

# Operation Plan 1 – Metadata collection of existing installation (Dive)

Location: **Cambridge Bay**

Date: September 16, 2014

Constraints: Bad weather, barge at the dock or inbound

## Objectives

- Visual inspection of the existing installation
- Record missing or more accurate metadata of the existing installation
- Install the extension line end to platform and a Surface Marker Buoy (SMB) in prevision for next operation (transect line deployment)

## 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 (Ryan Flagg)

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

Planned dive profile	Dive Op. 1
Total time	50 min
Max depth	9 m
Next max depth	12 m
Repetitive factor from previous dive	NA
Decompression schedule	9/60 or 12/60
Repetitive group	C or D
Surface interval	NA

## Equipment Requirements

1. Dive Gear
2. GoPro camera
3. Underwater camera
4. Wet-notes metadata table
5. Compass
6. Dive computer (will be used for depth recording)
7. Extension line (for transect)
8. SMB
9. Carabineer
10. GPS and its float

## **Underwater operations (Alice Bui & Ryan Key)**

1. Platform Cable survey
  - a) Swim along the cable to the platform while recording a video.
  - b) Pause and make a close up on any issue with the cable (e.g. heavy rusty areas of the armour cable or wear-off areas of the green cable).
2. Visual inspection of the platform (OIM Device ID 23188) and metadata recording
  - a) Visually inspect for any issues
  - b) Attach GPS float to the platform, pull the line taut. Record time.
  - c) Record a video of the platform (general view of every sides) and any potential issues
  - d) Record following metadata instruments
    - Depth of SWIP
    - Height of camera
    - Camera bearing
  - e) Take still photos
  - f) Untie the GPS float
3. VEMCO cable (thinner cable) survey
  - a) Swim along the cable to the VEMCO while recording a video
  - b) Pause and make a close up on any issue with the cable (e.g. wear-off areas of the green cable).
4. Visual inspection of the VEMCO (Device ID 23189)
  - a) Visually inspect for any issues
  - b) Record a video of the VEMCO (general view of every sides) and any potential issues
  - c) Attach GPS float to the platform, pull the line taut. Record time.
  - d) Record depth
5. Hydrophone cable (thicker cable) survey
  - a) Swim back to where the cable branches out
  - b) Follow the cable to the hydrophone while recording a video
  - c) Pause and make a close up on any issue with the cable (e.g. wear-off areas of the green cable).
6. Visual inspection of the hydrophone (Device ID 23155)
  - a) Visually inspect for any issues
  - b) Record a video of the hydrophone (general view of every sides) and any potential issues
  - c) Attach GPS float to the platform, pull the line taut. Record time.
  - d) Record depth
7. Terminate the dive
  - a) Ascent to surface
  - b) Swim back to shore

## **Post operation tasks**

1. Fill out logbooks
2. Dive debriefing. Re-evaluate recovery dive.
3. Upload videos/pictures
4. Upload GPS coordinates
5. Fill out Metadata sheet