

R/V Polar Duke VI-88 Coring Information

Date 11 MAY 88

Station No. - 1 Latitude 61°35.387 Longitude 54°41.201

Type of Core: Piston ✓ Gravity ✓ Type of weightstand Piston Core short

Number of Core barrels attached 2 Length of Core barrel 6 meters

Water Depth (meters) 3.125 sec

Station time information:

Time ship slowed to pull gear 2243 Z / 10 MAY

Time gear aboard ship 2330 Z / 10 MAY

Time on station 0050 Z

Time probe lowered 0059 Z

Water depth when core at surface 3.125 sec meters

Meter reading with core at sea surface 0 m

Meter reading where pinger attached 100 m

Time when pinger attached 0102 Z

Water depth when pinger attached 3.125 sec meters

Time at stop above bottom 0135 Z

Water depth at stop above bottom 3.130 sec meters

Time when core entered bottom 0144 Z

Water depth when core entered bottom 2342 meters

Latitude 61°35.341 Longitude 54°41.640 when core in bottom

Wire out 2455 meters Wire angle < 5° Sea State "0" in ice

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed 0221 Z

Time when core on surface 0224 Z

Time when ship underway 0245 Z

Bottom relief Flat - sandy

Amount of core recovered 254.5 cm

Was Trigger core used? No Amount of scope meters Length of trigger core recovered cm

Watchstander 4

Comments (include type of sediments recovered):

Sandy - fine green sediments

R/V Polar Duke VI-88

Coring Information

Date 11 MAY 88

Station No. - 2

Latitude 61° 30.537

Longitude 54° 33.522

Type of Core: Piston Gravity X

Type of weightstand PC short

Number of Core barrels attached 1

Length of Core barrel 3 meters

Water Depth (meters) 1

Station time information:

Time ship slowed to pull gear No gear out

Time gear aboard ship N/A

Time on station 0340Z

Time probe lowered 0349Z

Water depth when core at surface 1533 m unc meters

Meter reading with core at sea surface -0-

Meter reading where pinger attached N/A

Time when pinger attached N/A

Water depth when pinger attached N/A meters

Time at stop above bottom 0412Z

Water depth at stop above bottom meters

Wire angle ~15° waiting for bridge

Time when core entered bottom 0420Z

Water depth when core entered bottom 1490(unc) meters

Latitude 61° 30.126

Longitude 54° 32.941 when core in bottom

Wire out not known

(1550) meters

Wire angle 0°

Sea State -0- in ice

Time out of bottom 0435Z

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed N/A

Time when core on surface 0503Z

Time when ship underway 0530Z

Bottom relief bottom not very reflective.

Amount of core recovered 221 cm

Was Trigger core used? NO Amount of scope N/A meters Length of trigger core recovered N/A cm

Watchstander L2 & P2

Comments (include type of sediments recovered): Unload not seen by winch operator. Pete Pope saw ^{sheave} "unload" at 1550m on pull-out.

SAT FIX 0421:37 61° 30.202 S

54° 31.087 W

Core head filled with mud. 3 mini-cores taken of corehead material. Ash apparent in corehead material.

R/V Polar Duke VI-88

Coring Information

Date 11 MAY 88

Station No. - 3

Latitude 61°29.4

Longitude 54°05.7

Type of Core: Piston Gravity X

Type of weightstand PC short

Number of Core barrels attached 1

Length of Core barrel 3 meters

Water Depth (meters) 1040 meters

Station time information:

Time ship slowed to pull gear N/A

Time gear aboard ship N/A

Time on station 0705

Time probe lowered 0720

Water depth when core at surface 990 meters

Meter reading with core at sea surface -0-

Meter reading where pinger attached 100m

Time when pinger attached 0744Z

Water depth when pinger attached 968 meters

Time at stop above bottom 0757

Water depth at stop above bottom 957 meters

Time when core entered bottom 0803Z

Water depth when core entered bottom 956 meters

Latitude 61°29.317

Longitude 54°05.029 when core in bottom

Wire out 948 meters Wire angle -0°- Sea State -0-

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed 0824Z

Time when core on surface 0830Z

Time when ship underway 0850Z

Bottom relief Gentle slope

Amount of core recovered 255 cm

Was Trigger core used? No Amount of scope N/A meters Length of trigger core recovered N/A cm

Watchstander L² + P²

Comments (include type of sediments recovered):

Same green gunk.

SAT FIX 0718Z 61°29.389'S 54°05.593'W

R/V Polar Duke VI-88
Coring Information

Date 11 May, 1988

Station No. - 4

Latitude 61° 41.447'

Longitude 54° 54.941'

Type of Core: Piston Gravity X

Type of weightstand Short (regular)

Number of Core barrels attached 1

Length of Core barrel

Water Depth (meters) 2138m

Station time information:

Time ship slowed to pull gear

Time gear aboard ship

Time on station 12:07

Time probe lowered 12:21.8

Water depth when core at surface 2138 meters

Meter reading with core at sea surface 0

Meter reading where pinger attached 75m

Time when pinger attached 12:25.26

Water depth when pinger attached 2138 meters

Time at stop above bottom 1258

Water depth at stop above bottom 2000 meters

Time when core entered bottom 13:05

Water depth when core entered bottom 2161.5 meters

Latitude 61° 41.819

Longitude 54° 54.206' when core in bottom

Wire out 2230 meters Wire angle 10° Sea State calm

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed 1340

Time when core on surface 1348

Time when ship underway 1354

C/C305'

Bottom relief smooth

Amount of core recovered 57 cm

Was Trigger core used? / Amount of scope / meters Length of trigger core recovered / cm

Watchstander

Comments (include type of sediments recovered):

R/V Polar Duke VI-88

Coring Information

Date 11 May 88

Station No. - 5

Latitude 62°15.878'

Longitude 57°29.605'

Type of Core: Piston ☒ Gravity ☐

Type of weightstand Short but different from previous stations

Number of Core barrels attached 2

Length of Core barrel

Water Depth (meters) 1980

Station time information:

Time ship slowed to pull gear 5:24.8

Time gear aboard ship

Time on station 1652

Time probe lowered 1655

Water depth when core at surface 1980 meters

Meter reading with core at sea surface 0

Meter reading where pinger attached ☒

Time when pinger attached ☒

No pinger

Water depth when pinger attached ☒ meters

Time at stop above bottom 1744

Water depth at stop above bottom 1980 meters

Time when core entered bottom 1753

Water depth when core entered bottom 1980 2008 meters

Latitude 62°15.638'

Longitude 57°28.986' when core in bottom

Wire out 2048 meters Wire angle Vertical Sea State flat

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed ☒

Time when core on surface 1839

Time when ship underway 1915

Bottom relief Smooth. But We noticed there is a mound near-by by side echo when drifting

Amount of core recovered 572 cm

Was Trigger core used? ☒ Amount of scope meters Length of trigger core recovered 51.5 cm

Watchstander S. Nagihara

Comments (include type of sediments recovered):

The piston O-ring was too thick. We applied Silicone grease to lubricate it. We know this is crazy. The penetration was hardly noticed because of the insensitivity of the tension meter. Neither pullout!

R/V Polar Duke VI-88
Coring Information

Date May 12

Station No. - 6

Latitude 62° 13.26

Longitude 57° 36.12

Type of Core: Piston ☒ Gravity ☐

Type of weightstand Short

Number of Core barrels attached 2

Length of Core barrel

Water Depth (meters) 1969

Station time information:

Time ship slowed to pull gear

Time gear aboard ship

Time on station 2000

Time probe lowered 2023

Water depth when core at surface 1969 meters

Meter reading with core at sea surface ~~2020~~ 0

Meter reading where pinger attached

Time when pinger attached

Water depth when pinger attached meters

Time at stop above bottom 2050

Water depth at stop above bottom ~~1969~~ 1969 meters

Time when core entered bottom 2103

Water depth when core entered bottom 1969 meters

Latitude 62° 13.043'

Longitude 57° 35.487 when core in bottom

Wire out 2033 meters

Wire angle 0°

Sea State calm

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed

Time when core on surface 2156

Time when ship underway

Bottom relief Smooth

Amount of core recovered 300 cm

Was Trigger core used? ☒ Amount of scope meters Length of trigger core recovered cm

Watchstander

see Peter's drawing

Comments (include type of sediments recovered):

R/V Polar Duke VI-88
Coring Information

Date 12 May

Station No. - 7

Latitude 62° 15.987'S

Longitude 57° 38.540'

Type of Core: Piston X Gravity

Type of weightstand short

Number of Core barrels attached 2

Length of Core barrel 6m

Water Depth (meters) 1977

Station time information:

Time ship slowed to pull gear

Time gear aboard ship

Time on station 2355

Time probe lowered 0026

Water depth when core at surface 1982 meters

Meter reading with core at sea surface

Meter reading where pinger attached NONE

Time when pinger attached N/A

Water depth when pinger attached N/A meters

Time at stop above bottom

Water depth at stop above bottom meters

Time when core entered bottom 0102Z

Water depth when core entered bottom ~1980 meters

Latitude 62° 15.623'S Longitude 57° 37.542'W when core in bottom

Wire out 2215 meters Wire angle ~10° Sea State in ice

2185m pull out

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed

Time when core on surface 0137Z

Time when ship underway 0157Z

Bottom relief Flat

Amount of core recovered 277 ~~110~~ cm

Was Trigger core used? yes Amount of scope 5 meters Length of trigger core recovered 50 cm

Watchstander L2 + P2

Comments (include type of sediments recovered):

0105Z 62° 15.379'S 57° 35.154'W

Core retainer broke off and lodged in core causing only partial filling of liner

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R/V Polar Duke VI-88

Coring Information

Date 13 May 88

Station No. - 8

Latitude 62° 15.732

Longitude 57° 37.782

Type of Core: Piston X Gravity

Type of weightstand short PC

Number of Core barrels attached 2

Length of Core barrel 6 M

Water Depth (meters) 1985

Station time information:

Time ship slowed to pull gear

Time gear aboard ship

Time on station 0320

Time probe lowered 0328

Water depth when core at surface 1985 meters

Meter reading with core at sea surface -0-

Meter reading where pinger attached 100m

Time when pinger attached 0332

Water depth when pinger attached 1985 meters

Time at stop above bottom 0405Z

Water depth at stop above bottom 1985 meters

Time when core entered bottom 0409Z

Water depth when core entered bottom 1978 meters

Latitude 62° 14.893' S Longitude 57° 38.233' W when core in bottom

Wire out 2023 meters Wire angle 0° Sea State -0-

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed 0449Z

Time when core on surface 0454Z

Time when ship underway 0515Z underway

Bottom relief Flat King George Basin

Amount of core recovered 569 cm

Was Trigger core used? Yes Amount of scope 5 meters Length of trigger core recovered 85 cm

Watchstander L2 + P2

Comments (include type of sediments recovered):

Lots of green gunk.

0349Z SAT FIX 62° 14.978' S 57° 38.441' W

0459Z SAT FIX 62° 14.030' S 57° 34.740' W

R/V Polar Duke VI-88

Coring Information

Date 13 MAY 1988

Station No. - 9 Latitude 62°18.560'S Longitude 57°43.332'W

Type of Core: Piston X Gravity _____ Type of weightstand PC short

Number of Core barrels attached 2 Length of Core barrel 6 m

Water Depth (meters) 1988.2

Station time information:

Time ship slowed to pull gear _____

Time gear aboard ship _____

Time on station 0656Z

Time probe lowered 0732Z

Water depth when core at surface 1988. meters

Meter reading with core at sea surface - 0 -

Meter reading where pinger attached 100 m

Time when pinger attached 0740Z 1990

Water depth when pinger attached 1988 meters

Time at stop above bottom 0814

Water depth at stop above bottom 1988 meters

Time when core entered bottom 0819Z

Water depth when core entered bottom 1989.75 meters

Latitude 62°18.664 Longitude 57°43.597 when core in bottom

Wire out 2015 meters Wire angle - 0 - Sea State - 0 -

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed 0855Z

Time when core on surface 0915Z

Time when ship underway 1000Z

Bottom relief Flat King George Basin

Amount of core recovered 595 cm

Was Trigger core used? Yes Amount of scope 5 meters Length of trigger core recovered 67 cm

Watchstander L² & P²

Comments (include type of sediments recovered):

0759Z 62°18.528'S 57°43.244'W

0821Z 62°18.604'S 57°43.697'W

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Coring Information

Date 15 May

Station No. - 10

Latitude 62°32.729

Longitude 61°53.286

Type of Core: Piston Gravity x

Type of weightstand slant

Number of Core barrels attached 1

Length of Core barrel

Water Depth (meters) 191

Station time information:

Time ship slowed to pull gear /

Time gear aboard ship /

Time on station 1734

Time probe lowered 1739.8

Water depth when core at surface 191 meters

Meter reading with core at sea surface 0

Meter reading where pinger attached x

Time when pinger attached x

Water depth when pinger attached x meters

Time at stop above bottom x

Water depth at stop above bottom x meters

Time when core entered bottom 1740

Water depth when core entered bottom 191 meters

Latitude 62°32.723'

Longitude 61°53.259' when core in bottom

Wire out 201 meters Wire angle 90° Sea State calm

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed x

Time when core on surface 1747

Time when ship underway

Bottom relief smooth

Amount of core recovered cm 22 1/2 inch

Was Trigger core used? No Amount of scope meters Length of trigger core recovered cm

Watchstander

Comments (include type of sediments recovered):

No pinger

Sand + Gravel

Partial ~~Piston~~ core + Cutter nose Bagg
Gravity

R/V Polar Duke VI-88

Coring Information

Date May 15, 1988

Station No. - 11 Latitude 62°32 Longitude 61°53

Type of Core: Piston ☒ Gravity ☐ Type of weightstand short

Number of Core barrels attached 2 Length of Core barrel

Water Depth (meters) 150

Station time information:

Time ship slowed to pull gear

Time gear aboard ship

Time on station

Time probe lowered

Water depth when core at surface 150 meters

Meter reading with core at sea surface ?

almost same as St. #10

Meter reading where pinger attached ☒

Time when pinger attached ☒

Water depth when pinger attached ☒ meters

Time at stop above bottom ☒

Water depth at stop above bottom ☒ meters

Time when core entered bottom 1953

Water depth when core entered bottom 175 meters

Latitude 62°32.834 Longitude 61°53.868 when core in bottom

Wire out ? meters Wire angle 90° Sea State calm

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed ☒

Time when core on surface 1903

Time when ship underway

Bottom relief smooth

Amount of core recovered cm 12 3/4 inch

Was Trigger core used? Amount of scope meters Length of trigger core recovered cm

Watchstander

Comments (include type of sediments recovered):

Wire length meter broke down. Penetration & pull out were recognized only by the tension meter. ← The sea was shallow.

Partial Piston Core

Trigger core + more Bagged

Sand & Gravel

R/V Polar Duke VI-88

Coring Information

Date 15 May

Station No. - 12 Latitude _____ Longitude _____

Type of Core: Piston ☒ Gravity _____ Type of weightstand short

Number of Core barrels attached 2 Length of Core barrel _____

Water Depth (meters) 165

Station time information:

Time ship slowed to pull gear 1

Time gear aboard ship 1

Time on station 2055

Time probe lowered _____

Water depth when core at surface 165 meters

Meter reading with core at sea surface 0

Meter reading where pinger attached 1

Time when pinger attached 1

Water depth when pinger attached 1 meters

Time at stop above bottom 1

Water depth at stop above bottom 165 meters

Time when core entered bottom 2112

Water depth when core entered bottom 165 meters

Latitude 62° 27.08 Longitude 61° 28.96 when core in bottom

Wire out 165 meters Wire angle 0 Sea State calm

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed 1

Time when core on surface 2123

Time when ship underway _____

Bottom relief smooth

Amount of core recovered _____ cm 10 inch

Was Trigger core used? ☒ Amount of scope _____ meters Length of trigger core recovered _____ cm

Watchstander _____

Comments (include type of sediments recovered):

Core + 1 Bag

Partial 75% - Bagged
& 10 inch Core

Sand + Gravel

4 Bags

Trigger Core Bagged
in 4 Bags

Total 5 Bags

R/V Polar Duke VI-88

Coring Information

Date 16 May

Station No. - 13 Latitude $62^{\circ}19.807'S$ Longitude $61^{\circ}01.680'W$

Type of Core: Piston Gravity Type of weightstand Short

Number of Core barrels attached 1 Length of Core barrel

Water Depth (meters) 150

Station time information:

Time ship slowed to pull gear —

Time gear aboard ship

Time on station 0055 z

Time probe lowered 0058z

Water depth when core at surface 150 meters

Meter reading with core at sea surface _____

Meter reading where pinger attached None

Time when pinger attached

Water depth when pinger attached _____ meters

Time at stop above bottom _____

Water depth at stop above bottom _____ meters

Time when core entered bottom 0101

Water depth when core entered bottom 152 meters

Latitude 62° 19.809'S **Longitude** 61° 01.690'W when core in bottom

Wire out 157 meters Wire angle — Sea State Chin

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed —

Time when core on surface 0105 z

Time when ship underway _____

Bottom relief _____

Amount of core recovered _____ cm

Was Trigger core used? _____ Amount of scope _____ meters Length of trigger core recovered _____ cm

Watchstander $L^2 / P^2 / KG$

Comments (include type of sediments recovered):

SAT UPDATE 0114Z 62° 19.754' S Elev 13°

$61^{\circ} 03.798' W$

0125z 62° 19.972

61° 05.264

एकल Z_1^0

no recovery

except Cutter nose

Bagge

R/V Polar Duke VI-88

Coring Information

Date 16 MAY '88

Station No. - 14 Latitude 62° 20.158' S Longitude 61° 05.985' W

Type of Core: Piston ☒ Gravity ☐ Type of weightstand Short

Number of Core barrels attached 1 Length of Core barrel 3m

Water Depth (meters) 178

Station time information:

Time ship slowed to pull gear _____

Time gear aboard ship _____

Time on station _____

Time probe lowered 0147

Water depth when core at surface 178 meters

Meter reading with core at sea surface _____

Meter reading where pinger attached None

Time when pinger attached _____

Water depth when pinger attached _____ meters

Time at stop above bottom _____

Water depth at stop above bottom _____ meters

Time when core entered bottom 0150 Z

Water depth when core entered bottom 178 meters

Latitude 62° 20.192' S Longitude 61° 06.116' W when core in bottom

Wire out 190 meters Wire angle — Sea State Calm

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed N/A

Time when core on surface 0205 Z

Time when ship underway 0217

Bottom relief Flat

Amount of core recovered 220 cm

Was Trigger core used? Yes Amount of scope 5 meters Length of trigger core recovered <2 cm

Watchstander L2 P2 KG

Comments (include type of sediments recovered):

Piston Core recovered
+
cutter nose bagged

Trigger cutter bagged - no core retrieval

R/V Polar Duke VI-88

Coring Information

Date 16 MAY 1988

Station No. - 15

Latitude $62^{\circ} 14.46' S$

Longitude $60^{\circ}42.121'W$

Type of Core: Piston ✓ Gravity

Type of weightstand Short

Number of Core barrels attached 1

Length of Core barrel_____

Water Depth (meters) 435

Station time information:

Time ship slowed to pull gear

Time gear aboard ship _____

Time on station 0400

Time probe lowered 0431

Water depth when core at surface 437 meters

Meter reading with core at sea surface

Meter reading where pinger attached NONE

Time when pinger attached —

Water depth when pinger attached meters

Time at stop above bottom —

Water depth at stop above bottom meters

Time when core entered bottom 0440 z

Water depth when core entered bottom 439 meters

Latitude 62° 14.437' S **Longitude** 60° 43.840' W when core in bottom

Wire out 425 meters Wire angle _____ Sea State _____

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed

Time when core on surface 0504 z

Time when ship underway 0530

Bottom relief _____

Amount of core recovered 130 cm 51 1/4 inch

Was Trigger core used? ☐ Amount of scope _____ meters Length of trigger core recovered 85 cm 33 1/2 inch

Watchstander $L^2 / \rho^2 / \pi G$

Comments (include type of sediments recovered):

Unusual green flakes in Trigger Core cutter nose

Full Trigger Core + 2 Bags of cutter nose

Partial Proton Core + 1 Bay or Cutter Nose

Date 16 MAY 1988

Date 16 MAY 1988

Type of Core: Piston ☒ Gravity ☐ Type of weightstand Sheet

Number of Core barrels attached 1 Length of Core barrel

Water Depth (meters) 381

Time ship slowed to pull gear —

Time gear aboard ship _____

Time on station 0740

Time probe lowered 0800

Water depth when core at surface 381 meters

Meter reading with core at sea surface

Meter reading where pinger attached NONE

Time when pinger attached

Water depth when pinger attached meters

Time at stop above bottom

Water depth at stop above bottom _____ meters

Time when core entered bottom 0807 z

Water depth when core entered bottom 381 meters

Latitude 62° 05.495'S **Longitude** 60° 10.469'E when core in bottom

Wire out 370 meters Wire angle _____ Sea State _____

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed

Time when core on surface 0825

Time when ship underway _____

Bottom relief _____

Amount of core recovered 241 cm 95 inch

Was Trigger core used? Yes Amount of scope 5 meters Length of trigger core recovered 85 cm 33 1/2 inch

Watchstander $L^2/P^2/KG$

Comments (include type of sediments recovered):

Piston Core & Cutter nose (Bussed)

Trygon Core & Cuttenose (Bagged)

Date 16 MAY 1988

Date 16 MAY 1988

Station No. - 17

Latitude $62^{\circ} 09.261' S$

Longitude $59^{\circ} 54.950' \text{W}$

Type of Core: Piston ☒ Gravity ☐

Type of weightstand Short

Number of Core barrels attached 1

Length of Core barrel

Water Depth (meters) 105

Time ship slowed to pull gear —

Time gear aboard ship _____

Time on station ~~0942~~ 0932

Time probe lowered 0953

Water depth when core at surface 103. meters

Meter reading with core at sea surface

Meter reading where pinger attached **NONE**

Time when pinger attached _____

Water depth when pinger attached meters

Time at stop above bottom _____

Water depth at stop above bottom meters

Time when core entered bottom 0955

Water depth when core entered bottom 103 meters

Latitude 62° 09.261' S **Longitude** 59° 54.950' W when core in bottom

Wire out 96 meters Wire angle _____ Sea State _____

Remember the pinger at 100 meters, remind the winch operator!

Time when pinger removed —

Time when core on surface 1010

Time when ship underway 1020

Bottom relief _____

Amount of core recovered cm

Was Trigger core used? _____ Amount of scope _____ meters Length of trigger core recovered _____ cm

Watchstander _____

Comments (include type of sediments recovered):

No recovery except Piston Core Cutter Nose - Bagged

Sand