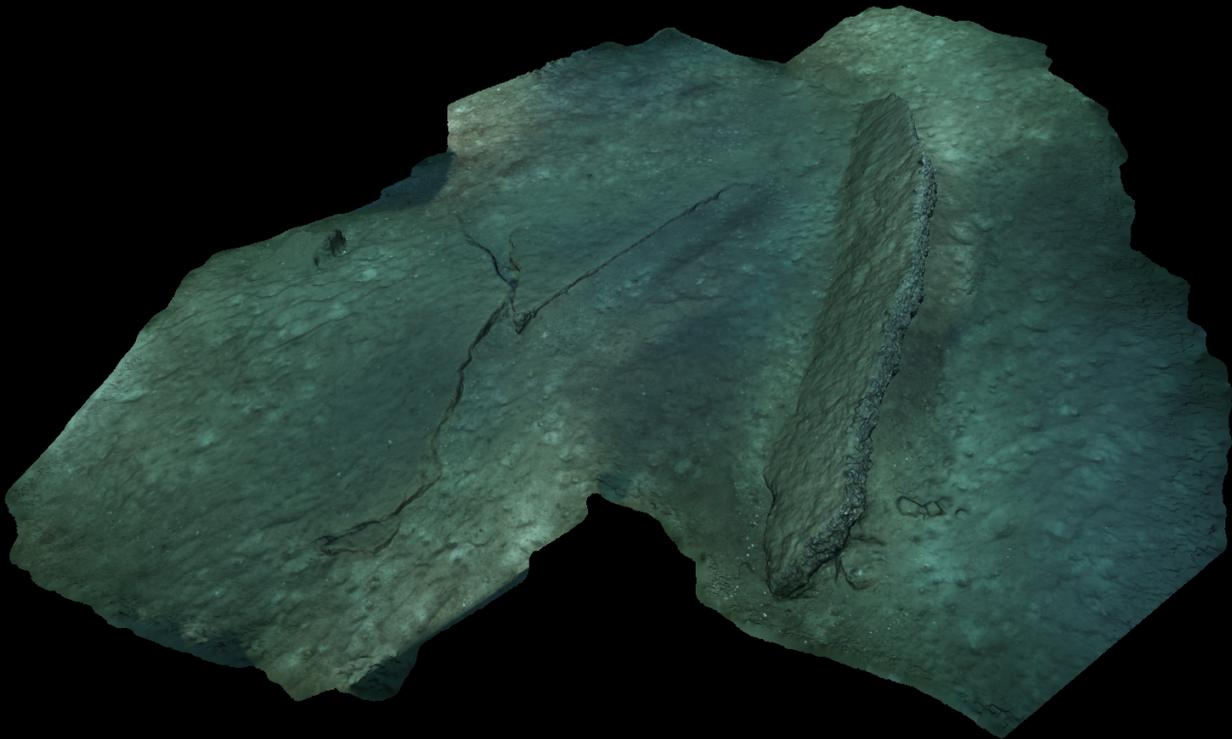


NORD STREAM 2 PIPELINE  
Cultural heritage target assessment  
and exclusion zone recommendations

VIR 2740



Mikkel H. Thomsen & Frederik D. Hyttel



VIKINGESKIBS  
MUSEET

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***SLKS 16/02648***

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## Cultural heritage target assessment and exclusion zone recommendations

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### **Abstract**

Nord Stream 2 AG has asked the Viking Ship Museum to identify and assess the cultural significance of objects potentially conflicting with the installation of new pipelines around Bornholm. Through an iterative process, the Viking Ship Museum has thus identified, inspected and documented a small number of discrete wooden objects on the seabed. No objects have been recovered, and no further mitigation measures have been imposed.

### **Dansk resumé**

Nord Stream 2 AG har bedt Vikingskibsmuseet udpege og vurdere den kulturhistoriske værdi af genstande, som potentielt berøres af et nyt sæt rørledninger ved Bornholm. Gennem en iterativ proces har Vikingskibsmuseet således udpeget, inspiceret og dokumenteret et mindre antal enkeltstående trægenstande på havbunden. Ingen genstande er blevet bjærget, og der er ikke pålagt yderligere mitigerings tiltag.

## ***Background***

In advance of finalising the route design for a set of new Baltic pipelines traversing the Danish EEZ around Bornholm, Nord Stream 2 AG (NS2) has asked the Viking Ship Museum (VIR) to identify and assess the cultural significance of objects potentially conflicting with the design, as well as to recommend possible mitigation measures.

## ***Administrative data***

The desk-based assessments were completed at the Viking Ship Museum in Roskilde, Denmark, by maritime archaeologist Mikkel H. Thomsen.

The visual inspections were conducted aboard Østensjø Rederi/Reach Subsea's research vessel M/V *Edda Fonn* during the period between 01.06.2017 and 08.06.2017. During the campaign, the Viking Ship Museum was represented by maritime archaeologists Marie E. Jonsson and Frederik D. Hyttel.

## ***Process overview***

An initial reconnaissance survey was acquired by NS2 using vessel towed side-scan sonar and magnetometer data, as well as vessel mounted multi-beam echo sounder and sub-bottom profiler data covering a 1500 m wide corridor. High and low frequency side-scan sonar data was acquired with the low frequency data primarily used for target picking. Run lines were spaced to ensure 100% coverage with the multi-beam echo sounder and 200% coverage with the side-scan sonar.

NS2 survey contractors conducted an assessment of the geophysical data acquired and generated a target listing of all relevant items within certain criteria (wrecks, debris and any targets larger than 0.5 m in any direction).

NS2 subsequently commissioned an engineering contractor to generate basic design routes for the pipeline, based on the reconnaissance survey data. The design routes were then surveyed using ROV-based survey equipment, covering two approximately 130 m wide corridors centred on the two design routes. Again, the NS2 survey contractor was given the job to generate a target listing from the side-scan sonar data of all wrecks, debris and targets larger than 0.5 m in any direction. Run lines were spaced to ensure 100% coverage with the multi-beam echo sounder and 200% coverage with the side-scan sonar.

NS2 completed an ROV-based gradiometer (unexploded ordnance – UXO) survey and ROV-based visual inspection of all targets identified from the gradiometer and detailed surveys within the initial basic engineering proposed pipeline lay corridor and security corridors. This work also included an ROV visual survey of 'boulder fields' along the route.

From the video and geophysical survey data supplied, VIR identified targets of probable cultural significance and assigned preliminary exclusion zones around the visible target extents.

Based on the results of the initial UXO surveys and preliminary VIR analysis of potential underwater cultural heritage sites, the engineering contractor updated the design route. The cultural heritage analysis and target exclusion zones were subsequently updated to reflect this new route design.

Finally, targets of presumed cultural significance which were found to conflict with the updated design route were subjected to a dedicated ROV-based visual inspection supervised by maritime archaeologists. This campaign provided the basis of the final target assessments and documentation.



**Fig. 1. Denmark in context, with Danish EEZ around Bornholm in blue, and route design (rev. 07) in black.**  
Graphics: Frederik D. Hyttel © Vikingskibsmuseet. Base map: Styrelsen for Dataforsyning og Effektivisering (skærmkort, dæmpet).

## **Definitions**

### **Route revisions**

Pipeline route data was delivered to VIR as it became available from the engineering contractor, and underwent two revisions during the cultural heritage assessment process:

- Rev. 04 – (W-EN-OFP-POF-DWG-804-071713EN-03)
- Rev. 06 – (W-EN-OFP-POF-DWG-804-D72001EN-02)
- Rev. 07 – (W-EN-OFP-POF-DWG-804-D72001EN-03)

Seabed intervention work GIS polygons, based on the rev. 04 route were delivered to VIR in order to assist with the review process. For rev. 06 evaluation, identical start, end and widths of intervention work polygons were assumed. Rev. 07 has subsequently been matched against rev. 06 design and cultural heritage evaluation. This change in route design has, however, had no impact on the target list or mitigation measures.

### **Confliction**

A target is considered *outside* the affected area if its assigned exclusion zone does not intersect the lay corridor or intervention work area. Objects outside the affected area have been assigned (usually circular) exclusion zones (see Appendix 1), and no other mitigation has been carried out.

Conversely, a target is said to be *conflicting* if its final exclusion zone intersects with design route centre line (Figure 2B).

A target is said to be *marginally conflicting or conflicting with intervention works* if the target exclusion zone intersects with the pipelay corridor or intervention work areas, but does not intersect the design route centre line. Minor pipelay re-routing within the lay corridor is feasible so that the 'as-laid' position of the pipeline does not intersect with the exclusion zone (Figure 2A). In this case the pipelay contractor must manoeuvre away maintaining a minimum of half the lay corridor (8.25 m) from the target exclusion zone. If this should prove impossible, further mitigation may be required by the Danish Agency for Culture and Palaces (Slots- og Kulturstyrelsen), e.g. further investigation, rerouting the pipeline, removing the object, or securing it *in situ*.

Note that future rerouting or change of intervention type may necessitate renewed assessment. Preliminary exclusion zones discarded during the iterative selection process can be made available for this.

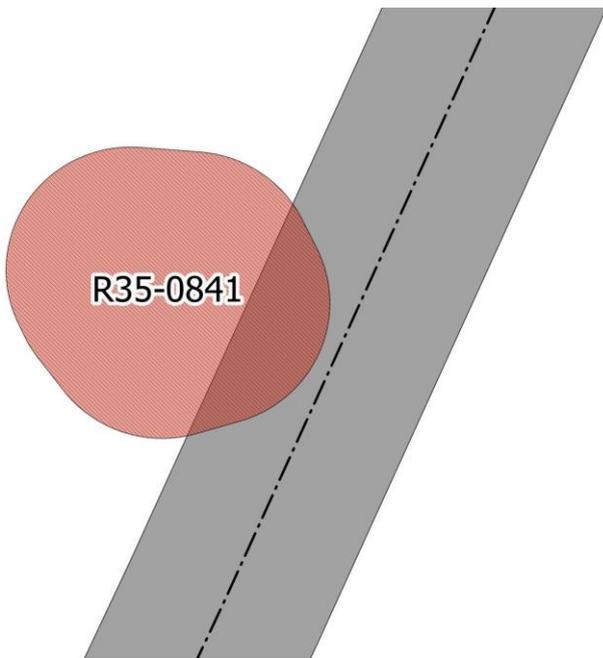


Fig. 2A. Marginally conflicting exclusion zone.

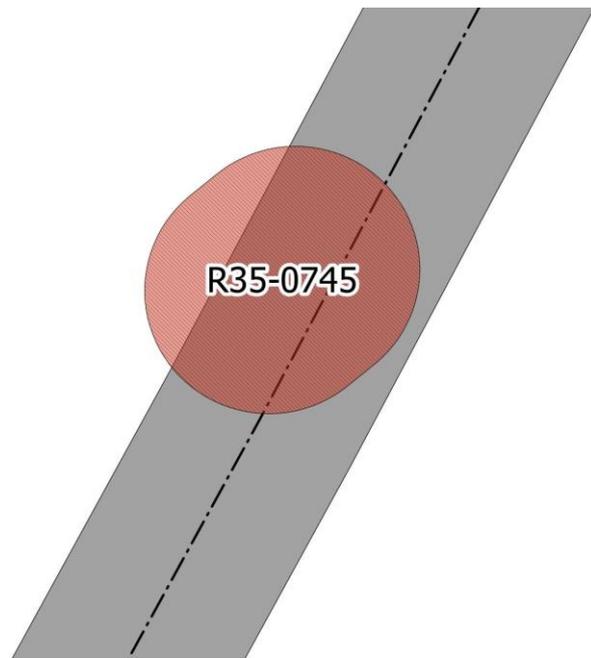


Fig. 2B. Conflicting exclusion zone.

Graphics: Frederik D. Hyttel © Vikingeskibsmuseet.

### ***Desk-based assessment***

#### **Reconnaissance survey assessment method**

All targets interpreted by the NS2 survey contractor (and selected survey datasets) from the surveys were delivered to VIR and the target catalogue screened for potential archaeological objects of interest. Selected targets were later identified in primary survey data for closer inspection.

Based on the assumption that only in the case of major rerouting would the wider reconnaissance survey corridor be affected, only the target catalogue produced by the survey contractor was screened and potential archaeological objects selected. Selected objects were assigned a standard exclusion zone defined as a circle centred on the target coordinates (single point) – usually 50 or 200 m radius was defined depending on the nature and size of the target.

Where possible the exclusion zone was adjusted based on available video footage (boulder field inspection), SSS mosaics or MBES mosaic data, or because of only negligible intersection. Finally a few particularly problematic objects were also screened in the original XTF side-scan sonar files with the aim of assigning a more informed exclusion zone based on the digitized extent of the object(s) as observed in the sonar files.

Objects also identified in the design route survey (see below) or outside the affected area were not assigned an exclusion zone.

### **Design Route survey assessment method**

All targets interpreted by the NS2 survey contractor and selected survey datasets were delivered to VIR and then screened. Potential archaeological sites of interest were selected from the supplied target catalogue and independently VIR completed a full review of the side-scan sonar project data.

Firstly, the target catalogue produced by the survey contractor was screened and potential archaeological objects selected.

All SSS lines were then screened anew and newly picked targets added to list. Preliminary circular exclusion zones were assigned (as above) and zones not affected by the planned pipelay or intervention work were removed from the dataset.

The remaining targets were re-inspected in SSS files and the visible object extent digitized as polygons. Suitable exclusion zones were assigned – usually a 10 m R buffer around the digitized perimeter. A 10 m radius reflects the accumulated navigation accuracy when first locating the object and later laying the pipeline and is considered by VIR to be the minimum safe distance if no other mitigation is instigated.

Once again zones outside affected area were removed from the dataset.

Where possible, remaining exclusion zones were adjusted or removed from the dataset based on visual inspection of available, georeferenced video footage (UXO and boulder field inspection).

### **Gradiometer (UXO) survey assessment method**

As part of the UXO survey, ROV visual inspection video of gradiometer and side-scan sonar targets was acquired. Where VIR target exclusion areas coincided with visually inspected targets/areas (boulder field), the corresponding video was delivered to VIR for review.

### **Results**

Appendix 1 includes all 260 reconnaissance and detailed survey targets selected for further assessment (based on SSS interpretation) by VIR.

Based on the review of UXO target and boulder field inspection video and spatial assessment of the basic design route lay-/intervention corridor, the items where confliction between the targets and route remained have been selected. The degree of conflict is classed as conflicting/marginally conflicting/conflicting with intervention works only – or the target is deemed identical to or part of another target/exclusion zone.

Appendix 2 includes those 26 reconnaissance and detailed survey targets assessed by VIR (post UXO survey) as targets conflicting with the lay corridor or an intervention works corridor of relevant type (i.e. where actual seabed intervention can occur). These targets were subsequently subjected to additional visual inspection.

## ***Visual inspection***

### **Methodology**

The desk-based assessment identified 26 targets which conflicted with the current (rev. 7) design of the pipe lay corridor or intervention works (see Appendix 2). These 26 targets were inspected using the ROV and survey systems aboard *Edda Fonn*, and videography as well as HD still photography (where relevant) was conducted.

Where objects of any cultural significance were discovered, a grid of 20 x 20 metres around the object was also searched to identify any possible associated remains. Where no object was found on the target position, the same method was employed. Where objects of no cultural significance were discovered immediately, no further search was conducted.

In the case of four targets, the photographic documentation was subsequently processed using Agisoft PhotoScan to create three-dimensional photogrammetric models.

### **Results**

As a result of the visual inspection campaign, nine of the identified targets are assumed to fall under the protection of Danish cultural heritage legislation (see below).

Exclusion zones have been defined around each target. Each exclusion zone encompasses the recognisable object(s) on the target location, and includes a buffer extending 10 metres beyond the perimeter of the object (group). The below description of conflict with pipeline lay corridor refers to these exclusion zones.

#### *R33-0017*

- Single wooden plank, 170 x 15 x 5 cm. No features or evidence of fasteners. Located in scour hole with both ends buried in the seabed. Cultural significance: low. Conflicts entirely with lay corridor.

#### *VIRSSS-0003*

- Single wooden plank, 20 x 200 cm, ending in a straight cut. Several holes for fasteners, spaced ca. 30 cm. Cultural significance: low. Conflicts entirely with lay corridor.

#### *R34-0213*

- Single wooden timber, 660 x 20 x 20 cm, with long scarf both ends. Several holes for fasteners, some still with treenails present, spaced 30-40 cm. Located in scour hole, but fully exposed. Cultural significance: low. Conflicts entirely with lay corridor.



**Fig. 3. Target R34-0213. Photogrammetric model: Matko Čvrljak © Vikingeskibsmuseet.**

*VIRSSS-0030*

- Single wooden post or beam, c. 150 x 15 x 15 cm, with square cross section. One end is heavily worn, while the other end tapers slightly to form a tap or peg. The tapering end features two elongated holes. Cultural significance: low. Conflicts marginally with lay corridor.

*R35-0230*

- Single wooden timber, c. 120 x 15 x 15 cm, with square cross section. Slight bend halfway along, perhaps indicating a framing element. Cultural significance: low. Conflicts marginally with lay corridor.

*R35-0745*

- Single wooden timber, c. 15-20 cm  $\varnothing$  and 290 cm long. One end is broken off, and the other features a hole. Possibly a spar related to wreck R35-0285. Cultural significance: medium. Conflicts entirely with lay corridor.



**Fig. 4. Target R35-0745. Photogrammetric model: Matko Čvrljak © Vikingeskibsmuseet.**

*R35-0827*

- Single wooden board, c. 370 x 15 x 5 cm. No features or evidence of fasteners. Cultural significance: low. No conflict with current lay corridor.

*R35-0841*

- Three stone slabs, c. 480 x 80 x 15 cm. Presumably lime stone, possibly cargo related to wreck R35-0285. Cultural significance: medium. Conflicts marginally with lay corridor.

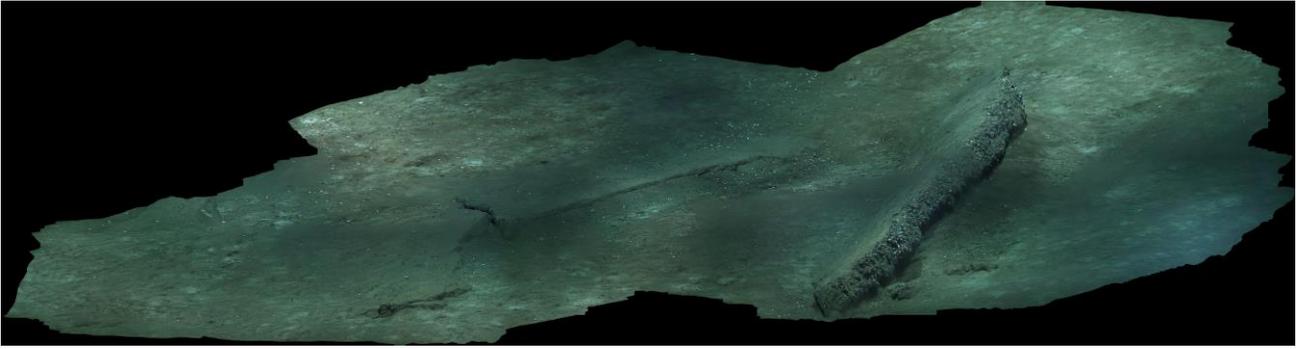


Fig. 5. Target R35-0841. Photogrammetric model: Matko Čvrljak © Vikingskibsmuseet.

#### *R36-0069*

- Wooden timber, round, ca. 20 cm  $\varnothing$  and 770 cm long. One end is flattened with a hole, and the other tapers to a point. Wooden board, ca. 15 x 600 cm. No features or evidence of fasteners. Presumably spar and planking related to wreck R35-0285. Cultural significance: medium. Conflict entirely with lay corridor.



Fig. 6. Target R36-0069. Photogrammetric model: Matko Čvrljak © Vikingskibsmuseet.

#### ***Further action***

In conclusion to the continuous dialogue between Nord Stream 2 AG, the Viking Ship Museum and the Danish Agency for Culture and Palaces (Slots- og Kulturstyrelsen), the latter has evaluated the present target assessments and documentation levels.

Based mainly on the detailed and comprehensive nature of the photogrammetric models, the Danish Agency for Culture and Palaces has decided not to recover the identified objects, or impose further mitigation measures concerning underwater cultural heritage (Torben Malm, 28.08.2017).

This assessment relates exclusively to route design rev. 07 (W-EN-OFP-POF-DWG-804-D72001EN-03), and any future re-routing or change of intervention type may necessitate renewed assessment.

## Appendix 1

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### All targets

All reconnaissance and detailed survey targets selected.

Positions in ETRS89, UTM zone 33.

EZ = exclusion zone. The format indicates whether the shape is circular (C) or custom (CU), the buffer radius (in metres) applied to either centre point or observed perimeter, and whether it is adjusted (A)

Block	ID	Easting	Northing	Interpretation (NS2)	Interpretation (VIR)	EZ	VIR initial assessment
<b>Reconnaissance Survey Targets</b>							
R33	S-R33-0017	535984.1	6144108.0	Debris	Debris	C50	N/A
R33	S-R33-0022	538191.2	6146034.0	Linear object	Linear object	C50	N/A
R33	S-R33-0023	538191.7	6146042.0	Debris	Debris	C50	N/A
R33	S-R33-0024	538060.6	6145794.0	Debris	Debris	C50	N/A
R33	S-R33-0025	538055.1	6145791.0	Debris	Debris	C50	N/A
R33	S-R33-0032	536194.3	6146064.0	Debris	Debris	C50	N/A
R33	S-R33-0037	547347.1	6153468.0	Boulder	Boulder	C50	N/A
R33	S-R33-0042	536329.7	6143790.0	Linear object	Linear object	C50	N/A
R33	S-R33-0044	534836.4	6142490.0	Linear object	Linear object	C50	N/A
R33	S-R33-0046	543522.5	6151672.0	Linear object	Linear object	C50	N/A

R33	S-R33-0048	542547.3	6150600.0	Linear object	Linear object	C50	N/A
R33	S-R33-0054	545476.8	6153745.0	Linear object	Linear object	C20	N/A
R33	S-R33-0055	544315.0	6153058.0	Linear object	Linear object	C50	N/A
R33	S-R33-0056	544315.8	6153063.0	Debris	Debris	C50	N/A
R33	S-R33-0058	540198.5	6148944.0	Other	Other; Area of high back scatter	C50	N/A
R33	S-R33-0064	533908.5	6142907.0	Linear object	Linear object; Probably associated with S-R33-0065 and magnetic anomaly 0011 - 9nT	C20A	N/A
R33	S-R33-0065	533849.8	6142807.0	Linear object	Linear object; Probably associated with S-R33-0064 and magnetic anomaly 0011 - 9 nT	C200	N/A
R33	S-R33-0114	545127.9	6153854.0	Linear object	Linear object	C50	N/A
R33	S-R33-0116	544330.8	6153284.0	Debris	Debris	C50	N/A
R33	S-R33-0120	540700.0	6149620.0	Debris	Debris; Magnetic anomaly 0014 – 4 nT	C50	N/A
R33	S-R33-0122	540088.1	6149154.0	Linear object	Linear object; Cable	C50	N/A
R33	S-R33-0151	542649.6	6151475.0	Linear object	Linear object; Possible cable	C50	N/A
R33	S-R33-0163	544043.8	6153300.0	Other	Other; Area of high back scatter	C50	N/A
R33	S-R33-0210	535593.1	6145204.0	Boulder	Boulder	C50	N/A
R33	S-R33-0230	540075.9	6149142.0	Debris	Debris	C50	N/A
R33	S-R33-0232	545672.9	6154165.0	Linear object	Linear object	C50	N/A
R33	S-R33-0290	534553.9	6144208.0	Linear object	Linear object	C50	N/A
R33	S-R33-0393	545300.0	6152595.0	Linear object	Linear object	C50	N/A
R33	S-R33-0394	545304.0	6152602.0	Linear object	Linear object	C50	N/A
R33	S-R33-0432	540191.8	6148945.0	Other	Other; Area of high back scatter	C50	N/A
R33	S-R33-0441	543543.2	6152850.0	Other	Other; Area of high back scatter	C50	N/A
R33	S-R33-0464	540726.0	6149450.0	Linear object	Linear object	C50	N/A
R33	S-R33-0476	545478.7	6154610.0	Linear object	Linear object	C50	N/A
R33	S-R33-0477	545603.6	6154748.0	Debris	Debris	C50	N/A
R33	S-R33-0486	544574.6	6154052.0	Linear object	Linear object	C50	N/A
R33	S-R33-0487	544589.6	6154061.0	Linear object	Linear object	C50	N/A
R34	S-R34-0005	527777.1	6131452.0	Linear Debris	Linear Debris; partially buried	C200	N/A
R34	S-R34-0017	524891.7	6118133.0	Boulder	Boulder; Associated with scar	C50	N/A
R34	S-R34-0085	527953.6	6130871.0	Linear Debris	Linear Debris	C50	N/A
R34	S-R34-0122	524321.1	6116892.0	Boulder	Boulder	C50	N/A
R34	S-R34-0152	532220.5	6140718.0	Debris	Debris; NMH	C50	N/A
R34	S-R34-0202	526111.7	6127050.0	Linear Debris	Linear Debris	C50	N/A

R34	S-R34-0206	524921.5	6120319.0	Mound (CIW)	Mound	C50A	N/A
R34	S-R34-0211	524513.6	6118569.0	Mound (CIW)	Mound	C40A	N/A
R34	S-R34-0224	523837.4	6116325.0	Boulder (MC)	Boulder	C40A	N/A
R34	S-R34-0363	530066.8	6138224.0	Debris	Debris	C50	N/A
R34	S-R34-0465	524501.2	6117007.0	Boulder	Boulder	C50	N/A
R34	S-R34-0711	529028.9	6137149.0	Boulder	Boulder	C50	N/A
R34	S-R34-0726	524495.0	6117697.0	Boulder	Boulder	C50	N/A
R34	S-R34-0823	526972.8	6127831.0	Debris	Debris	C50	N/A
R34	S-R34-0851	525957.0	6126831.0	Boulder	Boulder	C50	N/A
R34	S-R34-0933	527521.7	6135116.0	Boulder	Boulder	C50	N/A
R34	S-R34-0940	528332.8	6137269.0	Linear Debris	Linear Debris	C50	N/A
R34	S-R34-0947	527657.1	6135564.0	Debris	Debris	C50	N/A
R34	S-R34-1066	525103.1	6115854.0	Boulder	Boulder	C50	N/A
R34	S-R34-1091	530060.6	6139179.0	Linear Debris	Linear Debris; Magnetic contact 0079 - 9nT	C20	N/A
R34	S-R34-1127	530349.3	6139847.0	Wreck	Wreck; Possible trawled wreck	C200	N/A
R35	S-R35-0030	515876.4	6087223.7	Linear debris	Linear debris	C50	N/A
R35	S-R35-0122	523844.5	6114508.4	Boulder	Boulder	C50	N/A
R35	S-R35-0146	522998	6110142.9	Linear debris	Linear debris	C50	N/A
R35	S-R35-0184	516369.5	6087405.3	Linear debris	Linear debris	C50	N/A
R35	S-R35-0197	516519.7	6087911.8	Wreck	Wreck; Possible old sailing vessel with mast. Magnetometer anomaly: M-R36-002	C200	N/A
R35	S-R35-0212	517402.7	6091588.3	Linear debris	Linear debris	C50	N/A
R35	S-R35-0247	520623.3	6103433.1	Debris	Debris	C50	N/A
R35	S-R35-0248	520307.0	6102442.9	Linear debris	Linear debris	C50	N/A
R35	S-R35-0285	515740.2	6087410.0	Wreck	Wreck	CU200A	N/A
R35	S-R35-0286	515793.5	6087416.1	Boulder	Boulder	C50	N/A
R35	S-R35-0295	515774.7	6087376.9	Boulder	Boulder	C50	N/A
R35	S-R35-0354	515709.7	6087699.7	Linear debris	Linear debris; Video: fishing net	C200	N/A
R35	S-R35-0356	515711.0	6087658.4	Linear debris	Linear debris; Possible cable/wire. Video: fishing net	C200	N/A
R35	S-R35-0415	521232.7	6103531.4	Debris	Debris; Possible fishing net	C50	N/A
R35	S-R35-0417	522285.9	6107023.2	Linear debris	Linear debris	C50	N/A
R35	S-R35-0429	524408.8	6114726.5	Linear debris	Linear debris	C50	N/A
R35	S-R35-0518	516037.3	6088875.7	Linear debris (CIW)	Linear debris; Coiled wire	C20	N/A

R35	S-R35-0528	520523.6	6104288.4	Linear debris	Linear debris	C20	N/A
R35	S-R35-0531	523125.0	6113782.7	Mound	Mound	C50	N/A
R35	S-R35-0576	515855.0	6086598.9	Linear debris	Linear debris	C50	N/A
R35	S-R35-0577	516529.5	6087923.3	Linear debris	Linear debris; Debris associated with wreck	C50	N/A
R35	S-R35-0578	516534.6	6087928.5	Linear debris	Linear debris; Debris associated with wreck	C50	N/A
R35	S-R35-0603	518927.4	6094454.1	Boulder	Boulder	C50	N/A
R35	S-R35-0629	515176.7	6087168.6	Linear debris	Linear debris	C50	N/A
R35	S-R35-0630	515186.0	6087161.9	Linear debris	Linear debris	C50	N/A
R35	S-R35-0653	517711.9	6094979.7	Wreck	Wreck	CU200A	N/A
R35	S-R35-0656	515555.9	6087570.9	Linear debris	Linear debris	C20	N/A
R35	S-R35-0671	518951.0	6094480.1	Wreck	Wreck; Disintegrated, debris scattered Magnetometer anomaly: M-R36-013	C200	N/A
R35	S-R35-0673	518951.8	6094443.7	Debris	Debris	C50	N/A
R35	S-R35-0674	519041.5	6094466.7	Linear debris	Linear debris	C50	N/A
R35	S-R35-0675	519017.4	6094516.5	Linear debris	Linear debris	C50	N/A
R35	S-R35-0676	519006.7	6094504.3	Linear debris	Linear debris	C50	N/A
R35	S-R35-0678	523190.3	6109203.3	Linear debris	Linear debris	C50	N/A
R35	S-R35-0681	523793.4	6111799.6	Debris	Debris	C50	N/A
R35	S-R35-0682	523778.8	6111804.6	Debris	Debris	C50	N/A
R35	S-R35-0691	522895.6	6113288.7	Mound	Mound; Possible ships' ballast	C50	N/A
R35	S-R35-0701	523630.1	6115988.3	Boulder	Boulder	C50	N/A
R35	S-R35-0710	518830.2	6094377.4	Linear debris	Linear debris	C50	N/A
R35	S-R35-0714	522518.3	6107035.8	Linear debris	Linear debris	C50	N/A
R35	S-R35-0726	516640.0	6087452.1	Debris	Debris	C50	N/A
R35	S-R35-0800	514995.2	6086971.7	Others	Others; Derived from bathymetry	C200A	N/A
R36	S-R36-0131	504602.9	6080527.6	Boulder	Boulder	C50	N/A
R36	S-R36-0139	515122.6	6085497.9	Boulder	Boulder	C50	N/A
R36	S-R36-0274	488958.4	6075543.8	Debris	Debris; Possible fishing gear.	C200	N/A
R36	S-R36-0286	498288.7	6078316.8	Linear debris	Linear debris	C50	N/A
R36	S-R36-0350	513254.3	6083760.3	Linear debris	Linear debris	C50	N/A
R36	S-R36-0405	497865.1	6077195.3	Debris	Debris	C50	N/A
R36	S-R36-0491	513176.7	6084744.4	Others	Others; Derived from bathymetry.	C200A	N/A
R36	S-R36-0492	513201.1	6084794.5	Others	Others; Derived from bathymetry.	C200A	N/A
R36	S-R36-0497	500993.3	6079206.0	Others	Others; Derived from bathymetry.	C50	N/A

R36	S-R36-0509	508277.9	6082901.8	Linear debris	Linear debris	C50	N/A
R37	S-R37-0007	482055.1	6072759.4	Linear debris	Linear debris; Possible group of small targets.	C50	N/A
R37	S-R37-0009	485758.4	6074512.8	Linear debris	Linear debris; Partially sediment covered.	CU50A	N/A
R37	S-R37-0012	477520.2	6067434.1	Debris	Debris; Wreck debris.	C50	N/A
R37	S-R37-0013	477551.3	6067442.3	Debris	Debris; Possibly several pieces of debris, partially sediment covered.	C50	N/A
R37	S-R37-0014	477480.5	6067389.1	Linear debris	Linear debris; Linear debris associated with nearby wreck: S-R37-36.	C50	N/A
R37	S-R37-0015	477466.4	6067386.3	Linear debris	Linear debris; Linear debris associated with nearby wreck: S-R37-36.	C50	N/A
R37	S-R37-0027	485392.7	6074388.5	Debris	Debris; Linear debris associated with nearby anchor pull-out pit.	C50	N/A
R37	S-R37-0036	477464.6	6067403.7	Wreck	Wreck; Possibly wreck. Magnetic anomaly: M-R37-034.	C200	N/A
R37	S-R37-0047	485856.2	6075306.4	Boulder	Boulder; double echo	C50	N/A
R37	S-R37-0052	477369.2	6067361.1	Linear debris	Linear debris	C50	N/A
R37	S-R37-0053	478052.1	6068221.9	Linear debris	Linear debris	C50	N/A
R37	S-R37-0060	481106.7	6072618.2	Linear debris	Linear debris	C50	N/A
R37	S-R37-0061	477313.0	6067396.1	Debris	Debris associated with nearby wreck: S-R37-36.	C50	N/A
R37	S-R37-0074	476903.9	6067071.0	Linear debris	Linear debris; Possible wire or cable. Magnetic anomaly: M-R37-035.	C200	N/A
R37	B-R37-0089	480723.8	6071734.5	Others	Others; Derived from bathymetry.	C50	N/A
R38	S-BR38-0026	468630.4	6056699.1	Linear Object	Linear Object; Possible Man Made Object	C200	N/A
R38	S-BR38-0044	467346.7	6053789.4	Linear Object	Linear Object	C50	N/A
R38	S-BR38-0047	468084.1	6054647.0	Boulder	Boulder	C50	N/A
R38	S-BR38-0060	469152.7	6055264.8	Linear Object	Linear Object	C50	N/A
R38	S-BR38-0063	470144.1	6056507.9	Debris	Debris; Possible Man Made Object	C50	N/A
R38	S-BR38-0073	471010.6	6057783.2	Linear Object	Linear Object;	C20	N/A
R38	S-BR38-0208	469019.9	6056232.1	Debris	Debris; Possible Man Made Object	C50	N/A
R38	S-BR38-0287	470601.3	6058843.6	Linear Object	Linear Object	C50	N/A
R38	S-BR38-0332	469078.0	6056713.1	Other	Other; Possibly a geological feature	C50	N/A
R38	S-BR38-0351	468816.3	6054783.5	Debris	Debris	C20	N/A
R38	S-BR38-0360	469999.4	6056550.2	Linear Object	Linear Object	C20	N/A
R38	S-BR38-0387	469604.6	6055770.7	Linear Object	Linear Object; Possible Man Made Object	C20	N/A

Detailed Design Survey Targets							
R33	R-R33-0014	538747.9	6147534.8	Ground mine	UXO analyst's interpretation: mine	C50	Irrelevant
R33	R-R33-0017	537083.4	6145849.6	Plank	Plank; partly buried; no visible constructional details. Possibly protected	CU10	Insignificant
R33	SD-R33-0060	541909.3	6150524.3	Boulder	-	C50	N/A
R33	SD-R33-0065	540723.5	6149448.0	Debris	Object not found or modern: Section of cable / wire	C50	N/A
R33	SD-R33-0067	540186.3	6148946.5	Boulder	-	C50	N/A
R33	R-R33-0068	540096.0	6148822.2	Possible angled beam	Ship timber; possibly a small keelson; ca. 1,9 m section with two internal reinforcing (?) pieces attached	CU10	Medium
R33	SD-R33-0110	533859.2	6142831.5	Debris	Object not found or modern: Section of cable / wire	C50	N/A
R33	SD-R33-0154	540517.4	6149073.7	Other	-	C50	N/A
R33	SD-R33-0156	539181.1	6147856.8	Debris	-	CU10	N/A
R33	SD-R33-0170	541079.3	6149669.1	Linear object	-	C50	N/A
R33	R-R33-0173	540898.1	6149605.4	Possible munitions related debris	Object not found or modern: Metal pipe. Possible munitions related debris	C50	Irrelevant
R34	R-R34-0213	529280.2	6138294.4	Long piece of wood. Probable part from a ship.	Plank or wale, several metres long with scarfs both ends (110 and 67 cm long respectively). Also a white object in sediment, possibly porcelain. Possibly protected.	CU10	Low
R34	SD-R34-0218	530057.5	6139183.1	Possible debris poor shadow	Object not found or modern: Cable or wire slightly buried	C50	N/A
R34	SD-R34-0247	531895.4	6140801.4	Possibly floating debris- check when MBES available	-	C50	N/A
R34	SD-R34-0248	527511.7	6131776.8	Strangely angled object stuck in the seabed at one end confirmed on MBES (MC)	-	CU10	N/A
R34	SD-R34-0251	525787.8	6124200.4	Linear object	Object not found or modern: Large corroded metal object. Partially buried	C50	N/A
R34	SD-R34-0255	527115.7	6130209.6	Debris (MC)	-	CU10	N/A
R34	SD-R34-0282	532396.5	6141366.5	Debris	-	C50	N/A
R34	SD-R34-0299	528116.4	6134592.3	Boulder (MC)	-	CU10	N/A

R34	SD-R34-0303	528003.1	6134233.6	Debris (MC)	-	CU10	N/A
R34	SD-R34-0304	527999.9	6134230.6	Debris	-	C50	N/A
R34	SD-R34-0623	531388.8	6140491.3	Linear object	-	C50	N/A
R34	SD-R34-0736	529712.2	6138871.7	Debris	-	C50	N/A
R34	SD-R34-0741	532181.7	6141228.9	Linear object	-	C50	N/A
R35	SD-R35-0032	515095.5	6086903.9	Debris (CIW)	-	CU10	N/A
R35	SD-R35-0088	516072.3	6088864.7	Cable/Rope/Wire debris	-	C200	N/A
R35	R-R35-0098	516013.8	6088697.2	Section of channel. Non-Ferrous	Object not found or modern: Section of channel. Non-ferrous	C50	N/A
R35	SD-R35-0154	518117.7	6095901.8	Debris (MC)	-	CU10	N/A
R35	SD-R35-0205	518782.6	6098286.1	Linear object (MC)	-	CU10	N/A
R35	SD-R35-0207	519599.4	6101099.3	Possible debris (MC)	-	CU10	N/A
R35	SD-R35-0216	520785.9	6105319.9	Partially buried linear debris	-	CU10	N/A
R35	SD-R35-0217	520949.7	6105816.7	Associated with possible debris (MC)	-	CU10	N/A
R35	SD-R35-0218	520948.9	6105816.9	Possible debris	-	CU10	N/A
R35	SD-R35-0221	521313.2	6107198.1	Linear object	-	CU10	N/A
R35	R-R35-5048 / SD-R35-0222	521422.3	6107648.8	Coiled cable or wire	Object not found or modern: Coiled cable or wire	C50	N/A
R35	SD-R35-0230	522141.7	6110178.6	Possible debris	-	CU10	N/A
R35	SD-R35-0736	515459.5	6087498.9	Debris	-	C50	N/A
R35	R-R35-0745	515393.8	6087282.8	Wooden post	Rig element, 2,55 m long, circular cross-section and a square hole and possibly a longitudinal slot in one end. The other end broken. Possible topmast/-gallant mast fragment (lower end). Also a bottle that looks 'old'. Presumably protected.	CU10	Medium
R35	R-R35-0827	516407.7	6089816.5	Plank	Plank, >3 m long, no visible constructional details. Possibly protected.	CU10	Insignificant

R35	R-R35-0841	515551.4	6087565.7	2 x large flat angular boulders.	Stone slabs, probably lime stone, at least three pieces, one with a possibly shaped straight edge. EZ adjusted (favourably) based on BF video.	CU10	High if more exists under sediment; check SBP from area. However, visible objects themselves are not fragile
R35	SD-R35-0879	516071.1	6088862.5	Piece of cable approx 120m long	-	C200	N/A
R36	SD-R36-0761	505404.9	6081611.6	Linear Object	Section of cable / wire	C10	N/A
R36	R-R36-0069	514495.0	6086165.3	Wooden Plank	Two planks (one recorded as 'metallic frame' R-R36-10004), possibly protected.	CU10	Low
R36	SD-R36-0109	508279.7	6082903.6	Linear debris (CIW)	-	CU10	N/A
R36	R-R36-0113	507371.5	6082475.4	Possible linear debris	Object not found or modern: Seabed depressions? Track plot and interpretation needed. Coverage insufficient.	CU10	N/A
R36	SD-R36-0227	491087.5	6075425.3	Linear debris (CIW)	-	CU10	N/A
R36	R-R36-7002 / SD-R36-0761	505407.8	6081610.7	Steel Wire	Object not found or modern: Section of cable/wire.	C50	N/A
R36	SD-R36-0798	514400.1	6086028.0	Linear debris (CIW)	-	CU10	N/A
R37	SD-R37-0151	486517.7	6074354.2	Boulder	-	C50	N/A
R37	SD-R37-0162	486152.1	6074372.7	Linear debris	-	CU10	N/A
R37	SD-R37-0163	486135.1	6074372.2	Linear debris	-	CU10	N/A
R37	SD-R37-0128	479064.9	6068386.6	Linear debris	-	C50	N/A
R37	SD-R37-0126	478646.8	6067785.5	Boulder	-	CU10	N/A
R37	SD-R37-0112	476720.1	6064899.6	Possible linear debris (MC)	-	CU10	N/A
R37	SD-R37-0109	475718.4	6063617.1	Boulder	-	C50	N/A
R37	SD-R38-0022	470146.5	6056511.1	Debris (MC)	-	CU10	N/A
R38	SD-R38-0023	469152.9	6055266.1	Debris (MC)	-	CU10	N/A
R38	SD-R38-0001	470484.2	6057101.8	Debris	-	C50	N/A
R38	SD-R38-0005	471005.5	6057777.5	Debris	-	C50	N/A

VIR Targets							
R33	R-R33-5002-A / VIRSSS-0002	540199.2	6148944.4	Section of debris (MC)	Large area of modern (aircraft?) debris. Some appears as a type of framework; most notably a presumed rudder or tail plane; some is (hydraulic?) piping. Also what appears to be a halved hollow cylinder with internal sections.	CU60A	High. Too young for blanket protection, but if it is an aircraft wreck it is most likely from WW2 and hence eligible for protection (and potentially a war grave)
R33	R-R33-5002-B / VIRSSS-0002	540196.4	6148939.0	Area of assorted partially buried debris	-	CU60A	N/A
R33	R-R33-5002-C / VIRSSS-0002	540196.5	6148944.5	Partially buried rectangular debris	-	CU60A	N/A
R33	R-R33-5002-D / VIRSSS-0002	540195.4	6148943.0	Area of assorted partially buried debris	-	CU60A	N/A
R33	R-R33-5002-E / VIRSSS-0002	540197.1	6148946.7	2 x rectangular debris	-	CU60A	N/A
R33	R-R33-5002-F / VIRSSS-0002	540192.3	6148940.0	Flat section of debris protruding from seabed	-	CU60A	N/A
R33	R-R33-5002-G / VIRSSS-0002	540191.7	6148938.5	Partially buried debris	-	CU60A	N/A
R33	R-R33-5002-H / VIRSSS-0002	540191.1	6148944.3	Flat section of debris	-	CU60A	N/A
R33	R-R33-5002-I / VIRSSS-0002	540185.8	6148946.8	Partially buried debris	-	CU60A	N/A
R33	TO-R33-6000 / VIRSSS-0002	540203.4	6148906.0	Degraded debris item	-	CU60A	N/A
R33	R-R33-5013 / VIRSSS-0002	540211.5	6148941.2	No target found	-	CU60A	N/A
R33	R-R33-5012-A / VIRSSS-0002	540192.8	6148927.1	Partially buried debris	-	CU60A	N/A
R33	R-R33-5012-B	540193.2	6148930.5	Flat debris	-	CU60A	N/A

	/ VIRSSS-0002			protruding from seabed			
R33	R-R33-5012-C / VIRSSS-0002	540198.8	6148932.1	Partially buried debris	-	CU60A	N/A
R33	R-R33-0141 / VIRSSS-0002	540208.7	6148937.6	Rectangular section of debris	-	CU60A	N/A
R33	VIRSSS-0003	541925.2	6150530.5		Linear	CU10	N/A
R33	VIRSSS-0005	545633.3	6153823.1		Mound	C200	N/A
R33	VIRSSS-0006	538813.0	6147419.6		Linear	C50	N/A
R33	VIRSSS-0007	533947.7	6142827.4		Debris	CU10	N/A
R33	TO-R33-6001 / VIRSSS-0013	533857.8	6142818.9	Section of cable/wire and bottle	Object not found or modern: Section of cable/wire and bottle	C50	N/A
R33	VIRSSS-0023	526995.2	6129113.6	-	Unknown	C50	N/A
R34	VIRSSS-0024	526954.0	6129017.1	-	Unknown	C50	N/A
R34	R-R34-10023 / VIRSSS-0029	524520.2	6118512.1	Group of boulders in close proximity	Boulders; remove from list	C50	N/A
R34	R-R34-10006 / VIRSSS-0030	524634.9	6118837.3	Linear	Beam, possibly protected. EZ adjusted (favourably) based on BF video.	CU10	Low
R34	VIRSSS-0032	526072.5	6125588.0	-	Unknown	C50	N/A
R34	VIRSSS-0033	526069.3	6125493.9	-	Linear	C50	N/A
R34	VIRSSS-0034	526724.3	6128392.9	-	Unknown	C50	N/A
R34	VIRSSS-0035	527596.6	6132455.5	- (MC)	Linear	CU10	N/A
R34	VIRSSS-0038	528346.0	6135580.0	-	Unknown	C200	N/A
R34	VIRSSS-0039	525841.5	6124426.1	-	Linear	CU10	N/A
R35	VIRSSS-0040	523408.5	6114435.8	-	-	C50	N/A
R35	VIRSSS-0041	523077.4	6113644.5	- (CIW)	Boulder field video: Inconclusive, but BF video coverage clear. Excl.zone adjusted (favourably) based on BF video	CU60A	N/A
R35	VIRSSS-0042	523125.5	6113776.7	- (CIW)	Mound: Boulder field video: Inconclusive, but BF video coverage clear. Excl.zone adjusted (favourably) based on BF video	CU60A	N/A
R35	VIRSSS-0043	520931.6	6106140.9	-	Unknown	C50	N/A
R35	R-R35-5014 /	520480.1	6104282.1	-	Object not found or modern: Section of cable/wire	C50	N/A

	VIRSSS-0045						
R35	R-R35-5044 / VIRSSS-0045	520465.3	6104279.4	-	Object not found or modern: Section of cable/wire	C50	N/A
R35	VIRSSS-0046	520460.5	6104516.4	-	Linear	C50	N/A
R35	VIRSSS-0047	520460.5	6104516.4	-	Linear	C50	N/A
R35	VIRSSS-0048	519494.0	6101131.2	-	Linear angled	C50	N/A
R35	R-R35-5130 / VIRSSS-0049	520525.2	6104291.8	Linear angled	Boulder field video: Object found: irrelevant (Net)	C50	None
R35	VIRSSS-0050	520526.7	6104289.2	-	Object not found or modern: Section of cable/wire	C50	N/A
R35	VIRSSS-0053	521905.6	6108889.6	- (CIW)	Unknown	CU10	N/A
R35	VIRSSS-0054	519206.1	6099936.8	-	Debris field (ass. W. 0055)	CU30A	N/A
R35	VIRSSS-0055	519213.0	6099952.9	-	Debris field (ass. W. 0054)	CU30A	N/A
R35	VIRSSS-0056	519279.9	6100199.0	- (CIW)	Linear angled	CU10	N/A
R35	VIRSSS-0057	520060.6	6102955.2	-	debris; Debris field (poss. more in vicinity)	CU60A	N/A
R35	VIRSSS-0058	520875.8	6105784.0	-	unknown; Poss. wreck (centre of area min. 25 x 15 m)	CU100A	N/A
R35	R-R35-0515 / VIRSSS-0059	523766.7	6115590.0	-	Linear: Object not found or modern: Sub angular boulder	C50	N/A
R35	VIRSSS-0062	523764.6	6115588.2	- (CIW)	Linear	CU10	N/A
R35	VIRSSS-0063	516176.0	6088866.2	-	Boulder field video: object not found within BF video coverage. Pres. soft/unstable object	C50	N/A
R36	VIRSSS-0064	497942.6	6078353.6	- (CIW)	Linear	CU10	N/A
R36	VIRSSS-0065	514311.8	6086103.2	-	Linear	C50	N/A
R36	VIRSSS-0066	512530.9	6084733.9	- (CIW)	Linear angled; Boulder field video: No video coverage of this target in BF video	CU10	N/A
R36	VIRSSS-0067	512116.9	6084492.9	-	Curved/angled line continuing as singular objects; Boulder field video: Inconclusive, but BF video coverage clear	CU10	N/A
R36	VIRSSS-0068	513576.7	6085309.7	-	Singular objects nearby; Boulder field video: Inconclusive, but BF video coverage clear	C50	N/A
R37	R-R37-7010 / VIRSSS-0069	481326.2	6071710.4	Debris	Also an object further away; included in digital polygon feature; Object not found or modern: Unknown object made of seemingly interconnected wires/cables. Presumably modern. Track plot and interpretation needed. Coverage insufficient	CU30A	N/A
R37	VIRSSS-0075	481323.7	6071701.4	-	Unknown	C50	N/A

R37	VIRSSS-0076	486491.5	6074343.6	- (MC)	Unknown	CU10	N/A
R37	VIRSSS-0077	473627.2	6060956.1	-	Unknown	C50	N/A
R37	VIRSSS-0078	481309.0	6071578.7	-	Linear	C50	N/A
R38	VIRSSS-0079	470918.9	6057721.2	-	Linear	C50	N/A
R38	VIRSSS-0080	469598.9	6055770.1	-	Linear	C50	N/A
R38	VIRSSS-0081	469477.8	6055665.1	-	Linear	C50	N/A
R38	VIRSSS-0082	470341.5	6056706.5	-	Unknown	C50	N/A

## Appendix 2

VIR 2740

### Conflicting targets

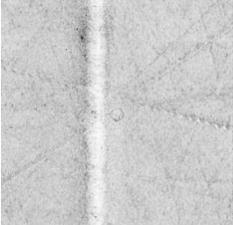
Reconnaissance and detailed survey targets intersecting with the route and/or intervention works corridor.

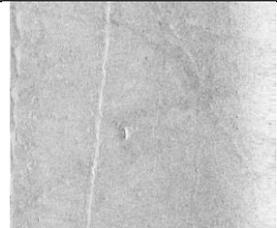
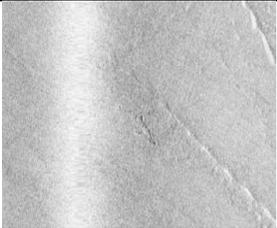
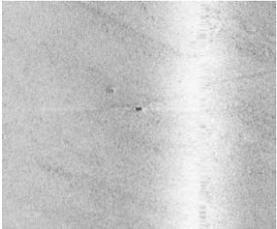
Positions in ETRS89, UTM zone 33.

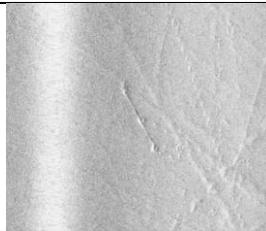
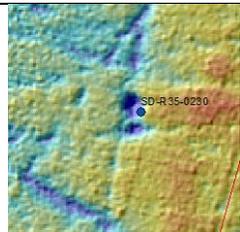
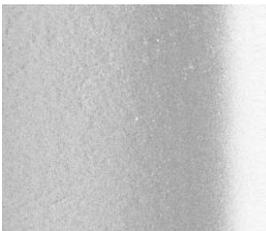
EZ = exclusion zone. The format indicates whether the shape is circular (C) or custom (CU), the buffer radius applied to either centre point or observed perimeter, and whether it is adjusted (A)

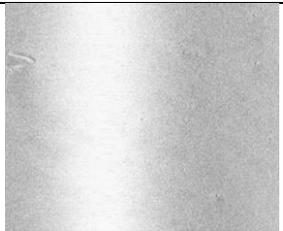
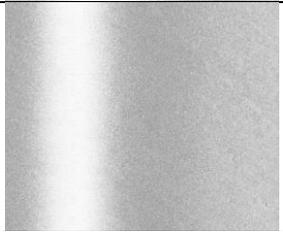
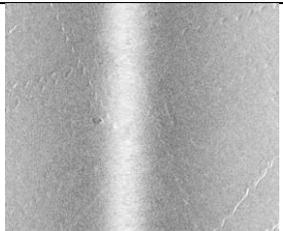
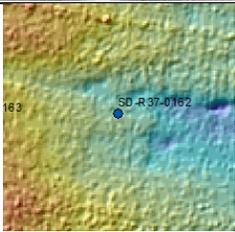
Significance describes the assessed level of cultural significance, from 0 to 2:

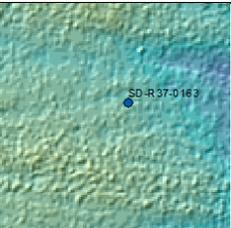
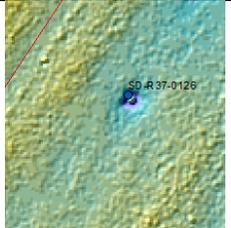
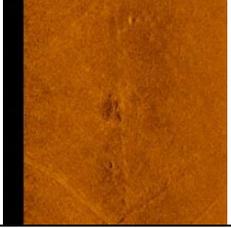
- 0 indicates geological features, modern objects or nothing found.
- 1 indicates man-made objects, presumed covered by Danish heritage legislation, but of limited extent and with no further context.
- 2 indicates man-made objects, presumed covered by Danish heritage legislation, and with a possible connection to a nearby wreck.

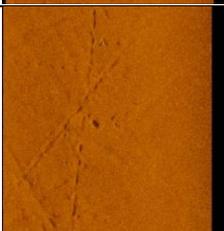
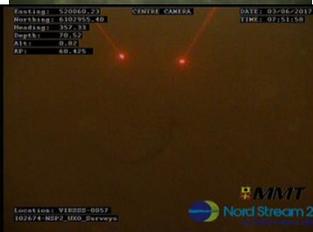
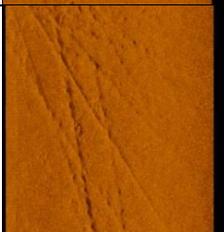
ID	Easting	Northing	Interpretation (NSP)	Interpretation (VIR)	EZ	Visual inspection results	Significance	ROV imagery	SSS / MBES imagery
S-R33-0064 / SD-R33-0097	533908.5	6142907.0	Linear object	Linear object, probably associated with S-R33-0065 and magnetic anomaly 0011 - 9nT.	C20	Metal wire, 5 cm Ø and several metres long.	0		

S-R37-0007	482055.1	6072759.4	Linear debris	Linear debris, possible group of small targets.	C50	Nothing found on 20 x 20 m search grid.	0	N/A	
S-R37-0009	485758.4	6074512.8	Linear debris	Linear debris, partially sediment covered.	CU50A	Nothing found on 20 x 20 m search grid.	0	N/A	
R-R33-0017	537083.4	6145849.6	Plank	Plank, partly buried with no visible constructional details. Possibly protected.	CU10A	Single wooden plank, 170 x 15 x 5 cm. No features or evidence fasteners. Located in scour hole with both ends buried in the seabed.	1		
SD-R33-0156	539181.1	6147856.8	Debris	Debris, piece of cable.	CU10A	Fishing gear caught on boulder.	0		
R-R34-0213	529280.2	6138294.4	Long piece of wood. Probable part from a ship.	Plank or wale, several metres long with scarfs both ends (110 and 67 cm long respectively). Also a white object in sediment, possibly porcelain. Possibly protected.	CU10A	Single wooden timber, 660 x 20 x 20 cm, with long scarf both ends. Several holes for fasteners, some treenails still present, spaced 30-40 cm. Located in scour hole, but fully exposed.	1		

SD-R35-0216	520785.9	6105319.9	Partially buried linear debris.	Linear object, partially buried linear debris.	CU10A	Two pieces of pipe, ca. 12 cm Ø, along with a length of thin cordage or wire.	0		
SD-R35-0221	521313.2	6107198.1	Linear	-	CU10A	Single pipe, ca. 12 cm Ø, 130 cm long. Thin stock, presumably aluminium alloy. Ca. 20 mm Ø holes, three in a row along the length of the pipe, and one slightly offset, all spaced 12-15 cm, starting the same distance from one end.	0		
SD-R35-0230	522141.7	6110178.6	Possible debris	Linear object, possible debris.	CU10A	Single wooden timber, ca. 120 x 15 x 15 cm, with square cross section. Slight bend halfway along, perhaps indicating a framing element.	1		
R-R35-0745	515393.8	6087282.8	Wooden post	Rig element, 2,55 m long, circular cross-section and a square hole and possibly a longitudinal slot in one end. The other end broken. Possible topmast/-gallant mast fragment (lower end). Also a bottle that looks 'old'. Presumably protected.	CU10A	Single wooden timber, ca. 15-20 cm Ø and 290 cm long. One end is broken off, and the other features a hole. Possibly a spar related to wreck R35-0285.	2		

R-R35-0827	516407.7	6089816.5	Plank	Plank, >3 m long, no visible constructional details. Possibly protected.	CU10A	Single wooden board, ca. 370 x 15 x 5 cm. No features or evidence of fasteners.	1		
R-R35-0841	515551.4	6087565.7	2 x large flat angular boulders.	Stone slabs, probably lime stone, at least three pieces, one with a possibly shaped straight edge. EZ adjusted (favourably) based on BF video.	CU10A	Three stone slabs, ca. 480 x 80 x 15 cm. Presumably lime stone, possibly cargo related to wreck R35-0285.	2		
R-R36-0069	514495.0	6086165.3	Wooden Plank	Two planks (one recorded as 'metallic frame' R-R36-10004), possibly protected.	CU10A	Wooden timber, round, ca. 20 cm Ø and 770 cm long. One end is flattened with a hole, and the other tapers to a point. Wooden board, ca. 15 x 600 cm. No features or evidence of fasteners. Presumably spar and planking related to wreck R35-0285.	2		N/A
R-R36-0113	507371.5	6082475.4	Possible linear debris (Object not found)	Object not found or modern: Seabed depressions? Track plot and interpretation needed. Coverage insufficient.	CU10A	Nothing found on 20 x 20 m search grid.	0	N/A	
SD-R37-0162	486152.1	6074372.7	Linear debris	Linear object; Linear debris	CU10	Nothing found on 20 x 40 m search grid (including R37-0163).	0	N/A	

SD-R37-0163	486135.1	6074372.2	Linear debris	Linear object; Linear debris	CU10	Nothing found on 20 x 40 m search grid (including R37-0162).	0	N/A	
SD-R37-0126	478646.8	6067785.5	Boulder	Boulder	CU10	Single large boulder.	0		
VIRSSS-0003	541925.2	6150530.5	Linear	Linear	CU10A	Single wooden plank, 20 x 200 cm, ending in a straight cut. Several holes for fasteners, spaced ca. 30 cm.	1		
VIRSSS-0007	533947.7	6142827.4	Debris	Debris	CU10	Nothing found on 20 x 20 m search grid.	0	N/A	
R-R34-10006 / VIRSSS-0030	524634.9	6118837.3	Unidentified beam shaped debris	Beam, possibly protected. EZ adjusted (favourably) based on BF video.	CU10A	Single wooden post or beam, ca. 150 x 15 x 15 cm, with square cross section. One end is worn, while the other end tapers slightly to form a tap or peg. The tapering end features two elongated holes.	1		N/A

VIRSSS-0039	525841.5	6124426.1	Linear	Linear	CU10	Nothing found on 20 x 20 m search grid.	0	N/A	
VIRSSS-0054	518443.5	6097244.6	Debris	Debris; Debris field (associated with 0055)	CU30	Nothing found on 20 x 20 m search grid.	0	N/A	
VIRSSS-0055	519206.1	6099936.8	Debris	Debris; Debris field (associated with 0054)	CU30	Single cylinder, ca. 4 cm Ø and 130 cm long, apparently split halfway. Presumably wire or cable.	0		
VIRSSS-0057	519279.9	6100199.0	Debris	Debris; Debris field (possibly more in vicinity)	CU60	Single length of thin cordage or wire.	0		
VIRSSS-0058	520060.6	6102955.2	-	Unknown; Possible wreck (centre of area min. 25 x 15 m).	CU100	Numerous holes or animal burrows.	0		

R-R37-7010 / VIRSSS-0069	481326.2	6071710.4	Large loop of cable/wire	Debris, and also an object further away included in digitised polygon feature. Object of seemingly interconnected wires/cables. Presumably modern.	CU30	Wire, 3-4 cm Ø, partially buried.	0		N/A
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