

DEPLOYMENT RECORD

Project Name: Victoria Sill Start Date: Sep. 2007 End Date: May 2008
 Mooring Name: AS04-I Station Name: AS04

Geog. Desc.: Constance Bank Tide: +2.5m Victoria
 Latitude: 48°18.012' Longitude: 123°22.541'
 Water Depth: 114.5m datum Ice Thickness:
 Magnetic decl: Time Zone: PDT Anchor Type: 3wheels 2045lbs
 Date: Sep. 18, 2007 Time Anchor Dropped: 1307 PDT Date:
 Remarks:

RECOVERY RECORD

Date: Apr. 27, 2008 Time Anchor Released: 0745 PDT
 Remarks: - recovered without incident

INSTRUMENTS (Start at TOP)

Type	Serial #	Depth	Time in	Time Out	Notes
<u>WH300</u>	<u>8943</u>	<u>107.7m</u>	<u>1305 PDT</u>		<u>no external</u>
<u>RCM</u>	<u>10699</u>	<u>110m</u>			
<u>SAE37</u>	<u>5306</u>	<u>110.5m</u>			<u>Pumped</u>

Angus 7363

Release	Serial	R Code	Arm Code	Freq	On/Off	B0	B1	Aux Codes
<u>RT661</u>	<u>151</u>	<u>6434</u>	<u>6431</u>	<u>9000</u>	<u>6432/6433</u>			
Pinger 1	Type	Serial	Pinger 2	Type	Serial	Battery Volt		
<u>Helle</u>	<u>1/4 x 27</u>	<u>8822</u>						

Deployed
Disabled

FLOTATION

Type	Serial #	Size	Colour
<u>8 Vinyl Frame</u>			<u>Orange</u>
<u>SS37</u>	<u>2589</u>		<u>Yellow</u>

Type	Serial #	Size	Colour

Data Entry by:

PlanADCP (Advanced) : [AS041]

BackToSC Settings View Help

CAUTION: Not enough battery packs for the deployment

Basic Advanced Expert

Environmental Setup: Transducer Depth: 111 m Salinity: 34 ppt Magnetic Variation: 0 ° Temperature: 8 °C	Profiling Setup: Pings Per Ensemble: 36 Number of Depth Cells: 30 Depth Cell Size: 4 m Mode: 1	Deployment Consequences First Cell Range: 6.11 m Last Cell Range: 122.11 m Max Range: 138.56 m Standard Deviation: 1.24 cm/s Ensemble Size: 754 bytes Storage Required: 18.64 MB Power Usage: 453.03 Wh Battery Pack Usage: 1.0
--	---	--

Deployment Timing Setup:

Duration: 270 days

Ensemble Interval: 00:15:00.00

Ping Int(☒ Auto): 00:00:25.00

Min TP

☐ Ping Immediately After Deployment

First Ping Date and Time:

18-Sep-2007 20:00:00

Notes

8943
AS041
START: SEPT 18, 2007 @ 2000UTC
Aluminum Housing, internal pack with no compass swing, LP

Workhorse Sentinel: 300 kHz/ Long Range/ 1 Battery Pack/ Memory: 256 MB

NUM



>>>>> Function starting 09/18/07 15:37:30 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.28
RD Instruments (c) 1996-2005
All Rights Reserved.
>TS070918153733
>CZ

Powering Down

>>>>> Function starting 09/18/07 15:37:42 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.28
RD Instruments (c) 1996-2005
All Rights Reserved.
>AZ
Pressure Offset Updated in NVRAM.

>CZ

Powering Down

>>>>> Function starting 09/18/07 15:37:50 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.28
RD Instruments (c) 1996-2005
All Rights Reserved.
>RE ErAsE erasing...
Recorder erased.

>CZ

Powering Down

>>>>> Function starting 09/18/07 15:38:03 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.28
RD Instruments (c) 1996-2005
All Rights Reserved.
>DEPLOY?

Deployment Commands:

RE ----- Recorder ErAsE
RN ----- Set Deployment Name

WD = 111 100 000 ----- Data Out (Vel,Cor,Amp; PG,St,P0; P1,P2,P3)
WF = 0176 ----- Blank After Transmit (cm)
WN = 030 ----- Number of depth cells (1-128)
WP = 00065 ----- Pings per Ensemble (0-16384)
WS = 0400 ----- Depth Cell Size (cm)
WV = 175 ----- Mode 1 Ambiguity Vel (cm/s radial)

TE = 00:15:00.00 ----- Time per Ensemble (hrs:min:sec.sec/100)
TF = **/**/**, **: **: ** --- Time of First Ping (yr/mon/day, hour:min:sec)
TP = 00:13.84 ----- Time per Ping (min:sec.sec/100)
TS = 07/09/18, 15:38:06 --- Time Set (yr/mon/day, hour:min:sec)

EA = +00000 ----- Heading Alignment (1/100 deg)
EB = +00000 ----- Heading Bias (1/100 deg)
ED = 01110 ----- Transducer Depth (0 - 65535 dm)
ES = 34 ----- Salinity (0-40 pp thousand)
EX = 11111 ----- Coord Transform (Xform: Type, Tilts, 3 Bm, Map)
EZ = 1111111 ----- Sensor Source (C,D,H,P,R,S,T)

Press any key to continue

CF = 11101 ----- Flow Ctrl (EnsCyc; PngCyc; Binry; Ser; Rec)
CK ----- Keep Parameters as USER Defaults
CR # ----- Retrieve Parameters (0 = USER, 1 = FACTORY)
CS ----- Start Deployment

>SYSTEM?

System Control, Data Recovery and Testing Commands:

AC ----- Output Active Fluxgate & Tilt Calibration data
AF ----- Field calibrate to remove hard/soft iron error
AR ----- Restore factory fluxgate calibration data
AX ----- Examine compass performance
AZ ----- Zero pressure reading

CB = 411 ----- Serial Port Control (Baud; Par; Stop)
CP # ----- Polled Mode (0 = NORMAL, 1 = POLLED)
CZ ----- Power Down Instrument

FC ----- Clear Fault Log
FD ----- Display Fault Log

OL ----- Display Features List

PA ----- Pre-Deployment Tests
PC1 ----- Beam Continuity
PC2 ----- Sensor Data
PS0 ----- System Configuration
PS3 ----- Transformation Matrices

RR ----- Recorder Directory
Press any key to continue

RF ----- Recorder Space used/free (bytes)
RY ----- Upload Recorder Files to Host

>TS?

TS = 07/09/18,15:38:15 --- Time Set (yr/mon/day,hour:min:sec)

>PS0

Instrument S/N: 8942
Frequency: 307200 HZ
Configuration: 4 BEAM, JANUS
Match Layer: 10
Beam Angle: 20 DEGREES
Beam Pattern: CONVEX
Orientation: UP
Sensor(s): HEADING TILT 1 TILT 2 DEPTH TEMPERATURE PRESSURE
Pressure Sens Coefficients:
c3 = -2.459703E-15
c2 = -9.793993E-09
c1 = +1.242588E-01
Offset = +5.787939E+01

Temp Sens Offset: -0.22 degrees C

CPU Firmware: 16.28 [0]
Boot Code Ver: Required: 1.13 Actual: 1.13
DEM0D #1 Ver: ad48, Type: 1f
DEM0D #2 Ver: ad48, Type: 1f
PWRTIMG Ver: 85d3, Type: 4

Board Serial Number Data:

FC 00 00 00 93 B5 D0 09 REC727-1000-04E
DB 00 00 00 93 AE 23 09 CPU727-2000-00J
36 00 00 00 93 AE 13 09 PIO727-3000-00C
2A 00 00 00 93 B9 27 09 DSP727-2001-04G

>PA

PRE-DEPLOYMENT TESTS

CPU TESTS:

RTC.....PASS
RAM.....PASS
ROM.....PASS

RECORDER TESTS:

PC Card #0.....DETECTED
Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS
PC Card #1.....DETECTED

Card Detect.....PASS
Communication.....PASS
DOS Structure.....PASS
Sector Test (short).....PASS

DSP TESTS:

Timing RAM.....PASS
Demod RAM.....PASS
Demod REG.....PASS
FIFOs.....PASS

SYSTEM TESTS:

XILINX Interrupts... IRQ3 IRQ3 IRQ3 ...PASS
Wide Bandwidth.....PASS
Narrow Bandwidth.....PASS
RSSI Filter.....PASS
Transmit.....PASS

SENSOR TESTS:

H/W Operation.....***FAIL***

>PC2

All Sensors are Internal Only.

>RS

```
>PC1
```

Collecting Statistical Data...

[illegible]

44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45
44 41 44 45

Rub Beam 1 = PASS
Rub Beam 2 = PASS
Rub Beam 3 = PASS
Rub Beam 4 = PASS

>CZ

Powering Down

>>>>> Function starting 09/18/07 15:39:29 >>>>>

[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.28
RD Instruments (c) 1996-2005
All Rights Reserved.
>RR
Recorder Directory:
Volume serial number for device #0 is a4ae-2016

No files found.

Bytes used on device #0 = 0
Volume serial number for device #1 is c497-71b7

No files found.

Bytes used on device #1 = 0
Total capacity = 1086271488 bytes
Total bytes used = 0 bytes in 0 files
Total bytes free = 1086271488 bytes

>
[BREAK Wakeup A]
WorkHorse Broadband ADCP Version 16.28
RD Instruments (c) 1996-2005
All Rights Reserved.
>CR1
[Parameters set to FACTORY defaults]
>CF11101
>EAO
>EB0
>ED1110
>ES34
>EX11111
>EZ1111111
>WA50
>WB1
>WD111100000
>WF176
>WN30

>WP36
>WS400
>WV175
>TE00:15:00.00
>TP00:25.00
>TF07/09/18 20:00:00
>CK
[Parameters saved as USER defaults]
>The command CS is not allowed in this command file. It has been ignored.
>The following commands are generated by this program:
>CF?
CF = 11101 ----- Flow Ctrl (EnsCyc;PngCyc;Binry;Ser;Rec)
>CF11101
>RN AS04I
>CS

Mooring: AS04-I
UCat
Serial
5306

Battery Calculations:

Sampling Time:

$$3.33s + (2.27 * (NAV G - 1))$$
$$3.33s + (2.27 * (4 - 1)) = 10.14s$$

Example 1: A standard MicroCAT (no external power option) with pressure sensor is set up to sample autonomously every 10 minutes (6 samples/hour), taking 4 measurement per sample (**NAV G=4**). How long can it be deployed?

Sampling time = 3.33 seconds + 2.27 seconds * (**NAV G** - 1) = 10.14 seconds

Sampling current consumption = 0.020 amps * 10.14 seconds = 0.2 amp-seconds/sample

In 1 hour, sampling current consumption = 6 * 0.2 amp-seconds/sample = 1.2 amp-seconds/hour

Pump current consumption = 0.13 amp-seconds/pulse

In 1 hour, pump current consumption = 6 * 0.13 amp-seconds/pulse = 0.78 amp-seconds/hour

Quiescent current 10 microamps = 0.01 mA

In 1 hour, quiescent current consumption = 0.01 mA * 3600 seconds/hour = 0.036 amp-seconds/hour

Total current consumption / hour = 1.2 + 0.78 + 0.036 = 2.02 amp-seconds/hour

Capacity = (5 amp-hours * 3600 seconds/hr) / (2.02 amp-seconds/hour) = 8910 hours = 371 days = 1.02 years

Number of samples = 8910 hours * 6 samples/hour = 53460 samples

Command Summary:

DDMMYY=XXXXXX
HHMMSS=XXXXXX //(UTC)
OUTPUTSAL=Y
OUTPUTSV=Y
FORMAT=1
NAV G=4
PUMPINSTALLED=Y
SAMPLENUM=0
INTERVAL=600
STORETIME=Y
TXREALTIME=N
STARTDDMMYY=180907
STARHHMMSS=210000
STARTLATER

IOS OCEAN PHYSICS

AANDERA CURRENT METER DEPLOYMENT AND RECOVERY RECORD

INSTRUMENT: RCM8 SERIAL #: 10699 PST, UTC OTHER: _____
 TAPE SIZE: DSU PROJECT: Victoria Sill I(mA) _____

Channel #	Reading1	Reading 2	Last Cal
1. Reference	<u>0283</u>		
2. Temperature	<u>1023</u>		
3. Conductivity	<u>249</u>		
4. Extemp/pressure	<u>1023</u>		
5. Direction	<u>147</u>		
6. Speed	<u>0</u>		
Date: <u>Sept 17/07</u> Time: <u>2100 UTC</u>			

OK PIMS

Rotor Counter Information:

Rev/Count: _____
 F.S.= _____ Cm/S 0x AvL
 Rotor Switch: _____
 Rotor Type: PW

Sampling Interval: 30 MIN Depth: 110m TAPE ID: 10699-AS04-I
 Pressure Sensore Range: _____ PSI Serial #: _____
 Depth Max: 2000 MAX Compass Serial #: 18211
 Conductivity Range: 24-44 MMHO Cell Serial #: 2713
 HI Res Temperature Range: 4-12

CON CELL

NOT IN
CAL

Channel #	Reading1	Reading 2
1. Reference		
2. Temperature		
3. Conductivity		
4. Extemp/pressure		
5. Direction		
6. Speed		
Date: _____ Time: _____		

TIME IN WATER: 1307 PPT DATE: Sept. 18, 2007
 BAT VOLTAGE: 9.86 ON DEPLOYMENT
 CRUISE ID: 2007-62 DEPLOYED
 TECHNICIAN: LP

TIME OUT WATER: 1604 UTC DATE: April 27/08
 BAT VOLTAGE: 2.04 ON RECOVERY
 CRUISE ID: 2008-32 RECOVERED
 TECHNICIAN: LP

NOTES: 4x Lithium
DSU ID - 4365 - Display not correct but data
is collected. LP
- Bat is run down open it up and check it

- no last records.