## **ROV Jason Daily Report**

Cruise Number: RB 19-03

Dive number: J2-1136

**Chief Scientist: Amanda Demopoulos** 

Report Date: 4/28/2019

**Expedition Leader:** Alberto Collasius Jr.

Prepared By: Expedition Leader

**Vessel Location: Atlantic 32.4W 76.2W** 

Weather: Fair

**Dive Times: GMT** 

**Dive Activities/Future Activities**: Coral samples to quivers, Mussel pots, Push cores, rock collection, Samples to Bio Box's, Slurp

and push cores

Reason for Dive Termination: Allotted time up

Dive No.	Dates	Max Depth	Hours Descending	Hours Ascending	Hours on Bottom	Hours in water	Time On Deck	Time on Deck not available to science
J2- 1128	4/10-4/11	792	:50	2:45	9:30	13:05		0
J2- 1129	4/13-4/14	746	1:07	1:20	11:15	13:42	56:53	32:53
J2- 1130	4/17	554	1:19	1:06	8:42	11:07	60:47	0
J2- 1131	4/17-4/18	1365	1:55	2:10	13:27	17:32	10:27	0

J2- 1132	4/21-4/22	1840	2:53	1:15	23:40	27:48	71:37	0
J2- 1133	4/23	355	1:10	:32	9:28	11:10	9:15	0
J2- 1134	4/24	477	:51	:35	14:46	16:12	7:39	0
J2- 1135	4/25	1030	2:05	1:02	2:39	5:48	25:54	0
J2- 1136	4/27-4/28	2169	1:33	1:45	8:46	12:04	21:09	0

## **Completed Dive Summaries:**

**Vehicle Status**: A Ground fault tripped the AFX right after leaving bottom. Had to give it 2 tries before it came back. Vehicle in good shape otherwise

Weather Forecast: Fair seas and Moderate winds

Expedition Leader Comments: Very good dive other than afx trip. 1.8 knots of surface current for launch. .4 Knots for recovery. 2200 meter dive so wire angle stayed nice for dive

Chief Scientist Comments: This was a great dive exploring Blake Ridge seeps. Our primary goal was to target collections at mussel beds, bacterial mats, and carbonate rock environments, while also characterizing the environment via high resolution imagery. The dive was a great success and we were able to accomplish all of our objectives. We set down on bottom and transited toward waypoints selected based on previous Alvin dives in 2003 and found several old bucket lid markers and Robert Carney's colonization experiment. The

experiment was a bucket filled with oyster shells and rabbit food, and after inspecting the lid, we found Bathymodiolus mussels and anemones attached. During the transit around the site between waypoints, we encountered dense mussel beds, dead clam beds, bacterial mats, and an exciting hydrate mound. We collected some amazing imagery at the mound feature that included two Gaidropsarus sp. fish (rocklings) hanging out in the crevice underneath solid methane hydrate. Really incredible. Several of the collections required precise manipulator skills and the pilots accomplished the tasks with ease. The dive went well and the power failure had no impact on the science.

## **Contact Numbers:**

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