OKEANOS EXPLORER ROV DIVE SUMMARY

Site Name	Off-axis sulfide mounds		EX 1103 GALREX - SITES OF INTEREST SECURITY SEC	
ROV Lead/ Expedition Coordinator	Dave Lovalvo/ Jeremy Potter		NOW SOUN SOUN SOUN SOUN SOUN SOUN SOUN SOUN	
General Area Descriptor	~300nm northeast of the Galapagos Islands			
ROV Dive Name	Cruise Season	Leg		Dive Number
	EX1103 ROV:	2 DIVE11 Little Hercules		
Equipment Deployed	Camera Platfom:	Seirios		
ROV Measurements	⊠ CTD	Depth	Altitude	
	Scanning Sonar Pitch	□ USBL Position □ Roll		☐ Heading☐ HD Camera
	Low Res Cam 1	Roll Low Res Cam 2		M HD Camera
Equipment Malfunctions	None			
ROV Dive Summary (From processed ROV data)	Dive Summary: EX1103L2_DIVE11 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA			
Special Notes	Click here to enter text.			
Scientists Involved (please provide name / location / affiliation / email)	Timothy M. Shank/ Okeanos Explorer Lead Scientist/WHOI/tshank@whoi.edu Edward T. Baker/NOAA-PMEL, Washington/Edward.baker@noaa.gov Robert W. Embley/NOAA-PMEL, Oregon/Robert.w.embley@noaa.gov Stephen Hammond/ NOAA-PMEL, Oregon/Stephen.r.hammond@noaa.gov James F. Holden/ UMASS Amherst/jholden@microbio.umass.edu Scott White/University of South Carolina/swhite@geol.sc.edu Sharon L. Walker/ NOAA-PMEL, Washington/sharon.l.walker@noaa.gov Santiago Herrera/ WHOI Exploration Command Center/WHOI/sherrera@whoi.edu T. Jennifer Lin/UMASS Amherst/tjennlin@gmail.com Catriona Munro/ WHOI Exploration Command Center WHOI/catmunro89 @gmail.com			

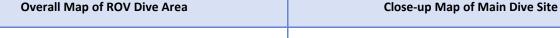
Taylor Heyl/ WHOI Exploration Command Center/WHOI/theyl@whoi.edu
Lucy C. Stewart/ UMASS Amherst/lsteweart@cns.umass.edu
Mashkoor Malik/ NOAA Office of Ocean Exploration & Research/mashkoor.malik@noaa.gov
Meme Lobecker/ NOAA Office of Ocean Exploration & Research/ Elizabeth.Lobecker@noaa.gov

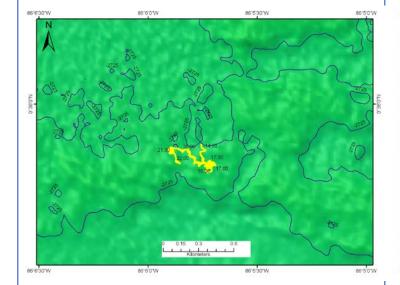
Purpose of the Dive

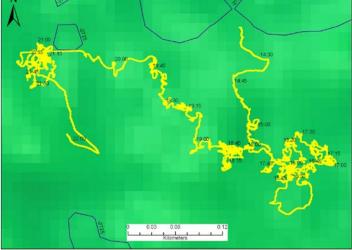
To locate and explore the Off-Axis Sulfide Mounds.

Description of the Dive:

Little Hercules surveyed a gently sloping mound with corals, sponges, holothurians and imaged yellow mineral deposits in sediments before continuing to the NE to the next cluster of sulfide mounds. ROV then headed west to follow a line of sonar targets and found mounds with similar faunal composition and more yellow staining around cracks/orifices at the base of rocky outcrops. Sponges were abundant at the top of the mound. Little Hercules explored to the west and traversed over a mound similar to ones seen previously with fractured crust and Mn staining, before turning North. Here, Little Hercules imaged on old clam shell that appeared to be ~8 cm in length with no trail marks nearby. The surrounding sediment was platy and meter-high mounds were observed with no staining or sulfide.







Representative Photos of the Dive





One of the gently sloping mounds imaged during the dive.

Several small areas or yellow mineral deposits are visible at the base of the small ledge.

Please direct inquiries to:

NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10th Floor) Silver Spring, MD 20910 (301) 734-1014