

Operation Plan 2 – Tripods & platform recovery (Dive)

Location: **Cambridge Bay**

Date: September 16, 2014

Constraints: Bad weather, barge at the dock or inbound, no boat

Objectives

- Recover the VEMCO and hydrophone tripods
- Recover the main instrument platform

Operation Dependents

None

Shore Procedure

1. Monitor Twitter feed

Communications with Shore

1. On-site team will email on the morning of the dive day
2. Post the dive plan on the cruise website
3. On-board team connect via intercom with shore operations as required

Surface Safety Attendant (Alice Bui)

1. Dive briefing
2. Record divers descent and surface time
3. Record deviations from dive plan.

Planned dive profile	Dive Op. 1 (previous dive)	Dive Op. 2
Dive time	50 min	45 min
Max depth	9 m	9 m
Next max depth	12 m	12 m
Repetitive factor from previous dive	NA	1.3 or 1.4
Decompression schedule	9/60 or 12/60	9/90 or 12/70
Repetitive group	C or D	D or E
Surface interval	NA	1 h

Equipment Requirements

1. Dive Gear
2. Lift bags
3. VEMCO recovery line
4. Hydrophone recovery line
5. Subsea float with line
6. Float for platform lifting line
7. Lift bags
8. Wet notes with metadata sheet

Underwater operations (Ryan Key & Ryan Flagg)

1. VEMCO (Device ID 23189) position marking
 - a) Swim along the cable and remove weight along the way
 - b) Continue to VEMCO location
 - c) Attach a lift bag to the VEMCO tripod and lift

2. Hydrophone position marking
 - a) Swim to the hydrophone
 - b) Attach a lift bag to the hydrophone tripod and lift

3. Main platform
 - a) Swim back to the platform
 - b) Remove the foot weights
 - c) Attach transect line to West-most foot weight
 - d) Lay transect line 10m West and attach 2-lb weight
 - e) Attach SMB to transect spool and float to surface
 - f) Attach a subsea float to mark platform location for redeployment
 - g) Untie lifting line
 - h) Attach the other end of the lifting line to a float
 - i) Attach lift bags to the top of the platform
 - j) Inflate lift bags to bring platform to the surface
 - k) Record time

4. Terminate dive
 - a) Ascent to surface
 - b) Swim back to shore with recovery line
 - c) Guide the platform to shore while the surface safety attendant hauls in the platform

Shore operations (Surface safety attendant and divers out of gear)

1. Once the divers exited water, pull the platform out of the water
2. Use the cable/recovery lines to haul in the Hydrophone and VEMCO
3. Recover the hydrophone
4. Recover the VEMCO

Post operation tasks

1. Fill out logbooks
2. Dive debriefing
3. Fill out Metadata spreadsheet