Calibration cruise
BNKT Flood 10/6/12

ON BOARD R/V Ellis Olsson
Capt Wayne Reisner crew
Grace Carthright, Kelsey Ball
& Darrell Smith.

Maiden cruise of PICS camera!
S/N 2

BNKT to turn pics as not aligned properly so will be deployed in a vertical position - will take profiles off Bottom to collect samples as setting at Back Down.

Raise List of Profiles & Adjust Hanging Bracket

Stations - 5038 - 5077

Profiler Deployment Setup **Date**_____

Location
- ☐ Gloucester Pt
- ☑ Claybank
- ☐ other _____

Profiler
- ☐ R.O.S.E.
- ☐ lil ROSE

ADV (SONTEK)

cmab 55 cmab

Sensor
- ☑ B336 (V20358) & G494 (V20364)
- ☐ B337 (V20359) & G447 (V20365)
- ☐ B338 (V20360) & G446 (V20366)

Calibration date _____ filename _____

Compass Calibration Horizontal Calibration score (0-9) _____
Vertical Calibration score (0-9) _____
Ambient Mag Field Strength (4.5) _____
Results: (pass/fail) _____

CTD (YSI 6600)

cmab 38 cmab

Sensor
- ☐ 03H1988 (V17937)
- ☐ 03K0492 (V??008)
- ☐ 07B1391 (V20490) New one

Calibration date _____
- ☑ conductivity
- ☐ pressure
- ☐ turbidity

LISST 100X (Sequioa)

lifted LISST up to 52 cmab

Sensor **cmab** 38 cmab
- ☐ 1075 (V14726)
- ☐ 1185 (V18917)
- ☐ 1232 (V20536)
- ☑ 1239 (V20609)

OBS **cmab** 36 cmab
- ☐ 1675 (V16608)
- ☐ 1812 (V16965)
- ☐ 11315 (V20774)

Calibration date 10/5/12 zscat name zsc121005_1239

PUMP INTAKE

Low 29 cmab
High 36 cmab

cmab _____

ADCP (RDI 1200 kHz

cmab _____

Sensor
- ☐ 602 (V)

PICS 5/12 64 cmab

BKT FLOOD

Cruise YR121006 Date 10/6/12

Station	start time	latitude	longitude	total depth	ADCP filename (121006)	CTD	LISST	ADV	TSS sample	Sample Depth	sample time	End Time	POCS Commer
S5038	0818	20.530	37.540	5.87	~~000~~	✓	✓	✓	—	—	—	—	081854
													081958
													082032
S5039	838	20.530	37.5405	5.92	000	~~✓~~	~~✓~~	~~✓~~					Push
S5040	841	20.5307	37.540	5.88	001	✓	✓	✓	B5039H1	5.81	084141		084141
													084222
					0'								084254
													084356
									B5040 H	5.81	084440		ON Anoth Start MARKED?
S5041	0853	20.531	37.543	5.85	002	✓	✓	✓	B5041H2	5.80	0853		
	~~0856~~	~~20.532~~	~~37.549~~	~~5.84~~					B5041H3	4.35	0856		
									B5041H4	2.85	0900		
									B5041H5	1.87	090301		
									B5041H6	083	090513		
S5042	0909	20.5324	37.5440		003	✓	✓	✓	—	—	—		Push
S5043	0910	20.5307	37.5408	5.97	004	✓	—	✓	B5043H1	5.85	0910		Bottom ①
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	5.85	0913		
S5044	0917	20.5317	37.5418	5.97	005	✓	✓	✓	B5044H1	5.83	091715		Bottom ②
↓	↓	↓	↓	↓	↓	↓	↓	↓	B5044H2	5.84	091955		

COMMENTS

Cruise ______________________ Date ______________________

121006

Station	start time	latitude	longitude	total depth	ADCP filename	CTD	LISST	ADV	TSS sample	Sample Depth	sample time	End Time	Comments
SS045	0927	20.5303	37.5388	6.02	006	✓	✓	✓	BS045H1	5.83	092810		☆ TOO TURBID
↓	↓	↓	↓	↓	↓	↓	↓	↓	BS045H2	5.85	093214		
S ————								↓	BS045L1	5.85	093346		
SS046	0939	20.5309	37.5406	6.02	007	✓	✓	✓	BS046H1	5.81	093838		Turned it back on before lifting off bott
↓	↓	↓	↓	↓	↓	↓	↓	↓	~~H2~~	—	—		
↓	↓	↓	↓	↓	↓	↓	↓	↓	~~L1~~	—	—		☆☆
SS047	0952	20.5328	37.5443	6.02	008	✓	✓	✓	BS047H1	5.89	100110	☆2	Profile ③
↓	↓	↓	↓	↓	↓	Don't count Lotta bad. [?]	↓	↓	H2	4.70	100630		1 m intervals up then down
↓	↓	↓	↓	↓	↓	↓	↓	↓	H3	3.48	100856		☆ moved boat before [illegible]
↓	↓	↓	↓	↓	↓	↓	↓	↓	H4	2.80	11152		
↓	↓	↓	↓	↓	↓	↓	↓	↓	H5	1.03	101500		
SS048	Bottom	Grab	——		1016								
SS049	1031	20.53326	37.50451	6.18	009	✓	✓	✓	To Bottom				Downcast
SS050	1035	20.5337	37.5475	6.10	010	✓	✓	✓	BS050 H1	5.83	10357		Bot
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	5.94	103640		
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	5.94	103734		
SS051	1042	20.5333	37.5574	6.11	011	✓	✓	✓	5051 H1	5.94	104210		Bot
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	5.94	104304		
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	5.94	104356		

COMMENTS ☆ starting fine & rate off the Bott

☆☆ Close pics value when start to drop profile fast

☆2 Set sample rate to 8 because lost CB connectivity, max reset. In settings set - recordings set limit to 240 [?] sec @ 8 f/s

Cruise _____ Date _____

Station	start time	latitude	longitude	total depth	ADCP filename	CTD	LISST	ADV	TSS sample	Sample Depth	sample time	End Time	Commer
5052	1045	20.5332	37.5305	6.07	012	✓	✓	✓	5052 H1	104610	5.96		BOT
									H2	104658	5.97		
									L1	104802	5.97		
5053	1057	20.5334	37.5571	6.15	013	✓	✓	✓	5053 H1	105116	5.95		U/CAST
									H2	105328	4.30		
									H3	105600	3.37		
									H4	105814	2.57		
									H5	110148	1.27		
5054	1106	20.5342	37.5493	6.27	014	✓	✓	✓					DOWNCAST
5055	1108	20.5336	37.5492	6.22	015	✓	✓	✓	5055 H1	110750	6.00		BOT
									H2	110910	6.01		
									L1	110934	6.00		
5056	1115??	20.5333	37.5337	6.22	016	✓	✓	✓	556 H1	111903	5.95		* files not connecti-
									H2	111942	5.95		
									L1	112030	5.95		
5057	1125	20.5338	37.5518	6.28	017	✓	✓	✓	557 H1	112600	6.03		
	11								H2	112730	6.03		
									L1	112915	6.03		

COMMENTS Software ok network quality not low took a frame every ~5 sec! check frame NOTE

Cruise _____ Date _____

Station	start time	latitude	longitude	total depth	ADCP filename	CTD	LISST	ADV	TSS sample	Sample Depth	sample time	End Time	Commer
5058	1133	20.5343	37.5500	6.30	018	✓	✓	✓	5058 H1	6.07	113530		BOT
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	6.08	113626		
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	6.08	113742		
5059	1144	20.5345	37.550	6.30	019	✓	✓	✓	———	———	———		DOWNCAST
5060	1146	20.5342	37.5501	6.34	020	✓	✓	✓	5060 H1	6.07	114729		UPCAST
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	4.81	115033		
↓	↓	↓	↓	↓	↓	↓	↓	↓	H3	3.73	115341		
↓	↓	↓	↓	↓	↓	↓	↓	↓	H4	2.56	115563		
↓	↓	↓	↓	↓	↓	↓	↓	↓	H5	1.38	115748		
5061	1206	20.5345	37.5501	6.35	021	✓	✓	✓	5061 H1	6.14	120628		BOT
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	6.14	120720		
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	6.14	120832		
5062	1214	20.5341	37.5506	6.40	022	✗	✓	✓	~~5062 H1~~				
						↑CTD			NO SAMPLES				
5063	1216	20.5344	37.5491	6.42	023	✓	✓	✓	5063 H1	6.19	121722		BOT**
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	6.19	121814		
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	6.21	121922		
5064	1226	20.5344	37.5490	6.39	24	✓	✓	✓	5064 H1	6.16	122723		BOT
↓	↓	↓	↓	↓	↓	↓	↓	↓	H2	6.16	122857		
↓	↓	↓	↓	↓	↓	↓	↓	↓	H1	6.18	122943	Bounded 27.98	12.43

COMMENTS ** standing 2m above Bottom + closing valve as Wayne stands to ~~Deep~~ position. — Trying to AVOID closing valve (Lower) on Bottom of PICS and NO

Cruise _____ Date _____ (5)

Station	start time	latitude	longitude	total depth	ADCP filename	CTD	LISST	ADV	TSS sample	Sample Depth	sample time	End Time	Commer
5065	1238	20.5348	37.5509	6.40	025	✓	✓	✓	5065 H1	6.17	123840		BOT
									H2	6.24	123923	Bound	23.55
									L1	6.27	??		8.00
5066	1249	20.5345	37.5466	6.42	26	✓	✓	✓	5066 H1	6.22	125020		Profile ~~then~~
									H2	4.93	125313	Pic	Started LISST on Bott
									H3	4.16	125818		
									H4	2.90	130142		
									H5	1.43	130458		
5067	1310	20533	37.5437	6.47	27	-	✓	✓	—	—	—		Downcast
5068	1311	205335	37.5464	6.44	28	✓	✓	✓	5068 H1	6.28	131231		BOT
									H2	6.28	131315	Bound	28.92
									L1	6.28	131437		13.37
5069	1320	20.5335	37.5441	6.51	29	✓	✓	✓	5069 H1	6.27	132343		* BOT
									H2	6.27	132420	Boundary	31.62
									L1	6.28	132527		16.07
5070	1336	20.5305	37.5407	6.50	30	✓	✓	✓	5070 H1	6.23	133700		BOT 35.48
									L1	6.23	133742	Bound	19.73

COMMENTS * Bring Profiler up & Down to flush out. Before sitting on Bottom

Cruise _____ Date _____ (6)

Station	start time	latitude	longitude	total depth	ADCP filename	CTD	LISST	ADV	TSS sample	Sample Depth	sample time	End Time	Commer
S5071	1345	20.5315	37.5405	6.50	031	✓	✓	✓	5071 H1	6.31	134728	UP CAST	
									H2	5.57	135244	Bridge & Down to clear	
									H3	4.41	135532		
									H4	3.23	135852		
									H5	1.68	140208		
									H6	0.54	140530		
S5072	1405	20.5278	37.5375	6.40	032	✓	✓	✓	—	—	—	DOWN CAST	
S5073	1413	20.5291	37.5390	6.48	033	✓	✓	✓	5073 H1	6.27	141348	Bounce	26.10 (5-7)
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	6.27	141441		10.55
S5074	1421	20.5262	37.5365	6.47	034	✓	✓	✓	5074 H1	6.28	142247	Bounce	(BOT)
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	6.28	142357		X
S5075	1433	20.5312	37.5410	6.50	035	✓	✓	✓	5075 H1	6.32	143420	Bounce	22.31 (BOT)
↓	↓	↓	↓	↓	↓	↓	↓	↓	L1	6.33	143516		6.77
S5076	~~1436~~	~~20.5320~~	~~37.5420~~	~~6.50~~	~~036~~				5076 H1	0.98	144720		UP CAST
	1446	20.5239	37.5340	6.46	036	✓	✓	✓	H2	2.18	144543		
									H3	3.35	145315		
									H4	4.58	145639		
									H5	5.96	145911		
											Bounce	61.49	
5077	1450	SED	GAS									45.95	

COMMENTS _____

York River, VA Ches. Bay 060d12
@VIMS Clay Bank station
on R/V Olsen
W. Reisner, Kelsey ——, G. Cartwright,
Jarrell Smith
PICS S/N #2
CAST 0817 ET (standard time)

081854	Frame on bottom	Laser: 50%
081958	dup	5038
082032	dup	

084141	on bottom	- bottle samp
084222		To analyze diff w/ time
084254		
084356		
084428		
084459		
084529		5040
084559		
084632		
084703		
084734		
084846		
084919		

06 Oct 2012 — VIMS Clay Bank

Depth	File	
4.36 m	—	two files w/ bad flow
	085924	
	090009	
2.85	090136	5041
~~to~~		
1.87	090420	
0.83	090640	
	090719	
BOT	09[illegible]	
5043	091218	
	091307	
BOT	091835	
5044	091917	
	091949	
BOT	— (too turbid?)	laser pwr @ 75%
5045		
BOT	093955	— closed valve @ bot
5046	094038	
	094108	

VIMS Clay Bank — 06 Oct 2012

CAM @ 8 PSI

5047

PROFILE

Depth	Time
~~100208~~ BOT	~~100208~~ 100218
5.90	100253
4.7	100246
	100828
3.5	101028
	101058
2.8	101323
	101357
1.03	101615
	101710
BOT	
5050	103616
	103647
	103732
5051 - too high conc	
BOT	104724
5052	104754
	104825

06 Oct 2012 — VIMS Clay Bank

— PROFILE —

BOT — 105232 — too turbid to see
105363 — on comp. scrn

4.3 m — 105452
105522 — ~~5054~~ 5053

3.4 m — 105828
105859

2.5 m — 110046
110117

1.3 m — 110300
110408

BOT — 110856
5055 — 110947

BOT — 111909, 111947 — Think the PICS pipe was plugged. Data questionable

BOT — 112711
112742

BOT — 113608
113640

VIMS Clay Bank — @ 06 Oct 2012

PICS data

— Profile — — 114831* — 5060

Bot: 6.1 m — 114902

4.8 m — 115117
115148

3.7 m — 115441
115518

2.56 m — 115
115854

1.4 m — 120107
120152

— BOT — — 120719 — 5061
120753

— BOT — — 121825 — 5063
121856

— BOT — — 122817 — 5064
122902

— BOT — — 123914 — 5065
123945 + 124016 + 124558*

VIMS Clay Bank
PICS

06 Oct 2012

- PROFILE -

- BOT -	125050	5066
6.2m	125121	
5m	- scratch -	Camera/Strobe Issues
4.16m	125919	
	125953	
2.90	130234	
	130304	
1.0m	130547	
	130618	
- BOT -	131311	5068
	131343	
- BOT -	132428	5069
	132504	
	132918*	
- BOT -	133656	5070
	133729	

VIMS Clay Bank
PICS

06 Oct 2012

- PROFILE -

- BOT -	134813	5071
6.3m	134847	
5.57m	135332	
	135407	
4.41m	135624	
	135656	
3.23m	135952	
	140028	
1.68m	140257	
	140331	
0.94m	140600	
	140631	
- BOT -	141411	5073
	141445	
- BOT -	142319	5074
	142350	
- BOT -	142452	
	143526	

VIMS - Clay Bank

06 Oct 2012 PICS Data

- PROFILE -

1.0 m	144731	5076
	144808	
2.2 m	145040	
	14 ___	
3.35 m	145401	
	145432	
4.58 m	145646	
	145718	
5.96 m	145957	
	150029	