

DIVE PLAN – Leg 1 Dive 15 Pod 3 Recovery

Location: **Barkley Canyon**

Date: May 11, 2014 12:45 pm PDT

Constraints: Weather, Sufficient deck space
ROV Dive Number – OE 0118

Objectives

- Visual inspection at Pod 3 (if not done on Dive 14)
- Recover sediment trap (DeviceID: 12005) and secure to IP
- Video transect
- Recover Camera System (DeviceID: 12170, 23077) and secure to IP
- Recover some of the Neus frames
- Disconnect Pod 3 from network and clear cables safely away
- Recover Pod 3

Dive Dependents

1. ROV porch grating orientation with respect to ROV heading
2. Sediment trap to be moved into neutral alignment

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 (m)
Descend at Pod 3	48° 18.8976'	-126° 03.5300'	888
Ascend at Pod 3	48° 18.8976'	-126° 03.5300'	888

Shore Procedure

1. Monitor Twitter feed

Communications With Shore

1. On-board team will tweet using @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 positions of the deployed platforms and satellite instruments
2. Guide visual transect
3. Record interesting positions

Dive Chief

1. Record deviations from dive plan

Site/Equipment IDs

ACTION	SITEID	SITENAME	DEVICE ID	DEVICENAME	LATITUDE	LONGITUDE	DEPTH	PORT	EXT CABLE
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Disconnect	100005 3	CanyonMidWest_IP_Pod3_2013-05	10012	BC Pod #3 JB-04	48°18.8976'	-126°03.5300'	888	J13	106/ 101.EX.0006
Disconnect/ Recover	100005 5	CanyonMidWest_A DCP_2013-05	12003	Nortek Aquadopp HR- Profiler 2978	48°18.8995'	-126°03.5351'	889	J1	283
Disconnect/ Recover	100005 6	CanyonMidWest_C amera_2013-05	23077	ROS Pan/Tilt with Lights	48°18.8915'	-126°03.4912'	894	J2	284
Disconnect/ Recover	100005 6	CanyonMidWest_C amera_2013-05	12170	Barkley Colour Axis- Video [Axis P1347]	48°18.8915'	-126°03.4912'	894	J3	288
Disconnect/ Recover	100005 3	CanyonMidWest_IP Pod3_2013-05	11402	Kongsberg Mesotech Rotary Sonar 1171	48°18.8976'	-126°03.5300'	888	J4	28/ 101.EX.0034
Disconnect/ Recover	100005 3	CanyonMidWest_IP _Pod3_2013-05	11206	RDI Workhorse Quartermaster ADCP 150 kHz (9455)	48°18.8976'	-126°03.5300'	888	J5	23/ 101.EX.0029
Disconnect/ Recover	100005 4	CanyonMidWest_S edTrap_2013-05	12005	Sediment Trap 2	48°18.8963'	-126°03.5399'	890	J6	179
Disconnect	100005 7	CanyonMidEast_IP _Pod4_2013-05	10013	BC Pod #4 JB-05	48°18.8865'	-126°03.5013'	895	J8	106/ 101.EX.0006

ROV/Equipment Requirements

1. Milk Crate

ONC/Equipment Requirements:

ROV Procedure

Descent

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

Recover Sediment Trap (DeviceID: 12005)

1. Inspect and ensure sediment trap has been set to its neutral position. Operations will be asked to rotate a bottle if necessary
2. Power down sediment trap on port J6
3. Remove three lead feet from base of trap, and place on seafloor
4. Record their position for later redeployment
 - 4.1. Lat/Lon
 - 4.2. Sonar range & bearing
5. Bungee the funnel end first for retrieval
6. Fly back to IP with sediment trap
7. Place horizontally on porch
8. Using the PVC ring bungeed to the top corners of the IP, secure the trap to the porch

Visual transect survey

1. Survey at POD 3 camera location
2. Perform visual survey with laser on, 1m above seafloor at 0.5 knots: 8 X 60m branches oriented North, North-East, East....

Relocate Neus Frames

1. Neus frames on already cored sites to IP horns.
2. Secure with bungee.

Recover Camera System (DeviceID: 23077, 12170)

1. Confirm camera heading and position.

2. Leave the measuring sticks on the seafloor for later re-use
3. Pick up camera tripod and fly back to IP (float attached on previous dive)
4. Place camera tripod's Derlin mounting rings on large horns on IP side opposing sediment trap
5. Secure with bungee/PVC ring straps around horns

Disconnect Pod 4 Downlink to Pod 3 and Clear Cable (Cable ID 106)

1. Transit to Pod 4
2. Systems stop drivers and power down Pod 3
3. Disconnect Pod 3 cable (Cable ID 106) from J8 (JB04) on Pod 4 connector panel
4. Place dust cap on J8 on Pod 4 connector panel
5. Transit back to Pod 3 holding cable connector
6. Place connector in empty space on Pod 3
7. Take visual of Pod 3 from all sides, ensuring IP is ready to be recovered

Ascend

1. Request permission for recovery from Bridge
2. Connect Pod 3 to ROV platform recovery line
3. Recover ROV
4. Recover Pod 3 once ROV secured