## OKEANOS EXPLORER ROV DIVE SUMMARY

Site Name	4aE		EX 1103 GALREX - SITES OF INTEREST	
ROV Lead/ Expedition Coordinator	Dave Lovalvo/ Jeremy Potter		No.	
General Area Descriptor	Site 4aE, <mark>X km NX of x Islan</mark>	<mark>d</mark> , Galapagos Islands	reg 2	
ROV Dive Name	Cruise Season	Leg	Dive Number	
	EX1103 ROV:	2	DIVE08	
Equipment Deployed	Camera Platfom:	Little Hercules Seirios		
ROV Measurements	CTD Scanning Sonar Pitch Low Res Cam 1	Depth USBL Position Roll Low Res Cam 2	Image: Altitude       Image	
Equipment Malfunctions	None			
ROV Dive Summary (From processed ROV data)	In Water at:       2011-07-21T14:35:27.034000 00°, 45.950' N ; 085°, 53.678' W         Out Water at:       2011-07-22T00:02:44.059000 00°, 46.062' N ; 085°, 53.686' W         Off Bottom at:       2011-07-21T22:21:43.614000 00°, 46.078' N ; 085°, 53.732' W         On Bottom at:       2011-07-21T16:31:22.528000 00°, 45.998' N ; 085°, 53.712' W         Dive duration:       9:27:17         Bottom Time:       5:50:21         Max. depth:       2607.4 m			
Special Notes	Click here to enter text.			
Scientists Involved (please provide name / location / affiliation / email)	T. Jennifer Lin/UMASS Amb	AEL, Washington/Edwa PMEL, Oregon/Robert.w -PMEL, Oregon/Stepher mherst/jholden@microb outh Carolina/swhite@g MEL, Washington/shard ploration Command Cen nerst/tjennlin@gmail.cor ploration Command Cen	rd.baker@noaa.gov v.embley@noaa.gov n.r.hammond@noaa.gov pio.umass.edu eol.sc.edu on.l.walker@noaa.gov nter/WHOI/sherrera@whoi.edu m tter /WHOI/catmunro89@gmail.com	

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## **Purpose of the Dive**

To dive below a high hydrothermal plume signal discovered during the last leg of this expedition now referred to as "4a". This is an unexplored region, but multibeam surveys suggest that there is a well-defined axial volcanic ridge with walls separated by approximately 500 meters.

## **Description of the Dive:**

We began this dive by landing 100 meters to the east of the 4aEast plume target and proceeding to the west, traversing across broken pillow lava heavily covered with sediment. *Little Hercules* then began moving north, discovered a fissure and began an E-W transit for exploration. The fissure was characterized by a northern wall higher than a Southern wall with pillow lavas on either side, and a talus slope at the base. *Little Hercules* continued traversing over heavily sedimented pillow and lobate lavas before coming to the end of the dive without locating any active hydrothermal vent areas.

Overall Map of ROV Dive Area

Close-up Map of Main Dive Site

