

**1. Chief Scientist Narrative:****ALL CAST DETAILS ARE FOUND IN AE1819 CAST LOG**

<b>Day #</b>	<b>Day &amp;Date</b>	<b>Time (Local)</b>	<b>Event</b>	<b>SIC</b>
1	TUES, 03/July/2018	0930	Depart St Georges for BATS. There was a 1 hr delay in getting started while crew inspected bow thruster issue.	CC
1	TUES, 03/July/2018	1515  1520	Arrived at BATS  <b>CTD – CAST #1-</b> cast type B for core cast to 500 m an large volume collection for AE1819 SIP#11820  Set up SIP Experiment  DCM ~80 (~0.75 mg/m <sup>3</sup> on wet lab Eco EF) SST ~ 26°C UMP ~ 19°C  BP was aborted because of pipet errors will pick up on next cast	CC
1	TUES, 03/July/2018	1730         1840	<b>PUMP CAST DEPLOYMENT PC #1</b> 4 pumps were deployed two with double head (one for Close and one for Carlson). Each pump head held 4 size fractions  Close – GF-75; GF/F on 150 um nytex, 6 um nytex, and 20 um nytex  Carlson- 0.2 supor, 1.2 mixed ester, 5 um PC and 20 um nytex.  Depths- in the EZ  Recovered successfully	CC
1	TUES, 03/July/2018	2000    2050	<b>CTD – CAST #2 – 300m cast large volume exp cast</b>  UCSB- 2 at 1 m for chances exp MBARI - 9 @ 15 M OSU – 5 @ 1m and 5 @ 200 m  On deck	CC
1	TUES, 03/July/2018	2200	<b>CTD- CAST #3-</b> 1000 m Core Cast	CC

			DCM – broad 80 – 100 m SST – 26 OMZ ~ 775-800	
		23:25	On deck	
2	WED, 04/July/2018	00:00	Zoo Tow - tow yo cast with 150 m wire payed out  Lots of Salps. Will be used for fecal pellet exp	CC
2	WED, 04/July/2018	0200	<b>CTD- CAST #4-</b> 300 m cast for large volume collections  MBARI, Pro Exp and grazing exp	CC
2	WED, 04/July/2018	0530	<b>CTD- CAST #5-</b> 1000 m cast core cast A  DCM ~ 75M broad SSC 25.935 OMZ ~ 775m	CC
2	WED, 04/July/2018	0837	<b>MOCNESS TOW TO 1000 m</b>	CC
		1315	On deck early	
2	WED, 04/July/2018	1430	<b>CTD- CAST #6-</b> 1000 m cast core cast A  DCM ~ 75M broad SSC 25.935 OMZ ~ 765m MLD 20m	CC
2	WED, 04/July/2018	1630	<b>START PUMP CAST DEPLOYMENT - PC #2</b>  4 pumps were deployed two with double head (one for Close and one for Carlson). Each pump head held 4 size fractions  Close – GF-75; GF/F on 150 um nytex, 6 um nytex, and 20 um nytex  Carlson- 0.2 supor, 1.2 mixed ester, 5 um PC and 20 um nytex.  Depths-120m, 160m, 200m	CC
		1650	IN WATER	
		1720	START PUMPING	

		2020	RECOVER PUMPS  SUCCESSFUL LOTS OF COLOR ON ALL DEPTHS	
2	WED, 04/July/2018	2200       2330	<b>CTD- CAST #7-</b> 1000 m cast core cast A  DCM ~ 75M broad starts at 55 max at ~ 80m attenuates with broad shoulder at 120 – 150. Fluorescence is still elevated at 200 m SSC 25.917 OMZ ~ 800 m MLD 20m  ON DECK ...FLOW CAM SAMPLING ON THIS CAS8	CC
3	THUS, 05/July/2018	0000	Zoo Tow	CC
3	THUS, 05/July/2018	0200	<b>CAST #8</b> TFF AND BW CAST Water was collected for Bact C exp using TFF to concentrate 20 of water from 1,40,80, 200 m  Water also collected for Brittany Widner exp	CC
3	THUS, 05/July/2018	0545      0715	<b>CTD- CAST #7-</b> 1000 m cast core cast TYPE C  Higher resolution sampling in the EZ  On deck	SL
3	THUS, 05/July/2018	0735      0750 0815 1030	<b>START PUMP CAST DEPLOYMENT - PC #3</b>  4 pumps were deployed two with double head (one for Close and one for Carlson). Each pump head held 4 size fractions  Close – GF-75; GF/F on 150 um nytex, 6 um nytex, and 20 um nytex  Carlson- 0.2 supor, 1.2 mixed ester, 5 um PC and 20 um nytex.  Depths-90m, 140m, 180m IN WATER START PUMPING <b>ON DECK</b>	CC

3	THUS, 05/July/2018	1230	<b>CTD- CAST #10- 1000 m cast core cast A</b>  DCM ~ 80 SST -26.094 OMZ 800 MLD 20	
3	THUS, 05/July/2018	1430	<b>START PUMP CAST DEPLOYMENT - PC #4</b>  4 pumps were deployed two with double head (one for Close and one for Carlson). Each pump head held 4 size fractions  Close – GF-75; GF/F on 150 um nytex, 6 um nytex, and 20 um nytex  Carlson- 0.2 supor, 1.2 mixed ester, 5 um PC and 20 um nytex.  Depths-250m, 300m, 500m IN WATER START PUMPING <b>ON DECK</b>  300 m and 500 m pump failed with sudden pressure change and low flow rate errors	CC
3	THUS, 05/July/2018	1930	<b>CTD- CAST #10- 1000 m cast core cast A</b>  DCM ~ 90 SST -26.107 OMZ 800 MLD 20 ON DECK	CC
3	THUS, 05/July/2018	2120	<b>MOCNESS TO 1000 m</b>	CC
		2145	Aborted tow because the system lost CTD connectivity	
		2200	Began retermination	
3	THUS, 05/July/2018	2330	<b>MOCNESS – redeployed</b>  Retermination successful	CC
	Fri, 06/ July /2018	0345		



## 2. Data and Sample Transfer Status

Parameter	Sample Number	Location	Date	PI	Status
Data disk	AE1819	With CAC posted to BIOS-SCOPE dropbox	7/7/18	CAC	posted
CTD cast sheets and Science Log (2 copies)		With CAC to be posted to BIOS-SCOPE dropbox	7/7/18	CAC	posted
Bacterial Production	70 -Cast	Samples all run	7/7/18	CAC	Will be posted
Bulk DOM	96 -Cast 1000-Expt	To Be shipped to UCSB (Pelican)	7/16/18	CAC	At BIOS until 7/16/18
Bulk Dom Reference	144 -10m 144 - 800m	To Be shipped to UCSB (Pelican)	7/16/18	CAC	At BIOS until 7/16/18
DCNS	36 -Cast 70 -Expt	Hand carried to UCSB by Craig except T final	7/19/18	CAC	At BIOS until 7/19/18
DAPI (Slides made)	96 -Cast 600 - Expt	Hand carried to UCSB by Shuting	7/26/18	CAC	At BIOS until 7/26/18
POCN	80 -Cast	Hand carried to UCSB by Chance	7/15/18	CAC	At BIOS until 7/15/18
NUTS	96 -Cast	Hand carried to UCSB by Chance	7/15/18	CAC	At BIOS until 7/15/18
Amino Acids References	50 -Cast	Hand carried to UCSB by Chance	7/15/18	CAC	At BIOS until 7/15/18
Vitamins	60 2L 50 1L	-20C RC To be shipped to OSU	7/9/18	SG/CS	At BIOS until 7/16/18
DAPI	16 -Expt	-20C To be shipped to OSU	7/27/18	AS	At BIOS
DNA-Sterivex	64 -Cast	-80 RC BIOS-SCOPE	7/9/18	SG	At BIOS

DNA – Pump filters	48 -Pumps	Will be Hand Carried to UCSB by Chance	7/15/18	CAC	At BIOS until 7/15/18
DNA – Pump filters	48 -Pumps	Will be Hand Carried by Hilary	7/15/18	HC	At BIOS until 7/17/18
PROBE samples	24 –Cast 88 -Expt	-80 RC BIOS-SCOPE	7/9/18	RP	Will be prepped at BIOS
Dilution Exp FCM	288	Hand carried to U Georgia	7/7/18	LH	At Skidaway
Dilution Exp Probe	102	RC -80 BIOS-SCOPE (RHS)	7/9/18	LH	Being processed by RP
MOCNESS Formalin Samples	2 Tows 8 Depths 18 Samples	N 204	7/7/18	LBB/ AM	At BIOS
MOCNESS-ethanol Samples	2 Tows 8 Depths 18 Samples	N Zoop Fridge	7/7/18	LBB/AM	At BIOS
Protist biomass (for Flow Cam)	20 Samples	Hand carried to U Georgia	7/7/18	LBB/LH	At Skidaway
HR-DOM	8 Casts 7 Depths 56 Samples	Shipped to WHOI	7/9/18	LK/KL	Shipped to WHOI
Nutrients	1 Cast 7 Depths 24 Samples	Taken by hand to WHOI	7/10/18	DV	Taken to WHOI
0.22 um filters	1 Cast 7 Depths 44 Samples	Taken by hand to WHOI	7/10/18	DV	Taken to WHOI
Supor Filters for DNA Pro. Ecotypes	1 Cast 7 Depths 44 Samples	Taken by hand to WHOI	7/10/18	DV	Taken to WHOI
Cyrovials for FCM analysis	1 Cast 7 Depths 150 samples	Taken by hand to WHOI	7/10/18	DV	Taken to WHOI
2 mL GC vials for 13C-DIC analysis	1 Cast 7 Depths 44 Samples	Taken by hand to WHOI	7/10/18	DV	Taken to WHOI

FCM – 2mL cryovails	18 – Cast 261 -Expt	Taken by hand to MBARI	7/10/18	SS AW	1/3 staying at BIOS 2/3 MBARI
DNA	16 – Cast 127 -Expt	Taken by hand to MBARI	7/10/18	SS AW	1/3 staying at BIOS 2/3 MBARI