

Operation Plan 4 – Transect Video Line (Dive)

Location: **Cambridge Bay**
Constraints: Bad weather, barge at the dock

Date: September 16, 2014

Objectives

- Visual transect survey

Operation Dependents

- Transect needs to be deployed

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

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

Planned dive profile	Dive Op. 1 (previous dive)	Dive Op. 2 (previous dive)	Dive Op. 4
Dive time	50 min	45 min	50 or 35 min
Max depth	9 m	9 m	15 m
Next max depth	12 m	12 m	18 m
Repetitive factor from previous dive	NA	1.3 or 1.4	1.2
Decompression schedule	9/60 or 12/60	9/90 or 12/70	15/60 or 18/50
Repetitive group	C or D	D or E	F
Surface interval	NA	1 h	4h

Equipment Requirements

1. Dive Gear
2. GoPro camera
3. Underwater camera and light

Underwater Operations

1. Visual transect survey
 - a) Descent at the platform
 - b) Find the transect line end
 - c) Record the time at the start of the transect
 - d) Start swimming following the transect line at low speed, at a height of 0.5 to 1 m above seafloor, with the camera objective perpendicular to seafloor, lights on, keep transect line in the middle of the GoPro screen
 - e) At the 100-m mark, (record time) turn left and swim along the perpendicular transect

- f) At the end of the transect, (record time) turn around and swim back to the 100-m mark of the longer transect (can be done swimming fast)
 - g) Back at the 100-m mark, continue along the 200-m transect with same height and speed as for the first part
 - h) At the end of the line, record time
 - i) Swim back fast to the platform if time allows (if maximum depth is greater than 15 m)
2. Terminate the dive
- a) Ascent to surface
 - b) Swim back to shore

Post operation tasks

- 1. Fill out logbooks
- 2. Dive debriefing
- 3. Fill out Physical samples spreadsheet
- 4. Upload videos/pictures