

LEGEND

- BATHYMETRIC CONTOUR (5 m INTERVAL)
- SHORE (0.3 m CD)
- CUT AREA

OCEANOGRAPHY

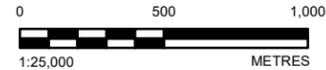
- ADCP MOORING
- CTD
- RTK CONTROL

START LOCATION

- DROGUE-02
- DROGUE-03
- DROGUE-06

END LOCATION

- DROGUE-02
- DROGUE-03
- DROGUE-06
- CTD
- DROGUE-02
- DROGUE-03
- DROGUE-06



REFERENCE(S)
 STEENSBY SITE INFRASTRUCTURE AND BATHYMETRY DATA PROVIDED BY CLIENT, JULY 2021.
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 PROJECTION: UTM ZONE 17 DATUM: NAD 83

CLIENT
 BAFFINLAND IRON MINES CORPORATION

PROJECT
 SECOND IRON ORE PORT – STEENSBY 2021 FIELD PROGRAM

TITLE
 OCEANOGRAPHY SAMPLING DURING STEENSBY 2021 FIELD PROGRAM

CONSULTANT	YYYY-MM-DD	2022-03-23
	DESIGNED	AD
	PREPARED	AJA
	REVIEWED	PR
	APPROVED	PR

PROJECT NO.	CONTROL	REV.	FIGURE
20252228	10400-03	0	9

PATH: I:\CENTERS\BAFFINLAND_IRON_MINES\2022\228\Maping\Products\10400_Data_Analysis_and_Reporting\Task_03\Steenby_Field_Program_2021\02\2228_10400_03_Fig9_Oceanography_Rev0.mxd PRINTED ON: 2025-04-24 AT 2:34:27 PM

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

APPENDIX A

Photographs



Photo 1: RV Nuliajuk in Steensby Port, 2021.



Photo 2: Freight Dock (FD), looking east, during visual survey (7 September 2021).



Photo 3: Freight Dock, looking northeast, during visual survey (7 September 2021).



Photo 4: Example surficial sample from Freight Dock dredge area (DA) location DA-FD-07-SS (9 September 2021).

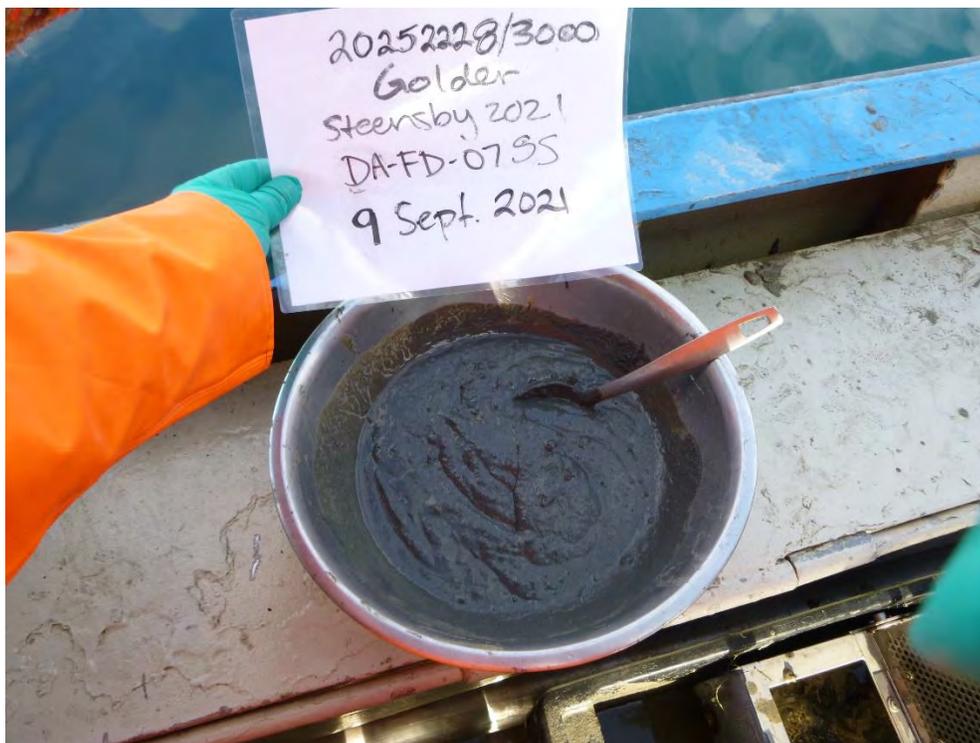


Photo 5: Example surficial sample from Freight Dock location DA-FD-07-SS (homogenized) in sampling bowl (9 September 2021).



Photo 6: Van Veen grab with sediment sample collected at the Freight Dock.

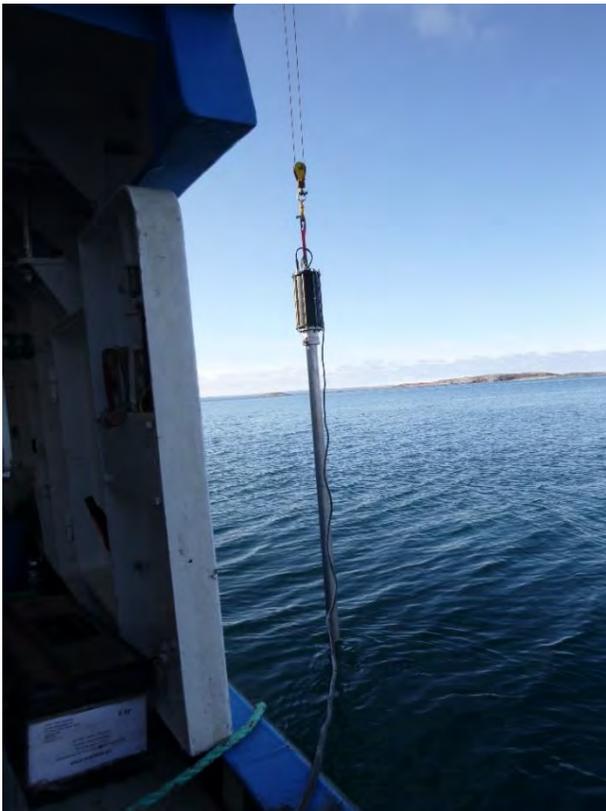


Photo 7: Vibracore system being deployed at the Freight Dock.



Photo 8: Example benthic sample on 0.5 mm sieve, collected from Freight Dock baseline (BL) station BL-FD-05 (5 September 2021).



Photo 9: Fourhorn sculpin (*Myoxocephalus quadricornis*) captured during gill netting (GN12) in the Freight Dock (16 September 2021).



Photo 10: Arctic char (*Salvelinus alpinus*) captured during gill netting (GN12) in the Freight Dock (16 September 2021).



Photo 11: 0 to -5 m chart datum (CD) depth contour of Freight Dock during ROV surveys (Transect FD-02; 11 September 2021).



Photo 12: -10 to -20 m chart datum (CD) depth contour of Freight Dock during ROV surveys (Transect FD-04; 13 September 2021).



Photo 13: ROV team conducting surveys along a Freight Dock transect from the zodiac.



Photo 14: ROV team conducting surveys at a Freight Dock transect from the Nuliajuk.



Photo 15: Ore Dock (OD), looking north, during visual survey (8 September 2021).



Photo 16: Example surficial sample from Ore Dock baseline location BL-OD-05 (11 September 2021).

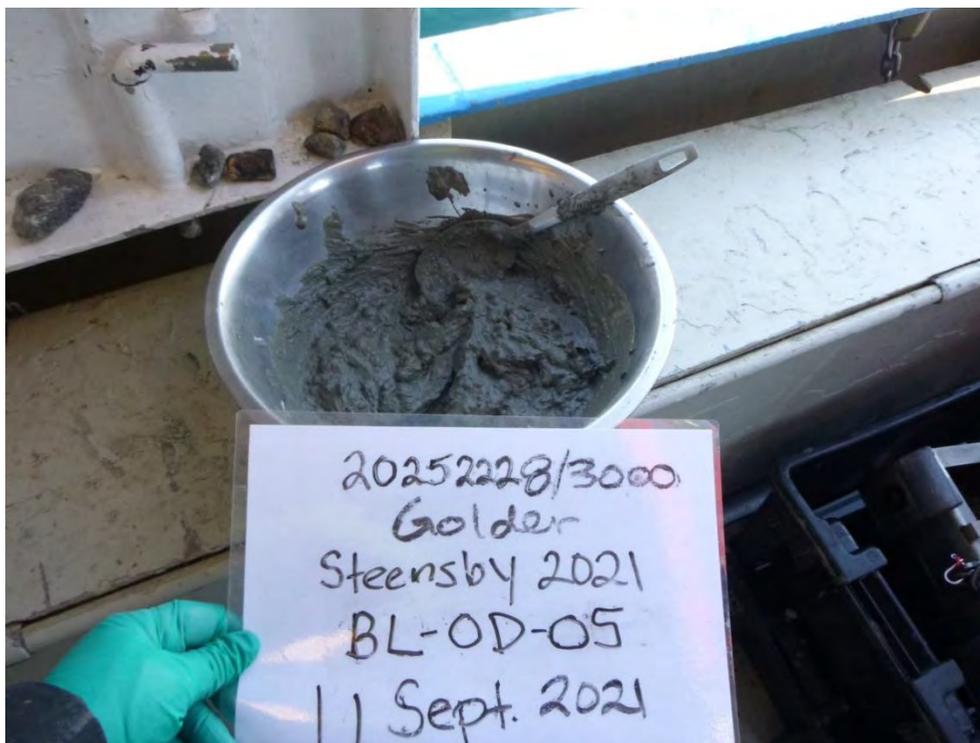


Photo 17: Example surficial sample from Ore Dock baseline location BL-OD-05 (homogenized) in sampling bowl (11 September 2021).



Photo 18: Benthic sample on 0.5 mm sieve, collected from Ore Dock baseline station BL-OD-05 (11 September 2021).



Photo 19: Unknown sculpin captured during Fukui trap efforts (FT03) from the Ore Dock (21 September 2021).



Photo 20: Unknown sculpin captured during gill netting (GN03) from the Ore Dock (8 September 2021).



Photo 21: -5 to -10 m CD depth contour of the Ore Dock during ROV surveys (Transect OD-03; 15 September 2021).



Photo 22: -20 to -30 m CD depth contour of the Ore Dock during ROV surveys (Transect OD-05; 14 September 2021).



Photo 23: -50 m CD depth contour of the Ore Dock during ROV surveys (Transect OD-07B; 15 September 2021).



Photo 24: Island Causeway (CW), looking southwest, during visual survey (7 September 2021).



Photo 25: Island Causeway, looking northeast, during visual survey (7 September 2021).



Photo 26: AMS Multi-Stage Corer attempting to collect sediment samples at the Causeway (14 September 2021).



Photo 27: Benthic sample on 0.5 mm sieve, collected from Causeway baseline station BL-CW-04 (14 September 2021).



Photo 28: Two arctic sculpin (*Myoxocephalus scorpioides*) captured during angling efforts (AN03) in the Causeway (16 September 2021).

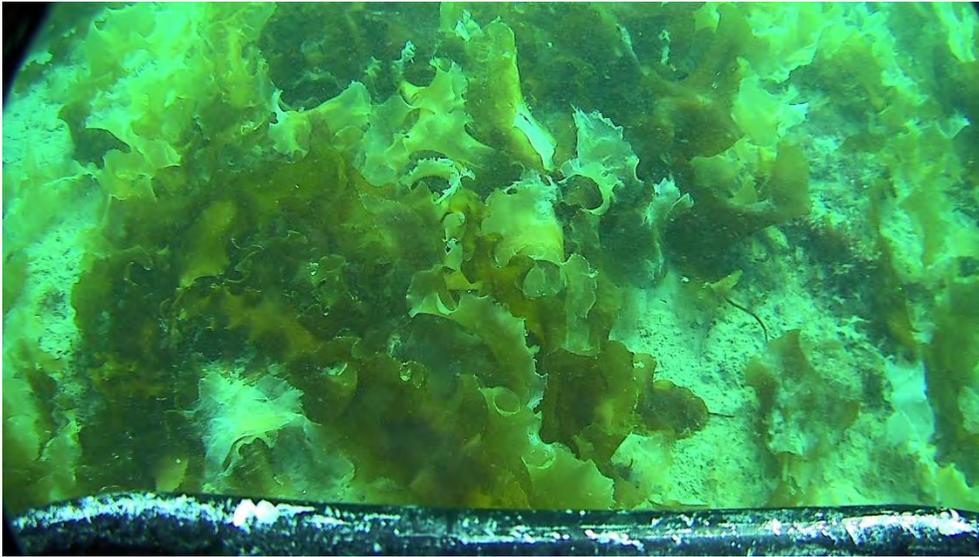


Photo 29: 0 to -5 m CD depth contour of the eastern Causeway during ROV surveys (Transect CW-02E; 11 September 2021).



Photo 30: -5 to -10 m CD depth contour of the western Causeway during ROV surveys (Transect CW-03W; 10 September 2021).



Photo 31: Reference site (RS or RD), looking northeast, during visual survey (17 September 2021).

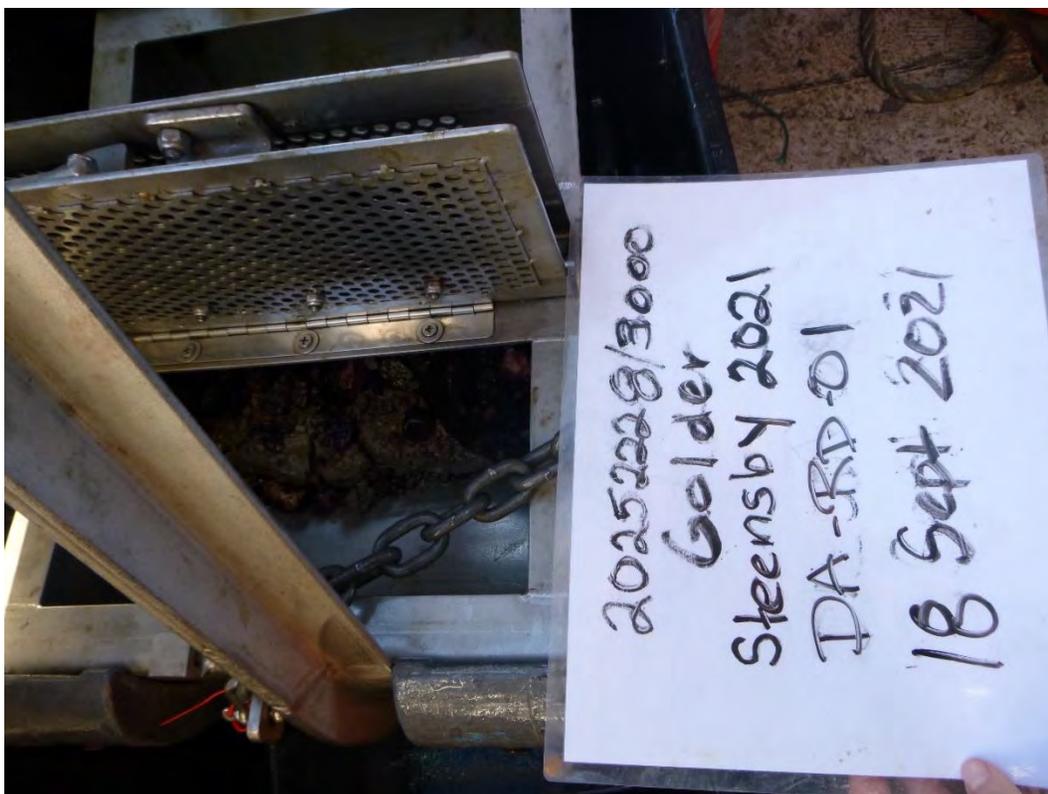


Photo 32: Surficial sample from Reference Site location DA-RD-01.

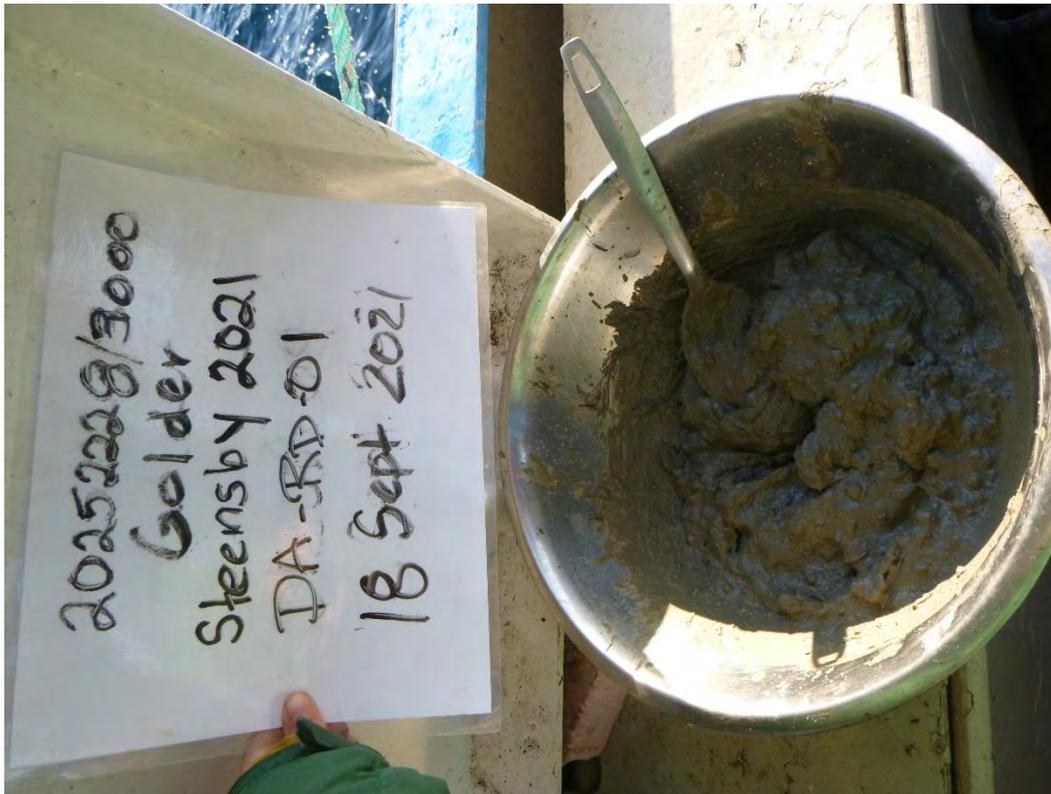


Photo 33: Surficial sample from Reference Site location DA-RD-01 (homogenized) in sampling bowl.



Photo 34: Unidentified sea cucumber recovered from Reference Site location BL-RD-01.



Photo 35: Unknown sculpin captured during Fukui trap efforts (FT07) in the Reference Site (18 September 2021).



Photo 36: Unknown sculpin captured during Fukui trap efforts (FT07) in the Reference Site (18 September 2021).

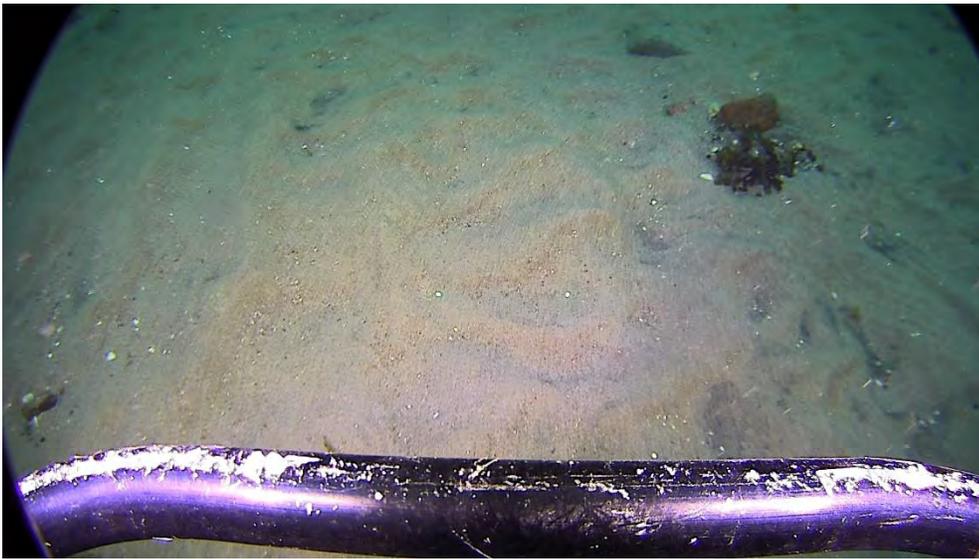


Photo 37: 0 to -5 m CD depth contour of Reference Site during ROV Surveys (Transect RS-02; 17 September 2021).



Photo 38: -10 to -20 m CD depth contour of Reference Site during ROV Surveys (Transect RS-04; 17 September 2021).



Photo 39: -40 m CD depth contour of Reference Site during ROV Surveys (Transect RS-06; 18 September 2021).



Photo 40: West end of Offset Site 1 (OS1) during visual surveys (11 September 2021).



Photo 41: East end of Offset Site 1 during visual surveys (11 September 2021).



Photo 42: Example surficial sample for grain size from Offset Site 1 location OS1-GS-20m (20 September 2021).



Photo 43: Example surficial sample from Offset Site 1 location OS1-GS-20m (homogenized) in sampling bowl (20 September 2021).



Photo 44: 0 to -5 m CD depth contour of Offset Site 1 during ROV surveys (Transect OS1-02; 11 September 2021).



Photo 45: -5 to -10 m CD depth contour of Offset Site 1 during ROV surveys (Transect OS1-03; 11 September 2021).



Photo 46: Gill netting efforts within Offset Site 1 (19 September 2021; photo courtesy of A. Clark of Ocean Dynamics Inc).



Photo 47: Closest location to Offset Site 2 (OS2) the Nuliajuk was able to access (18 September 2021).

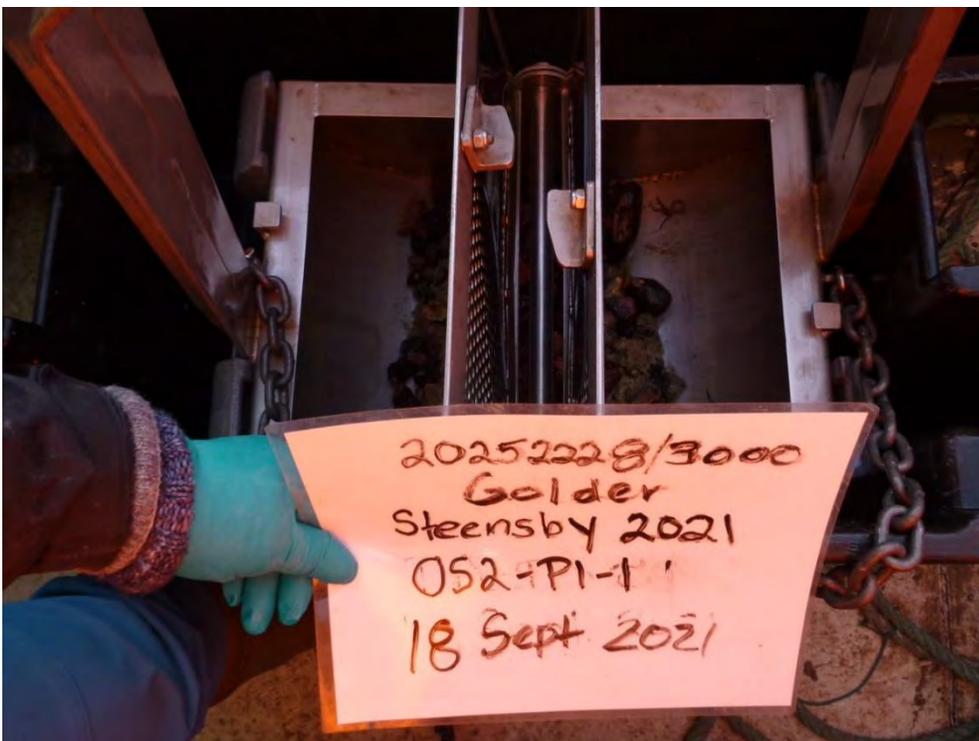


Photo 48: Surficial sample from Offset Site 2 location OS2-P1-1 (18 September 2021).

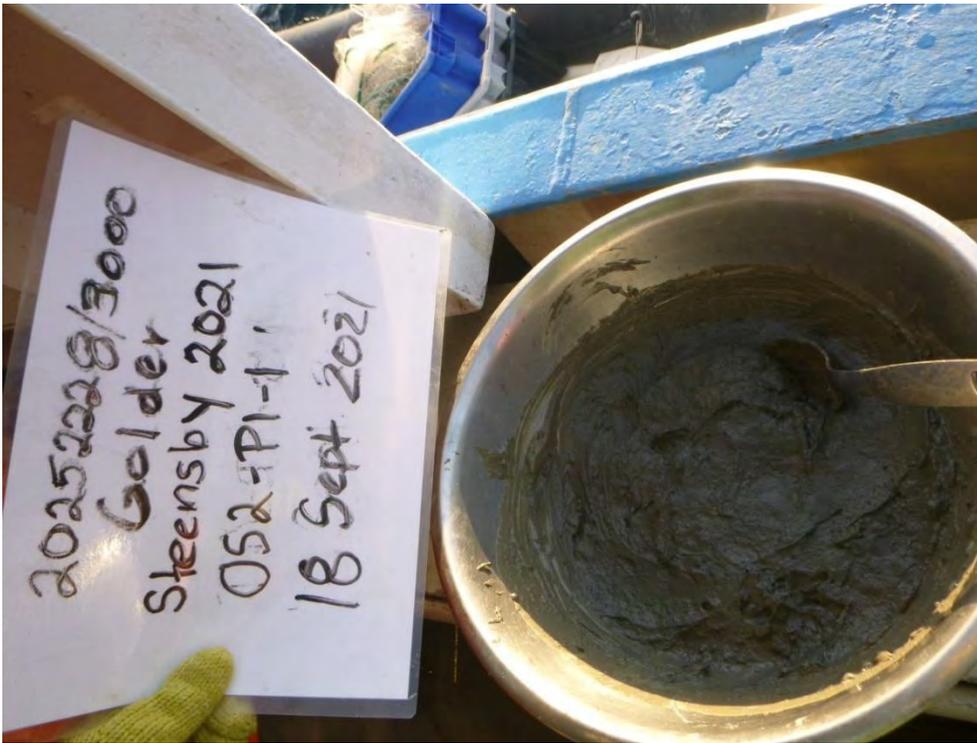


Photo 49: Surficial sample from Offset Site 2 location OS2-P1-1 (homogenized) in sampling bowl (18 September 2021).



Photo 50: ROV team conducting a survey at Offset Site 2 from the Nuliajuk.



Photo 51: -11 to -22 m CD depth contour of Offset Site 2 during ROV survey (Transect OS2-P1; 18 September 2021).



Photo 52: North end of Offset Site 3 (OS3) during visual survey (19 September 2021).



Photo 53: South end of Offset Site 3 during visual survey (19 September 2021).



Photo 54: Surficial sample for grain size from Offset Site 3 location OS3-GS-15m (19 September 2021).



Photo 55: Surficial sample for grain size from Offset Site 3 location OS3-GS-15m (homogenized) in sampling bowl (19 September 2021).



Photo 56: Intertidal (+3 to 0 m CD) during surveys of Offset Site 3 (Transect OS3-01; 19 September 2021).

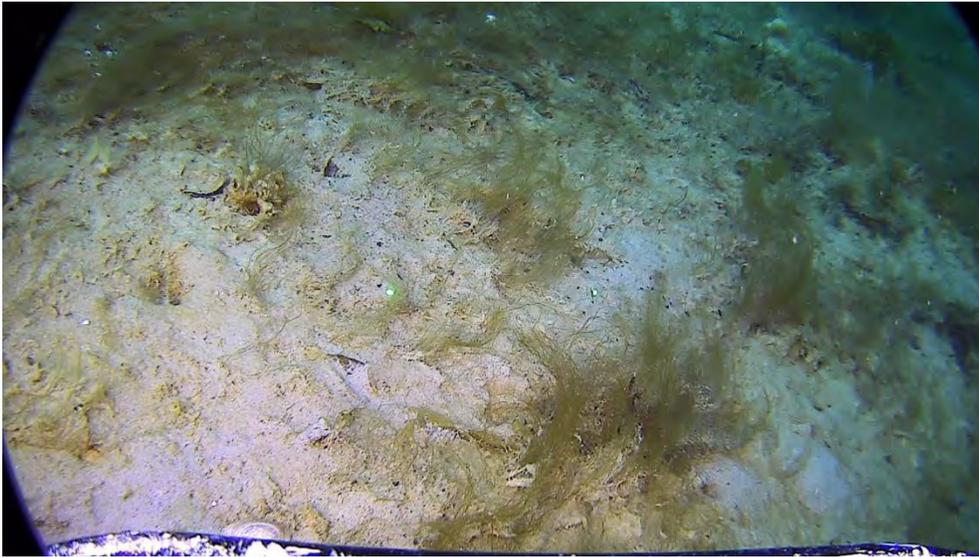


Photo 57: 0 to -5 m CD depth contour of Offset Site 3 during ROV surveys (Transect OS3-02;19 September 2021).



Photo 58: -5 to -10 m CD depth contour of Offset Site 3 during ROV surveys (Transect OS3-03;19 September 2021).



Photo 59: Construction Dock (CD), looking northeast, during visual survey (21 September 2021).



Photo 60: 0 to -5 m CD depth contour of Construction Dock during ROV surveys (Transect CD-02; 21 September 2021).



Photo 61: -10 to -20 m CD depth contour of Construction Dock during ROV surveys (Transect CD-04; 20 September 2021).



Photo 62: Example tide pool evaluation quadrat of transect 1 (T1-WQ1; 20 September 2021).



Photo 63: Example tide pool evaluation quadrat of transect 3 (T3-Q3; 20 September 2021).



Photo 64: Example tide pool evaluation quadrat of transect 5 (T5-Q6; 20 September 2021).



Photo 65: -39 to -58 m CD depth contour of Alternate disposal at sea (DAS) Site 1 during ROV surveys (Transect DAS-A01; 20 September 2021).



Photo 66: -39 to -58 m CD depth contour of Alternate DAS Site 1 during ROV surveys (Transect DAS-A01; 20 September 2021).



Photo 67: -40 to -49 m CD depth contour of Alternate DAS Site 2 during ROV surveys (Transect DAS-A02; 13 September 2021).



Photo 68: -40 to -49 m CD depth contour of Alternate DAS Site 2 during ROV surveys (Transect DAS-A02; 13 September 2021).



Photo 69: -49 to -54m CD depth contour of Alternate DAS Site 3 during ROV surveys (Transect DAS-A03; 20 September 2021).



Photo 70: -49 to -54 m CD depth contour of Alternate DAS Site 3 during ROV surveys (Transect DAS-A03; 20 September 2021).



Photo 71: RTK Survey Local Ground Control Point base station set up 40 m inland above the Ore Dock (5 September 2021).



Photo 72: ACDP Mooring deployment to 78 m depth to the west of the Ore Dock (8 September 2021).



Photo 73: GPS Drogue deployment (Drogue-02) to the west of Steensby Port (9 September 2021).



Photo 74: GPS Drogue deployed near Offset Site 1 (Drogue-03; 13 September 2021).



Photo 75: CTD deployment for Transect 3 (11 September 2021).

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