

DIVE PLAN – Leg 1 Dive 6 Recover Folger Deep

ROV Dive Number: OE 0109

Location: **Folger Passage**

Date: April 30, 2014

Constraints: Weather, Visibility

Objectives

- Recover Folger Deep Instrument Platform (JB-14, Device ID 10512)

Dive Dependents

1. Line laser and ROV porch grating orientation with respect to ROV heading

Ship Procedure

1. Transit to site, assess weather and sea state. Proceed only when it is safe to do so.
2. Deploy ROV USBL pole

ACTION	LATITUDE	LONGITUDE	DEPTH
Deploy ROV at Folger Deep IP	48°48.8310'	-125°16.8590'	98m
Recover ROV at Folger Deep IP	48°48.8310'	-125°16.8590'	98m

Shore Procedure

1. Monitor communications from ship.
2. Stay on stand-by for port power off on Folger Passage Node (Device 10501, port S1) and topology update

Communications with shore

1. On-shore team will tweet using the @oceannetworksops twitter account at the beginning of the dive
2. Post the dive plan on the cruise website
3. On-board team connect via intercom with shore operations as required

Navigation

1. Record interesting positions

Dive Chief

1. Record deviations from dive plan
2. Record changes to site layout diagrams

Site/Equipment IDs

ACTION	SITEID	SITENAME	DEVICE ID	DEVICENAME	LATITUDE	LONGITUDE	DEPTH	HEADING	PORT
Disconnect/Recover	100279	Deep_IP_2013-05	10512	Folger Deep JB-14	48°48.8265'	-125°16.8570'	98	94	
Disconnect/Recover	100279	Deep_IP_2013-05	10604	RDI Workhorse Monitor ADCP 300 kHz	48°48.8265'	-125°16.8570'	94		J4
Disconnect/Recover	100279	Deep_IP_2013-05	23030	Sea-Bird SeaCAT SBE16plus V2 7026	48°48.8265'	-125°16.8570'	94		J1
Disconnect/Recover	100279	Deep_IP_2013-05	23046	Sea-Bird SBE 63 Dissolved Oxygen Sensor 630103	48°48.8265'	-125°16.8570'	94		SBE Port
Disconnect/Recover	100279	Deep_IP_2013-05	20020	BioSonics DT-Xu scientific echosounder	48°48.8265'	-125°16.8570'	94		J3
Disconnect/Recover	100279	Deep_IP_2013-05	20116	Aanderaa Optode 3830	48°48.8265'	-125°16.8570'	94		J6
Disconnect/Recover	100278	Deep_Hydrophone_2013-05	23156	Ocean Sonics icListen HF Hydrophone 1253	48°48.8250'	-125°16.9170'	105		J5
Disconnect	100150	Deep_BPR_2011-07	22790	NRCan Bottom Pressure Recorder 5	48°48.8367'	-125°16.8670'	100		J2

ROV / Equipment Requirements:

1. Milk Crate
2. Line Laser
3. Spare bungees to secure oilies to platform
4. Hybrid parking position for Folger Deep cable
5. ROV dust caps for BPR and node
6. ROV rigged for platform recovery
7. Camera and lights on ROV manipulator arm for seeing connectors
8. Beacon and float

ROV Procedure

1. Start recording, start streaming video to UVic, start dive log, confirm both are being received
2. Start ORV-mounted CTD
3. Descend ROV

Prepare Folger Deep Platform for Recovery

1. Perform a visual inspection of the frame from all sides, checking for any potential issues. While doing this sweep, keep at constant altitude ~1-2m from the seafloor, make sure that camera is downward looking and lasers are on as data will be used for quantitative estimates of benthos
2. Confirm position and orientation of the JB
3. Confirm power is off to Folger Deep JB-14, port S1 on Folger Node

BPR preparation

1. Fly to BPR (DeviceID: 22790) position
2. Disconnect BPR
3. Install ROV dust cap on BPR connector
4. Retrieve cable (85/106.EX.0010) to platform and secure with bungees

Hydrophone preparation

1. Retrieve hydrophone (DeviceID: 23156) and transport back to platform
2. Using posts at end of platform (opposite the connector panel), hook the hydrophone stand onto platform and secure with bungees
3. Retrieve cable (210/106.EX.0210) to platform and secure with bungees?

Node cable preparation

1. Go to the North side of the node
2. Open the doors
3. Evaluate visibility at NODE. If good proceed with #4 if not skip to #5
4. Unplug cable (77/106.EX.0002) from Node and place onto Instrument Platform
5. If visibility poor; disconnect cable at platform and place in parking position

Recovery

1. Take a visual of platform from all sides; ensure platform is clear to be recovered
2. Request permission for recovery from Bridge
3. Connect Folger Deep Platform to ROV platform recovery line
4. Recover ROV
5. Recover Folger Deep IP once ROV secured