


# OKEANOS EXPLORER ROV DIVE FORM

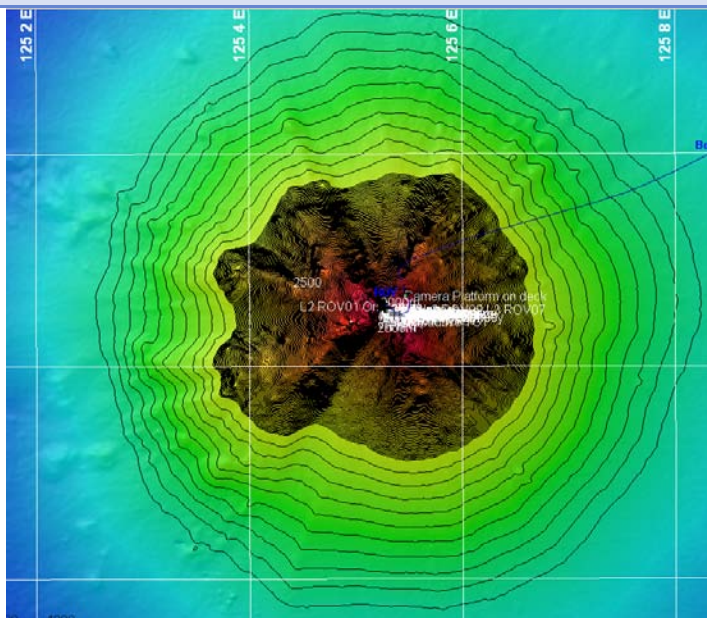
<b>Site Name</b>	Kawio Barat					
<b>ROV Lead</b>	Dave Lovalvo					
<b>General Area Descriptor</b>	365km N of Bitung, Indonesia					
<b>UTC Date &amp; Time</b>	Deployment	7/29/2010 12:33 AM				
	Recovery	7/29/2010 8:35 AM				
<b>Bottom Time [HH:MM]</b>	04:41					
<b>Landing Time &amp; Location</b>	UTC Time	02:24		Depth [m]	1925	
	Latitude	4	°	40.579849	N	
	Longitude	125	°	05.240244	E	
<b>Off Bottom Time &amp; Location</b>	UTC Time	07:05		Depth [m]	1850	
	Latitude	4	°	40.476626	N	
	Longitude	125	°	05.360651	E	
<b>ROV Dive Name</b>	Cruise Season	EX1004		Leg	LEG03	
				Dive Number	ROV07 (20)	
<b>Equipment Deployed</b>	ROV:	Little Hercules				
	Camera Platform:	Phoenix Camera Platform				
<b>ROV Measurements</b>	<input checked="" type="checkbox"/> CTD	<input checked="" type="checkbox"/> Depth		<input checked="" type="checkbox"/> Altitude		
	<input checked="" type="checkbox"/> Scanning Sonar	<input checked="" type="checkbox"/> USBL Position		<input checked="" type="checkbox"/> Heading		
	<input checked="" type="checkbox"/> Pitch	<input checked="" type="checkbox"/> Roll		<input checked="" type="checkbox"/> HD Camera		
	<input checked="" type="checkbox"/> Low Res Cam 1	<input checked="" type="checkbox"/> Low Res Cam 2				
<b>Equipment Malfunctions</b>	None					
<b>Special Notes</b>	Click here to enter text.					
<b>Scientists Involved</b> <i>(please provide name / location / affiliation / email)</i>	<p>Santiago Herrera (on-board Science Lead), EX, WHOI, sherrera@whoi.edu  <b>Tim Shank (on-shore Science Lead), ECC Jakarta, WHOI, <a href="mailto:tshank@whoi.edu">tshank@whoi.edu</a></b>  Rainer Troa, EX, renertroa@gmail.com  Eleanor Bors, ECC Seattle, WHOI, ekbors@gmail.com  Catriona Munro, WHOI, WHOI, c.munro@ucl.ac.uk  Elizabeth Sibert, WHOI, WHOI, esibert@ucsd.edu  Dave Butterfield, ECC Seattle, NOAA, David.A.Butterfield@noaa.gov&gt;  Ed Baker, ECC Seattle, NOAA, <a href="mailto:Edward.Baker@noaa.gov">Edward.Baker@noaa.gov</a>  Sam Zelin, ECC Seattle, UMass Amherst  Yusuf Surachman Djajadihardja, ECC Seattle  James Holden, UMass Amherst, UMass Amherst, jholden@microbio.umass.edu  Jennifer Lin, UMass Amherst, UMass Amherst  Verena Tunnicliffe, U. Victoria, U. Victoria <a href="mailto:verenat@uvic.ca">verenat@uvic.ca</a></p>					

**Purpose of the Dive:** To explore and characterize more extensively the venting characteristics and fauna of the Kawio Barat vent area and deeper downslope.

**Description of the Dive:**

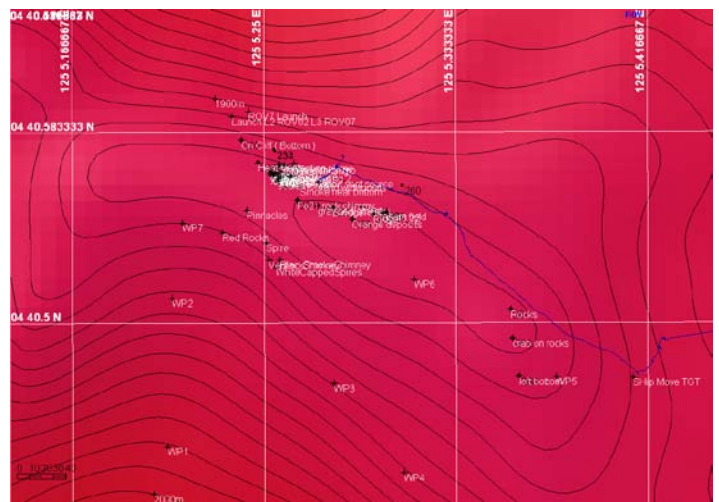
This dive at Kawio Barat started at the same launch point as EX1004\_Leg2\_ROV02 from which we came down on top of the vents. Our first waypoint will be the sulfur & shrimp wall vent site. This was an effort to relocate and characterize more extensively the venting characteristics and fauna of this area. We observed white bacterial mats on rocks. The area below the vents presented an accumulation of black, yellow and green sulfur flows. Diffuse venting was also observed adjacent to the main smoker vents. Dense barnacle colonization was observed on chimneys and rocks atop of the summit crest and sulfur vents, likely fed by diffuse venting. Volcanoclastic sediments were abundant on the lower portions of the Kawio Barat venting area. The lithology was dominated by volcanic rock with sulphide and manganese content. Volcanic sediments with well-oxidized surfaces were observed as we moved east. As we kept progressing laterally the slope became less sedimented and yellow patches of light and fluffy orange/yellow "stuff" were observed. Possibly iron-rich microbial mats and/or native sulfur. Clam fields were also found in this area, most of which appeared to be dead.

Overall Map of ROV Dive Area



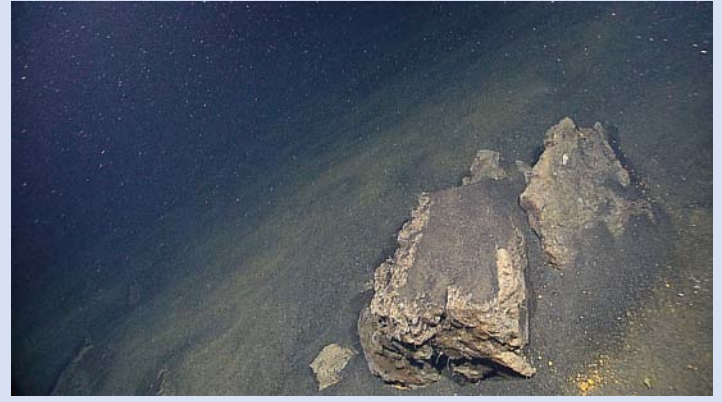
Overview of Site Kawio Barat

Close-up Map of Main Dive Site



Hypack screen grab of dive Targets

**Representative Photos of the Dive**



20100729\_04h03m54s14\_ROVHD\_LANDING\_02  
The area below the vents presented an accumulation of black, yellow and green sulfur flows.

20100729\_06h45m00s10\_ROVHD\_FLYOVER\_ROCKFIELD  
Volcanoclastic sediments were abundant elsewhere. The lithology was dominated by volcanic rock with sulphide and manganese content.

**Please direct inquiries to:**

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