## OKEANOS EXPLORER ROV DIVE FORM

Site Name				and the						
ROV Lead			*			<b>P</b>				
General Area Descriptor	4	KQ		Okea	ano: lore					
UTC Date & Time	Deployment 7/30,			) 1:	07 AM		A P			R
	Recovery	7/30	/2010 8:46 AM						J	5/
Bottom Time [HH:MM]	05:52							C 2010 SELECTION C 2010 SELECTION TERMINO CONTROL US Deel of Sale Company Deel SIO NOTALUS New NOTA CEDO TOTOLOGINI 133121739 E New 3000		Google 5/4 att 4905.05 mi O
	UTC Time		02	:12		Depth [m]		900		
Landing Time & Location	Latitude	5		ō		24.202032			'	N
	Longitude	126		ō		35.404107			'	E
	UTC Time		08:04			Depth [m]		807		
Off Bottom Time & Location	Latitude	5		Q		24.363742			1	N
	Longitude	126		Q		35.336671			1	E
ROV Dive Name	Cruise Season		Leg			Dive Number			er	
	EX1004		LEG03			ROV08 (21)				
Equipment Deployed	ROV:			Little Hercules						
ROV Measurements	Camera Platfom:			Phoeni X Depth						
	Scanning Sonar		USBL Position			Heading				
	Pitch		Roll			HD Camera				
	🔀 Low Res Cam 1 🛛 🖾 Low Res Cam 2									
Malfunctions	None									
Special Notes	Click here to enter text.									
Scientists Involved (please provide name / location / affiliation / email)	Santiago Herrera (on-board Science Lead), EX, WHOI, sherrera@whoi.edu Tim Shank (on-shore Science Lead), ECC Jakarta, WHOI, tshank@whoi.edu Rainer Troa, EX, renertroa@gmail.com Selvi, ECC Jakarta Eleanor Bors, ECC Seattle, WHOI, ekbors@gmail.com Catriona Munro, WHOI, WHOI, c.munro@ucl.ac.uk Elizabeth Sibert , WHOI, WHOI, c.munro@ucl.ac.uk Elizabeth Sibert , WHOI, WHOI, esibert@ucsd.edu Sam Zelin, ECC Seattle, UMass Amherst Ed Baker, ECC Seattle, NOAA, Edward.Baker@noaa.gov Yusuf Surachman Djajadihardja, ECC Seattle Tryono, ECC Seattle Dustin Schomagel, U. Victoria, U. Victoria, dbs@uvic.ca									

**Purpose of the Dive:** To explore the base of the east-facing side of the Pujada Ridge with the expectation that fluids may be seeping along the base of faults, including those that intersect the ridge at a high angle. The approach is to begin by running along the base of the slope (WPI to WP2 line, 775m), if seepage is detected along this line, then ignore WP3 location, and continue down this track (yellow dashed line in attached map) until the end of the dive. If no seeps are detected, proceed upslope, traversing to WP 3 (450m from WP2), and over the top of the ridge if there is time.

## Description of the Dive:

The dive started along the base of the slope (WP1 to WP2 line, 775m) at a depth of ~900m. The substrate was mostly fragmented pieces of basalt but very little sessile megafauna was observed except for few hexactinelid sponges. A closer look to the rocks revealed a high abundance of macrofauna dominated by white stylasterids and some scleractinian cup corals. As we progressed upslope to the west in a zig-zag movement we started to see increasing abundances of octocorals, especially Chrysogorgiids and their associate squat lobsters. Other less common corals included primnoids, Alcyonids and few isidids. There was a noticeable lack of crinoids in this area. The current at this point had a heading of 178.4 degrees and a speed of 0.6 knots. From here we started moving west toward WP3. As we moved we encountered a very large field of small white stalked barnacles. They did not appear to form aggregations but were present in ~90% of the rocks. No evidence of chemosynthesis was observed. Few other fauna were observed at this place. Urchins and few black corals were the exception. Current at this point was very strong, 0.99 knots heading 189.5 degrees.



**Overview of Site Mimpi** 

Hypack screen grab of dive Targets

## **Representative Photos of the Dive**



20100730\_03h04m56s27\_ROVHD\_ANEMONE\_FLYOVER The substrate was mostly fragmented pieces of basalt. A closer look to the rocks revealed a high abundance of macrofauna dominated by white stylasterids and some scleractinian cup corals.



20100730\_05h05m55s27\_ROVHD\_YELW\_SPONGE\_FLOVR As we progressed upslope to the west in a zig-zag movement we started to see increasing abundances of octocorals, especially Chrysogorgiids and their associate squat lobsters.

Please direct inquiries to:	NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10 <sup>th</sup> Floor) Silver Spring, MD 20910 (301) 734-1014
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