS6 file in
NONA server was not logging.

It had stopped 1530 on Aug 5
(on station so ok)

① when TS6 restarted, confirm output
includes Senpoint Floor 5 dec places.

Aug 6

Date

0119

19.98

23.8

noted SBE48 clock is 3 minutes
slow compared to GPS time,

0243

Found

Pump Off 0243 UTC

4 OUT = 35.0 so

looks like max output was
reached and system turned
off

Turned black box off

Tried calling 117 duty
engineer but no-one
answered

We are steamrolling through
snow covered first yr at 8knt.

0314

Pump
20.00

back on
24.3

0318

set point reduced to
18.00

0320

PV 17.96

SP 23.2

Page

33

Adjusted waste flow on debubbler
to clear bubbles after flow through
system adjusted.

6 AM
0519 Flow:

Black Box ~~contaminant~~ ^{flow} : 1 l / 19 sec ^{measured twice}
↳ Black Box is drawing out of

Blue Box Flow : 1 l / 12 sec

TSG : 1 l / 5 sec

CDOM + Flow : 1 l / 25 sec

PV = 18.01 psi, 23 % effort

09:17 PV = 18 OUT 23.0

10:39 PV = 18 OUT 23.0

1727
MD { pump observed off -0.34 35.0
Blue bot unplugged.

@ NG-3 (82°N, 140°W)

↳ I had come across sw pump off + blue cooler
mostly dry. I turned off cooler pump + optodrive + didn't
have chance to come back ore begin.

1830	pump back on ~ 1807 PV 18.01 SP 21.5	Date
1836	Re started blue box pump & optode. Re initialized GTD and started logging to c:\2008-LSSL\gtd-dat\2008-080618.GTD	
2000	18.06 21.6	
07 Aug 0022 52	Turned Black Box back on. It had been off since yesterday at (?) when ^{sw} pump had been stopped.	
0113	Cooler pump sounds <u>BAD</u> Turned off.	
0230	Computer observed re-started by MP. PV 17.99 SP 21.8	
0232	SBE21 restarted - logging to c:\2008-LSSL\TSG\TSG - Aug-7-het-	

SBE48 restarted

logging to c:\ ---- \ hull-temp
LSSL 2008-08-07TAT.TXT

0236 GPS logging restarted.

c:\ 2008-LSSL\GPS\ship-gps-2008-08-07
TXT.TXT

Restarted GTD- logging to

c:\ 2008-LSSL\std-data\2008080702.GTD

0255

Re-started NOAA server

0318

12V Rule 360 pump installed in
blue box.

11:57

PV 18.00

out 21.60

14:28

PV 18

out 21.50

16:53

PV 17

out 21.50

2335

PV 17.98

21.5

08 Aug

0033

see TSG is NOT coming in
being collected by NOAA server
+ Network error:

↓ conflict in IP addresses

opened ON NOAA server close + open
TSG instance on GPS gate and it fixed
itself.

08 Aug.
11:40

PV 18 OUT 21
- reset to WICP, address seems to
stay at ".57".

12:36

PV 18 out 21

13:43

PV 18 OUT 21

16:38

PV 18 OUT 21

08 Aug

0028

PV 18.00 SP 22.3

06:12

PV 18.00 OUT 23.8

07:41

PV 18.50 OUT 22.0

11:24

PV 17:99 OUT 21.8°

1941

18.00 SP 26.2

stationary at mooring C.
lots of spiking in Sal - bubbler?

Appears SBE48 stopped 1105.23

8 Aug

Reconnected in hyperterminal - OK
SBE48 clock still 3 mins slow.

10 Aug.

Date

0710

PV 18.01

SP 25.7

0913

PV 17.98

OUT 22.9

10:08

PV 18

OUT 22.9

12:26

PV 18

OUT 22.8

14:09

PV 18

OUT 22.8

2322

PV 17.83

SP 23.2

11 Aug

0222

PV 18.00

SP 22.99

lots of air in loop.

11:40

PV 18

OUT 23.00

15:23

PV 18

OUT 23.00

Blue box 16 s/l.
CDOM

2055

leak in TSB room - below
ditch drain plugged

2108

SW pump turned off

12 Aug.

08:18

PV 18.00

OUT 22.00

12:38

PV 18.00

OUT 22.00

14:30

PV 18

SP 21.8

pump in GTD was off
turned GTD pump on

1433

Page

38

Aug 12 16:37 PV 18 out 21.40

Aug 13 15:11 PV 18 out 22.00

Aug 14 0630 18.00 25.4
1802 18.02 22.6

Aug 14 2220

Black Box ~~suction~~

intake was $1\frac{1}{2}$ out of
water bucket

Resubmerged (as it
was in the back flush
mode)

Aug 15 0331
18.02 21.3

0515 0515 18.02 25.01

~2050

sw pump stopped

2100

call duty engineer

~2230

12V pump off

control

sw pump back on - lab
in manual (?)

Aug 16

0539 1418.00 SP 18.00

turned 12V pump on GTS back
on - off since 2100

Aug 16 1929

Turned SW Pump off

"

Blue cooler pump + optode

"

Black Box power off off

Left software running + power
for TSG

Left software running for cooler

We are waiting for fuel
off tuktoyuktuk & will be here
~ 16 hrs more. As water is
pretty full of stuff decided
to power everything off.

Aug 18 14:48 UTC TSG software
turned off

Aug 18

UTC

2230

underway again + restart
seawater loop

restart TSG but can't
get SBE38 to come up
on VLINX COM13. We
can see it though ^{on} using
the ITP ^{also} we know
its working.



using hyperterminal

to 10.1.20.5

Black Box turned on

GTD - blue cooler
power turned on to
pump + optode



software started @

Aug 19 0046

Aug 19

File: 2008-081900.GTD

0136

File
SBE48 ✓ stopped + restarted

GPS File stopped + restarted

Aug 20 approx 23:30 end of cruise 2008-30
 stop/restart Seasave
 stop/restart SBE48
 stop/restart ship GPS.

- File up to Aug 19 will be copied
- 67D file 2008-082023-67D will be copied

21

20 Aug 2008 0033 UTC
 Black Box

43911 → connected to computer
 using RS232 cable

Ran PC208W to collect data

File name: 200830-20A, 2008.dit
 and 200830-20Aug2008area2.dit

Not sure what area 1 and
 area 2 mean?

Only one data file written

200830-2.dit Julian day 193-233

~~The~~ Last data in
end of File is

233 1922

however the last Run was
at 20 Aug 2300 UTC

Maybe wrong time zone?

Main NOAA Server computer
had new updates installed
Then Edward Fok made sure
SCS restarted.

==

Underway computer (TSB)
rebooted on its own ~~and~~
while PC208w ~~was~~ was running.
Connection?? $\hookrightarrow$ used for downloading
black box data.

Trouble restarting =

SBE38 + SBE48 not talking
on VLINK to virtual com ports (B3+14)
Eventually SBE38 working But
48 is now collecting to hyperterminal
via TCP/IP, not ~~with~~ through virtual
com port.

4.
5.

Date

set point
is 18.0

Date	Time	Pump	SeaIce	Black	Blue	TSG	NOAA Server
		PV PSI %out	x/10	Box	cooler		(7 files)

Aug
21

0555

18.0

22.4

0/10

✓

✓

✓

✓

START OF 2008-31

Good Luck Shige!

NOAA Server Computer
channel 8

User: IPY admin
Passwd: noaaadmin

SCS program

IF TSG is not updating, *

open settings for GPSgate
Instance TSG
input → First close
then open

This will usually fix the
problem of ~~the~~ the TSG file on
NOAA server not ~~be~~ updating

To Restart ~~the~~ SCS software

Acquisition → Manager Functions
passwd kko01

→ Data Acquisition

→ START Acquisition

SCS data is at

TSG parent raw

012

/compress/TSG.?

S:\SCS\Datalog

Ice camera images

S:\IceCamera\2008

Cwise data

S:\Science Net

and underlying documentation

S:\ScienceNet\Underlying Systems Documentation
\whats here.doc

Questions? Ask Phil Soyboyer

the electrician

Loran?

Lorn is the Electronic Tech. (Hentner)

Chief Scientist

Ruth Jackson

Date	Time (UTC)	Pump		Sea Ice	gtd_data		TSG	Date	NOTES
					Black Box	Blue Cooler		NOAA Server (7 files)	
Aug 22	18:40	18.0	21.8	0/10	✓	✓	✓	✓	
23	19:37	18.0	21.7	0/10	✓	✓	✓	✓	Bottle Sal sampled
24	19:27	17.9	22.1	1/10	✓	✓	✓	✓	
25	18:32	18.0	22.1	0/10	✓	✓	✓	✓	Bottle Sal sampled
26	22:14	18.0	22.1	0/10	✓	✓	✓	✓	
27	20:55	17.9	22.2	0/10	✓	✓	✓	✓	Bottle Sal sampled
28	20:20	18.0	22.4	0/10	✓	✓	✓	✓	New files created
29	20:44	17.9	22.5	0/10	✓	✓	✓	✓	Bottle Sal sampled
30	18:53	18.0	22.6	2/10	✓	✓	✓	✓	
31	20:00	18.0	22.5	6/10	✓	✓	✓	✓	Bottle Sal sampled

Date	Time (UTC)	Pump		Sea Ice	gtldata			TSG	Date NOAA Server (7 Files)	NOTES
		PV PSI	% OUT		Black Box	Blue Cooler				
Sep	1	19:11	18.0	22.4	6/10	✓	✓	✓	✓	
	2	23:47	18.0	22.4	9/10	✓	✓	✓	✓	
	3									
	4									
	5	0:14	18.0	22.3	4/10	✓	✓	✓	✓	New files Created & Bottle Sal Sampled
	6	03:21	18.0	22.4	6/10	✓	✓	✓	✓	
	7	03:16	18.0	22.4	10/10	✓	✓	✓	✓	Bottle Sal Sampled
	8	00:59	17.9	22.8	10/10	✓	✓	✓	✓	
	9	06:45	18.0	22.6	10/10	✓	✓	✓	✓	Bottle Sal Sampled

* PUMP TRIPPED OFF 16:45 AM UTC TIME (POWER LOSS)
 BACK IN SERVICE AT 16:50 AM SP 18.00 PSI
 82.1 N / 171.7 W P.S.

Date	Time (UTC)	Pump		Sea Ice	gtd. data		TSG	Date NOAA server (7 Files)	NOTES
		PV PSI	% OUT		Black Box	Blue Cooler			
Sep 10	01:11	18.0	22.7	2/10	✓	*2	*1	✓	
*1 SBE48 data transfer was stopped at 09/Sep/2008 16:41									
SBE48 data transfer was started at 10/Sep/2008 01:32 New file was created "hull temp LSSL 2008-09-10.TXT" old file was leaved "hull temp LSSL 2008-09-05.TXT"									
*2 gtd. data transfer was stopped at 10/Sep/2008 01:19									
Restarted GTDLog.exe with Interactive v1.2 program File was overwritten automatically to "2008-091001.GTD" at 10/Sep/2008 01:55									
10	02:21	17.9	22.7	2/10	✓	✓	✓	✓	Ship was stopped to meet Healy
11	04:06	17.9	22.0	2/10	✓	✓	✓	✓	

Date	Time	Pump		Sea Ice	gtd. data		TSG	Date		NOTES
		FV PSI	% OUT		Black Box	Blue Cooler		NOAA Server	(7 Files)	

Sep 12 02:03 18.0 22.8 10% ✓ ✓ ✓ ✓ New files Created

13 02:49 18.0 22.7 10% ✓ ✓ ✓ ✓ Bottle Sal Sampled

• Ship stalled at this time.

Temp = 1.990°C Sal = 22.75

• Sal was noisy in this day

and was low around 257.00 Julian Days

↳ Front or Eddy?

• I will deploy XCTD near this point. → As a result of XCTD surface salinity was surely low.

14 05:23 17.9 22.9 10% ✓ ✓ ✓ 10% of inlet was out of water

• Sal became stable,



15 03:40 18.0 22.8 9% ✓ ✓ ✓ ✓

18 00:33 18.0 22.7 9% ✓ ✓ ✓ Bottle Sal Sampled

Date	Time (UTC)	Pump		Sea Ice	gtd-data		TSG	NOAA Server (7 Files)	NOTES
		PV PSI	% OUT		Black Box	Blue Cooler			
Sep									
19	03:26	18.0	22.4	10%	✓	✓	✓	✓	New files Created
20	02:15	18.0 (unstable)	22.5	10%	✓	✓	✓	✓	Bottle Sal sampled
23	00:33	18.2	23.1	9%	✓	✓	✓	✓	Bottle Sal sampled

FULL

POWER LOSS AT 12:30 SEPT 24, PUMP RE-STARTED AT
03:15, DEBUBBLER CLEAR ALL FLOWING NORMAL P.S.

25	19:10	17.9	21.5	10%	✓	✓	*1	✓	Bottle Sal sampled
----	-------	------	------	-----	---	---	----	---	-----------------------

↑
At this time, Shige changed the Honeywell Controller
from MANUAL mode to AUTOMATIC mode.

*1 SBE48 data transfer was stopped
at 24/Sep/2008 06:31

~~SBE48 data transfer was started
at 25/Sep/2008~~

~~New file was created "hull Temp LSSL 2008-09-25.TXT"
old file was leaved "hull Temp LSSL 2008-09-19.TXT"~~

SBE48 data connection was dead !!

*1: SBE 48 data connection was dead on 24 Sep.

Date	Time (UTC)	Pump		Sea Ice	Black Box	Blue Cooler	TSG	NOAA Server (7 files)	NOTES
		PV PSI	% OUT						
Sep									
26	04:53	18.0	21.4	10%	✓	✓	*1	✓	New files created
27	21:02	18.0	19.4	9%	Noisy	✓	*1	✓	
28	02:27	18.0	20.9	9%		✓	*1	✓	Bottle Sal sampled
30	04:06	18.0	21.2	9%	*2	✓	*1	✓	Bottle Sal sampled

*2. Black Box was not pumping.

Turned off Black Box at 04:25.

Oct

1 04:02 ? ? % — *3 *3 ✓

*3 The data of Blue Cooler (gtd-data), TSG, GPS, and SBE48 were not coming to the TSG LOGGER computer, probably because of a problem of GPS Gate.

I finished the download of the underway data.

Thank you
Shige

Oct

6

Date

re-set system clock to GPS
system clock was ~15s slow.

GPS OK - was disabled by
UNCLOS!
start acquisition 1652.

SBE48 not sending on 14 or ulinx
4001.

Tried starting blue box. GTD sending
pressures, but no optode (com6) or GPS
(com1).

- Pump in blue box not working

- no 12V on supply

substituted Patricia's power supply

- optode + pump now working

pump noisy - might last 6 days!

1818 - can not see com1 GPS
on GTD + optode display. Tried turning
off Hyperterminal capture of ship's
GPS - didn't change

re-started collection of ship's GPS
in file 2008-1000618.GTD

and 2008100618.Yft.

Oct

Date

7 UTC
~~0830~~

system off
GTA pump off/dead

~~0845~~
1445

restart TSB
re start ship's GPS log

1456

re start para pressure sensor
in GTA

1457

Restart Attempt restart
no 12V for pump or optode.

Oct 10

0125

PV 17.9

SP 18.9

GPS capture & TSB log OK
took loop sal sample 40

0128

2018

PV 17.99

SP 18.1

Oct 12

0214

shut down TSB Acquisition &
Ship's GPS
sea water sampling pump shut
down.

All TSB, gas cooler filters copied
to IOS LSS external 2

Page

55

END OF
2008-31
UNCLOS LSSL

Date

All
Blank

Page