



# Norfolk Vanguard Offshore Wind Farm

# Outline Written Scheme of Investigation (Offshore)

Applicant: Norfolk Vanguard Limited Document Reference: 8.6

APFP Regulation: 5(2)(q)

Date: June 2018
Revision: Version 1

Author: Royal HaskoningDHV

Photo: Kentish Flats Offshore Wind Farm





Document Reference: 8.6

## June 2018

For and on behalf of Norfolk Vanguard Ltd
Approved by: Ruari Lean, Rebecca Sherwood
Signed: -
Date: 8 <sup>th</sup> June 2018

For and on behalf of Royal HaskoningDHV

Drafted by: Vic Cooper

Approved by: Alistair Davison

Signed: pp <

Date: 29<sup>th</sup> May 2018





Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
23/03/18	01	First draft for NV Ltd review	VC	GK	PP
19/04/18	02	Second draft following NV Ltd review	VC	GK	PP
29/05/18	03	Third draft following NV Ltd review	vc	GK	AD
05/06/18	01F	Final draft following NV Ltd review	VC	GK	AD





# **Table of Contents**

1.1	Introduction	1
1.2	Project Background	3
1.3	Guidance and best practice	3
1.4	Approach	4
1.5	Archaeological and Historical Background	4
1.6	Impact Assessment Summary	13
1.7	Committed Mitigation Measures	17
1.8	Roles, Responsibilities and Communication	18
1.9	Written Scheme of Investigation	19
1.10	Archaeological Recording Protocol	30
1.11	Monitoring	32
1.12	References	33
Appendix 1: 0	Sazetteer of Palaeolandscape Features	
• •	Gazetteer of Seabed Features	65
• •	Gazetteer of Intertidal Features	236





### **Tables**

Table 1 Shallow geological units identified within the study areas by Wessex Archaeology	
(Appendix 17.4 Table 2)	6
Table 2 Wessex Archaeology's Criteria discriminating relevance of seabed features	7
Table 3 Features of archaeological potential within the study area	8
Table 4 Summary of A1 anomalies within the study area	8
Table 5 Types of A2 features within the study area	11
Table 6 Summary of Potential Impacts Identified for Offshore and Intertidal Archaeology	14
Table 7 Recommended AEZs and avoidance for A1 anomalies	24





### **Glossary**

AFZ Archaeological Exclusion Zones  AHOB Ancient Human Occupation of Britain  DCO Development Consent Order  DEFRA Department for Environment, Food and Rural Affairs  DML Deemed Marine Licence  EMU EMU Limited (geophysical survey contractor)  EPP Evidence Plan Process  ES Environmental Statement  ETG Expert Topic Group  Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record  NPPF National Planning Policy Framework	
DCO Development Consent Order  DEFRA Department for Environment, Food and Rural Affairs  DML Deemed Marine Licence  EMU EMU Limited (geophysical survey contractor)  EPP Evidence Plan Process  ES Environmental Statement  ETG Expert Topic Group  Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
DEFRA  Department for Environment, Food and Rural Affairs  DML  Deemed Marine Licence  EMU  EMU Limited (geophysical survey contractor)  EPP  Evidence Plan Process  ES  Environmental Statement  ETG  Expert Topic Group  Fugro  Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD  Horizontal Directional Drilling  HSC  Historic Seascape Characterisation  MHWS  Mean High Water Springs  MLWS  Mean Low Water Springs  MMO  Marine Management Organisation  NHER  Norfolk Historic Environment Record	
DML Deemed Marine Licence  EMU EMU Limited (geophysical survey contractor)  EPP Evidence Plan Process  ES Environmental Statement  ETG Expert Topic Group  Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
EMU EMU Limited (geophysical survey contractor)  EPP Evidence Plan Process  ES Environmental Statement  ETG Expert Topic Group  Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
EPP Evidence Plan Process  ES Environmental Statement  ETG Expert Topic Group  Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
ES Environmental Statement  ETG Expert Topic Group  Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
ETG Expert Topic Group Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor) HDD Horizontal Directional Drilling HSC Historic Seascape Characterisation MHWS Mean High Water Springs MLWS Mean Low Water Springs MMO Marine Management Organisation NHER Norfolk Historic Environment Record	
Fugro Fugro Survey B. V. (geophysical and geotechnical survey contractor)  HDD Horizontal Directional Drilling  HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
HDD Horizontal Directional Drilling HSC Historic Seascape Characterisation MHWS Mean High Water Springs MLWS Mean Low Water Springs MMO Marine Management Organisation NHER Norfolk Historic Environment Record	
HSC Historic Seascape Characterisation  MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
MHWS Mean High Water Springs  MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
MLWS Mean Low Water Springs  MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
MMO Marine Management Organisation  NHER Norfolk Historic Environment Record	
NHER Norfolk Historic Environment Record	
NDDE National Planning Policy Framework	
National Flaming Folicy Hamework	
NPS National Policy Statement	
NRHE National Record of the Historic Environment	
NSIPs Nationally Significant Infrastructure Project	
nT nanoTesla	
OWF Offshore Wind Farm	
PAB Pathways to Ancient Britain	
PEIR Preliminary Environmental Information Report	
ROV Remote Operated Vehicle	
UKHO United Kingdom Hydrographic Office	
WSI Written Scheme of Investigation	

# Terminology

Array cables	Cables which link the wind turbine generators and the offshore substation platform.
Interconnector cables	Buried offshore cables which link the offshore electrical platforms.
Landfall	Where the offshore cables come ashore at Happisburgh South.
Offshore accommodation platform	A fixed structure (if required) providing accommodation for offshore personnel.  An accommodation vessel may be used instead.
Offshore cable corridor	The corridor of seabed from the Norfolk Vanguard OWF sites to the landfall site within which the offshore export cables would be located.
Offshore electrical platform	A fixed structure located within the wind farm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which bring electricity from the offshore substation platform to the landfall.





Offshore project area	The overall area of Norfolk Vanguard East, Norfolk Vanguard West and the offshore cable corridor.
Safety zones	An area around a vessel which should be avoided during offshore construction.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations as a result of the flow of water.
The Applicant	Norfolk Vanguard Limited.
The OWF sites	The two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West.
The project	Norfolk Vanguard Offshore Wind Farm, including the onshore and offshore infrastructure.





This page is intentionally blank.





### 1.1 Introduction

- 1. This outline Written Scheme of Investigation (WSI) (offshore) (hereafter the "Offshore WSI") has been produced to set out the proposed approach to archaeological mitigation and investigations to be undertaken in association with the offshore and intertidal project areas (below Mean High Water Springs (MHWS)) of the Norfolk Vanguard offshore wind farm (hereafter 'the project'). Onshore archaeology and cultural heritage are not considered in this document (see Onshore WSI document reference 8.5).
- 2. An updated, final Offshore WSI will be developed in consultation with Historic England, post-consent. This final Offshore WSI will be reviewed and updated as necessary prior to construction based on the final design of the project.
- 3. The requirement for this is set out in the draft Deemed Marine Licence, under DCO Schedules 9 and 10 condition 14(1)(h) and Schedules 11 and 12 condition 9(1)(h), which states:
  - A written scheme of archaeological investigation in relation to the offshore Order limits seaward of mean low water, which must be submitted at least four months prior to commencement of the licensed activities and must accord with the outline written scheme of investigation (offshore) and industry good practice, in consultation with the statutory historic body to include—
  - (i) details of responsibilities of the undertaker, archaeological consultant and contractor;
  - (ii) a methodology for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
  - (iii) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within four months of any survey being completed;
  - (iv) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;
  - (v) monitoring of archaeological exclusion zones during and post construction;
  - (vi) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS (Online AccesS to the Index of archaeological investigationS') form with a digital copy of the report within six months of completion of construction of the authorised scheme, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;





(vii) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme; and

(viii) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order Limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.

### 1.2 Project Background

- 4. Norfolk Vanguard comprises two distinct offshore areas, NV East and NV West, which are in the southern North Sea, approximately, 70km and 47km from the coast of Norfolk respectively (at the nearest points). These two areas are included in the Environmental Impact Assessment (EIA) and Development Consent Order (DCO) application process as a single project.
- 5. The project would consist of between 90 and 200 turbines, each having a rated capacity of between 9 and 20MW, with a total installed capacity of up to 1,800MW.
- 6. Norfolk Vanguard Limited is currently considering constructing the project in a single phase or two phases, up to a total capacity of 1800MW.
- 7. Construction of the project under either approach would be anticipated to commence between 2020 and 2021 for the onshore works, and around 2024 for the offshore works.

### 1.3 Guidance and best practice

- 8. In demonstrating adherence to industry good practice, this outline Offshore WSI has been compiled with respect to available archaeological guidance for offshore development including:
  - Protocol for Archaeological Discoveries: Offshore Renewables Projects (The Crown Estate, 2014);
  - Chartered Institute for Archaeologists (CIfA) Code of Practice and Standards and Guidance (CIfA, 2014a, 2014b, 2014c, 2014d);
  - Marine Geophysical Data Acquisition, Processing and Interpretation guidance notes (Plets R., Dix J. and Bates R., 2013);
  - Offshore Geotechnical Investigations and Historic Environment Analysis:
     Guidance for the Renewable Energy Sector (Gribble and Leather, 2011)
  - Model Clauses for Archaeological Written Schemes of Investigation: Offshore Renewables Projects (The Crown Estate, 2010);
  - Historic Environment Guidance for the Offshore Renewable Energy Sector.
     Guidance (Wessex Archaeology, 2007); and





 Code for Practice for Seabed Development (Joint Nautical Archaeology Policy Committee (JNAPC), 2006).

### 1.4 Approach

- 9. The fundamental objectives of a WSI are set out in the Model Clauses for Archaeological Written Schemes of Investigation: Offshore Renewables Projects (The Crown Estate, 2010) as follows:
  - Set out the respective responsibilities of the Developer, main contractors, and archaeological contractors/consultants, to include contact details and formal lines of communication between the parties and with archaeological Curators;
  - Ensure that any further geophysical and geotechnical investigations associated with the project are subject to archaeological input, review, recording and sampling;
  - Provide for archaeological involvement in any diver and/or ROV obstruction surveys conducted for the scheme;
  - Establish the exact position and extent of archaeological exclusion zones, and methodologies for their monitoring, modification and/or removal;
  - Propose measures for mitigating effects upon any archaeological material encountered during the operation and decommissioning of the scheme; and,
  - Establish the reporting, publication, conservation and archiving requirements for the archaeological works undertaken in the course of the scheme.
- 10. The Model Clauses were prepared by Wessex Archaeology for The Crown Estate (2010) in order to set out agreed archaeological methodologies so that they do not have to form part of the drafting and agreement of each WSI prepared for the offshore renewables industry. As such, these methodologies will not be duplicated here. Rather, this outline Offshore WSI draws upon these standard, agreed methodologies and, for each section, sets out how these are relevant to the delivery of Norfolk Vanguard and explains any necessary adaptations and amendments for agreement with Historic England.

### 1.5 Archaeological and Historical Background

11. The following section provides a summary of the known and potential archaeological and cultural resource of the offshore project area and its environs based on Chapter 17 Offshore and Intertidal Archaeology and Cultural Heritage in the Environmental Statement (ES) and associated gazetteers.





- 12. The main source of data was the technical report authored by Wessex Archaeology (Appendix 17.1 to the ES) which itself was informed by:
  - Geophysical survey and geotechnical data acquired for the project by Fugro Survey B. V. (Fugro) between September and November 2016 over NV West and the offshore cable corridor;
  - Geophysical survey data previously acquired over NV East by EMU Limited (EMU) and over the eastern end of the offshore cable corridor by Coastline Surveys Ltd in 2012;
  - The United Kingdom Hydrographic Office (UKHO) data for charted wrecks and obstructions;
  - The National Record of the Historic Environment (NRHE) maintained by Historic England, comprising data for terrestrial and marine archaeological sites, find spots and archaeological events;
  - The National Heritage List for England maintained by Historic England, comprising data of designated heritage assets including sites protected under the Protection of Military Remains Act 1986 and the Protection of Wrecks Act 1973;
  - The Norfolk Historic Environment Record (NHER), comprising a database of all recorded terrestrial and marine archaeological sites, find spots and archaeological events within the county and offshore;
  - The HSC report for East Yorkshire to Norfolk (Newcastle University, 2014);
  - The Coastal and Intertidal Zone Archaeology Network (CITiZAN) project database of archaeological find spots;
  - Relevant mapping including Admiralty Charts, historic maps and Ordnance Survey; and
  - Relevant documentary sources and grey literature held by Wessex Archaeology, and those available through the Archaeological Data Service and other websites.

### 1.5.1 Seabed Prehistory

- 13. There are no known seabed prehistory sites within the study area. Prehistoric archaeology at the landfall at Happisburgh is discussed in section 16.
- 14. Wessex Archaeology (ES Appendices 17.2-17.4) has identified a broad pattern of eight geological units and 171 features of paleogeographic potential indicative of former terrestrial environments, based upon the assessment of sub-bottom profiler data and the assessment of vibrocore samples. The geological units, and the archaeological potential associated with each unit, are detailed in Table 1. Not all eight units are identified in any one area and the precise stratigraphy varies according to location.





Table 1 Shallow geological units identified within the study areas by Wessex Archaeology (Appendix 17.4 Table 2)

	ppendix 17.4 Table 2)						
WA Unit	Fugro Unit	Geological Unit	Geoarchaeological and Archaeological Potential				
8	A1	Holocene seabed	Gravelly sand with shell fragments, sand waves and ripples indicate				
		sediments	sediment is mobile. Low potential in areas of mobile sediment: basal				
		Post-transgression	contact may cover old land surfaces.				
		(MIS 1)					
7	A2	Holocene	Fluvial, estuarine and terrestrial (including peat) deposits. Shallow				
		sediments	infilled depressions or channels with potential for preserved organic				
		Pre-transgression	material of palaeoenvironmental significance.				
		(MIS 2-1)					
6	В	Twente Formation	Thin layer of aeolian periglacial sand. Potential to contain in-situ and				
		Upper Devensian	derived archaeological and palaeoenvironmental material.				
		(MIS 2)					
5	С	Upper Brown Bank	Clayey silty sand infilling channels or hollows and deposited in an				
		Formation	intertidal/lagoon environment. Potential for in-situ Lower Palaeolithic				
		Early/Mid	artefacts. Middle Palaeolithic artefacts may be associated with channel				
		Devensian (MIS 5d-	edges dependent on age of infill. Basal contact may cover old land				
		3)	surface.				
4	C/D	Lower Brown Bank	Silty sand and sandy silt. Possible intertidal or shallow marine deposit.				
		Formation / Eem	In-situ Lower Palaeolithic artefacts may be protected. Middle				
		Formation	Palaeolithic artefacts may be associated with channel edges				
		Ipswichian or	dependent on age of infill. Basal contact may cover old land surface.				
		Lower Devensian					
		(MIS 5e–5d)					
3	E	Swarte Bank	Silty sandy clays associated with the Anglian glaciation. Unlikely to				
		Formation	contain archaeological material.				
		Anglian (MIS 12)					
2	F	Yarmouth	Silty sand with occasional shell fragments, deposited as part of marine				
		Formation	delta complex. Low potential, unlikely to contain archaeology or				
		Lower to Middle	deposits of palaeoenvironmental significance.				
		Pleistocene					
		(MIS >13)					
1	1	Westkapelle	Deltaic silty clays and sands. Pre-date earliest occupation; of no				
		Ground	archaeological interest				
		Formation					
		Pliocene – Lower					
		Pleistocene (MIS					
		103-63)					

15. The archaeological potential associated with the above geological sequence and palaeogeographic features is described in detail in sections 4.2 and 4.3 of Appendix 17.1. In summary, the key areas of potential for seabed prehistory within the study area comprise:





- Potential for Lower Palaeolithic artefacts and landsurfaces protected by overlying Brown Bank Formation;
- Potential for Middle Palaeolithic artefacts associated with Unit 4 (Lower Brown Bank) where present in NV East, identified tentatively within the offshore cable corridor and sporadically in NV West as scattered remnants at the base of Unit 5;
- Potential for Middle Palaeolithic derived and in situ artefacts and intact organic material of palaeoenvironmental interest associated with Unit 5 (Brown Bank Formation) identified as a blanket deposit across the study area, particularly in association with channel features as seen in NV West and the offshore cable corridor;
- Potential for post-glacial Upper Palaeolithic in situ archaeological material and palaeoenvironmental material associated with Unit 6 in NV West and possibly in two small areas within the offshore cable corridor to the south of NV West;
- Potential for Mesolithic *in situ* archaeological material and palaeoenvironmental material associated with Unit 7. In particular:
  - The peat layer identified in NV West and the offshore cable corridor may represent a buried land surface and is considered of high archaeological and palaeoenvironmental potential, as it could contain *in situ* archaeological artefacts and preserved organic material;
  - The pre-transgression fluvial features identified in NV West and the offshore cable corridor are deemed to be of high archaeological interest as they may provide evidence of a former terrestrial environment and could contain both *in situ* or derived anthropogenic artefacts and preserved palaeoenvironmental material; and
  - The isolated cut and fill features identified in NV West and the offshore cable corridor may be the remnants of eroded palaeochannel systems although, as their nature is less certain, they are considered of lower archaeological potential.

### 1.5.2 Maritime and Aviation Archaeology

16. Seabed features of archaeological interest are discriminated by Wessex Archaeology in accordance with the definitions set out in Table 2.

Table 2 Wessex Archaeology's Criteria discriminating relevance of seabed features

Archaeological Discrimination		Description
Non-	U1	Not of anthropogenic origin
Archaeological	U2	Known non-archaeological feature
	U3	Position of a recorded loss at which no physical wreck remains have ever been identified





Archaeological Discrimination		Description
Archaeological A1 Anthropogenic origin of archaeological interest  A2 Uncertain origin of possible archaeological interest		Anthropogenic origin of archaeological interest
		Uncertain origin of possible archaeological interest
	A3	Historic record of possible archaeological interest – UKHO reference to feature that
		shows no trace on seabed

17. A total of 1234 features of maritime or aviation archaeological interest, or potential archaeological interest, have been identified within the boundaries of NV East, NV West and the offshore cable corridor. These are summarised in Table 3, listed in the Appendix 2 and shown on Figures 17.8 to 17.16 in Volume 2 of the ES.

Table 3 Features of archaeological potential within the study area

Archaeological Discrimination	Number of seabed features			Total	
	NV East	NV West	Offshore Cable Corridor		
A1	5	11	26	42	
A2	312	172	706	1190	
А3	1	1	0	2	
Total	318	184	732	1234	

18. The A1 features identified as being of archaeological interest, comprising wrecks, magnetic only buried anomalies and larger items of debris and debris fields, are summarised in Table 4.

Table 4 Summary of A1 anomalies within the study area

WA ID	Туре	Summary	Area
70021	Wreck	Unidentified, partially buried wreck with an associated magnetic anomaly indicating the presence of ferrous material. Not previously charted.	NV East
70058	Magnetic	Extremely strong magnetic anomaly (6587nT) without a corresponding sidescan sonar or bathymetry anomaly suggestive of a buried wreck with a significant amount of ferrous material in its construction. Charted by the UKHO (ID 11214).	
70255	Wreck	Unidentified, badly damaged and partially buried wreck with associated debris (possibly up to 125m away i.e. A2 anomalies: 70248, 70253 and 70250) and a strong magnetic anomaly indicating a significant amount of ferrous material. Located c. 35m from the recorded position of UKHO charted wreck ID 11213	
70262	Wreck	Unidentified, intact wreck, lying on its side and partially buried with associated debris (A2 anomalies: 70263 and 70265) and an associated magnetic anomaly indicating the presence of ferrous material. Charted by the (UKHO ID 11214)	
71480	Wreck	Lies just outside NV East and is the wreck of a submarine (UKHO ID	





WA ID	Туре	Summary	Area
		705/12) discovered in 201/	
71207	Massatia	79542) discovered in 2014.	NI\/\A/a-+
71297	Magnetic	Magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously charted.	NV West
71299	Magnetic	Magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously charted.	
71301	Debris field	Possibly indicative of a partially buried and previously uncharted wreck with a very large magnetic anomaly indicating a substantial quantity of ferrous material. Not previously charted.	
71314	Magnetic	Magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously charted.	
71323	Magnetic	Magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously charted. Possibly associated with 71334.	
71325	Magnetic	Magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously charted. Possibly associated with 71334.	
71332	Debris	Debris associated with 71334.	
71333	Debris	Debris associated with 71334.	1
71334	Wreck	Large spread of debris indicating a very broken up wreck and associated with a large magnetic anomaly indicating a substantial quantity of ferrous material. Charted by the UKHO (ID 11190).	
71336	Debris	Debris associated with 71334.	
71479	Magnetic	Magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously charted.	
70342	Wreck	Very indistinct area of wreckage with a medium magnetic anomaly. Associated with UKHO record (11091) of <i>Golden Oriole</i> (possibly), a British trawler Sunk 22/01/1915. Previously observed in 2014 as well broken-up.	Offshore cable corridor
70360	Wreck	An area of wreck debris with a very high magnetic anomaly associated, the full extent of which may be buried. The wreck stands upright prominently within large sandwaves but is relatively broken up and in poor condition. Associated with UKHO record (11093) of <i>HMS Dunoon</i> (possibly), a British minesweeper sunk by a mine on 30/05/1940. Last observed as relatively intact but damaged in the bows.	
70459	Wreck	A wreck broken in two, with dispersed wreck debris and some structure and possible deck planking discernible. The stern and hull are not clear and the full extent of the wreck is likely buried by the large sandwaves in the area. The wreck has a large magnetic anomaly associated indicating a ferrous composition. Associated with UKHO record (11092) of <i>Phillipp M</i> , a steam ship which was torpedoed and sunk in 1944. The wreck is described as lying in two parts on the seabed, probably inverted, last observed in 1999.	
70460	Debris	Small piece of possible wreck debris situated 27 m south-west of wreck 70459	
70565	Wreck	A possible area of dispersed wreck. The wreck appears to be broken up with large sections disjointed from the main structure of the wreck. A large magnetic anomaly is associated indicating some ferrous content. Associated with UKHO record 10722 for an unknown wreck described as being broken up and almost buried by sandwaves with debris in the wrecks vicinity, likely boilers and engine.	
70615	Magnetic	Very large, magnetic only anomaly with no surface expression and potential to be substantial buried ferrous remains. Not previously	





	_	
NA ID	Туре	Summary
		charted.
70617	Wreck	Large wreck possibly in two parts, with the majority of the hull intact
		and with deck structure visible as some straight, slatted features. There
		is a very large magnetic anomaly associated indicating a ferrous
		construction. Associated with the UKHO record (10544) for Rye, a
		steamship lying in two parts at right angles, sunk in 1941 by torpedo
		fire. Last observed in 2014.
70618	Debris	Feature identified in an area of textured seafloor with a large magnetic
		anomaly associated indicating ferrous debris
70639	Wreck	Large dispersed wreck, appears upright and with some structure visible
		with possibly two sections of wreck. The full extent and detail is likely
		covered by sands. There is a large magnetic anomaly associated with
		the wreck indicating a ferrous construction. The wreck has a possible
		associated piece of debris at its northern end (70640). Associated with
		UKHO record 10546 for <i>Trevethoe</i> , a motor vessel built in 1940 and sunk
		in 1941, last observed in 2014 as upright but collapsed and in two parts.
0640	Debris	Possible wreck debris located 9 m to the north-west of wreck 70639
0645	Wreck	Medium sized wreck with a possible broken off linear piece of debris
		extending from the wreck. The wreck is intact and upright. There is a
		medium magnetic anomaly associated with this wreck indicating some
		ferrous debris. Associated with UKHO record 82114, an unknown wreck
		that is largely intact and partially buried, previously observed in 2016.
0659	Wreck	Large wreck that appears to be intact though possibly partially buried by
		sandwaves. There is a very large magnetic anomaly associated
		indicating a ferrous construction. Associated with UKHO record 10849
		for an unknown wreck lying in two parts, last observed in 2014.
0704	Wreck	Wreckage of an unknown sailing vessel, relatively intact though partially
		buried. Has a medium magnetic anomaly associated indicating a ferrous
		construction. Associated with UKHO record 10545 which was last
		observed in 2014 as intact and mainly covered by a sandwave.
70709	Wreck	Wreckage of steamship <i>Montferlan</i> , upright with some debris to the
		north-east, partially disintegrated, possibly broken up into sections.
		Feature has a very large associated magnetic anomaly. The UKHO
		record 10549 states the original length was 128m and was last observed
10744	\A/nc al:	in 2014.
0744	Wreck	Large wreck, partially broken up but intact and lying upright on the edge
		of a large sandwave. Associated wreck debris may be buried by sands.  With a very large magnetic anomaly indicating ferrous material.
		Associated with UKHO record 10548 of an unknown wreck, last
		observed in 2014.
70784	Debris	Possibly part of nearby debris field (70785). Has a very large magnetic
0704	Deniis	contact associated indicating ferrous debris
70785	Debris	Small patch of disturbed seafloor with very large magnetic anomaly
0783	field	indicating ferrous material. Possible small debris field.
0809	Wreck	Wreck of steam paddle schooner <i>Seagull</i> , partially disintegrated but
5503	VVICCN	intact and upright and on a sandwave rich area of the seabed with some
		superstructure discernible in the data. With a large magnetic anomaly.
		The UKHO record 10550 states that wreck was last observed in 1994 by
		divers.
70810	Debris	Small patch of disturbed seafloor. Possible debris associated with the
3010	field	wreck 70809
0832	Debris	Small anomaly identified towards the bow of wreck 70834. Likely to be
J J J Z	200113	The shortery to be





WA ID	Туре	Summary	Area
70833	Debris	Small anomaly identified at the bow of a wreck. Possible similar debris identified nearby (70832). Likely to be items of debris associated to wreck 70834.	
70834	Wreck	Wreck of the steam screw barque <i>Xanthe</i> (UKHO 10660) sunk in 1869. Identified as a distinct, upright wreck, relatively intact, with some possible straight deck features and some associated items of debris and a medium magnetic anomaly. Last observed by the UKHO in 2002.	
70934	Wreck	Large wreck without distinguishable structural elements and appears badly degraded, though still with some height. Mostly buried and broken up and situated in a depression. Has a very large magnetic anomaly associated indicating a ferrous construction. UKHO record 10554 states this is the <i>Sheaf Water</i> , a steamship torpedoed by a German E-Boat in 1942. Previously identified in 2002.	
70954	Wreck	Large wreck that appears to be mostly intact and upright with possible deck structure visible. There is a very large magnetic anomaly associated indicating a ferrous construction. Associated with UKHO record 10680 of unknown wreck. Last observed in 1983.	
70958	Debris field	Approximately four anomalies located directly next to wreck 70962 and likely associated debris	
70962	Wreck	A large area of dispersed wreck with possible deck structure. Parts of the hull outer edge appear intact. The wreck has a debris field (70958) and possible rope or chain features in close proximity (70952, 70955, 70956 and 70959). Has a large magnetic anomaly associated indicating a ferrous construction. Associated with UKHO record 10556 for <i>Fulgens</i> , a steamship built in 1912 and sunk in 1915 by torpedo.	

19. Seabed features interpreted as A2 have been identified as being of possible anthropogenic origin and have the potential to represent archaeological material on the seabed of maritime or aviation origin. Magnetic only anomalies (without visible surface expression) have the possibility to be buried objects with ferrous content that are of archaeological potential. The types of features identified are summarised in Table 5.

Table 5 Types of A2 features within the study area

Type of feature	NV East	NV West	Offshore Cable Corridor	Total
Debris	16	18	45	79
Debris Field	6	13	25	44
Seafloor	17	13	4	34
Disturbance				
Bright Reflector	4	15	19	38
Dark Reflector	116	79	114	309
Rope/Chain	11	2	30	43
Magnetic	142	31	463	636
Mound	0	1	6	7





Type of feature	NV East	NV West	Offshore Cable Corridor	Total
Total	312	172	706	1190

- 20. There are two A3 historic records within the study area. The first (70079) is an unidentified obstruction (UKHO ID 11216) and the second (71377) an area of foul ground (UKHO ID 11236). Nothing was observed at these locations in the geophysical data but they are retained as the potential for buried, non-ferrous archaeological remains at these locations cannot be discounted.
- 21. There is also potential for the presence of further maritime archaeological material to be present, associated with Unit 8, post-transgression Holocene marine sediments present across the study area which varies in thickness from a thin veneer to sand banks up to 15m thick. This sediment could periodically bury and expose archaeological material in areas of mobile sediment. Similarly, although there are no known aircraft crash sites within the study area, there is potential for the discovery of previously unknown aircraft material, also associated with Unit 8. Mitigation measures are detailed within 1.7 and methodologies with 1.9.

### 1.5.3 Intertidal Archaeology

- 22. There are 17 previously recorded heritage assets within the intertidal zone (up to MHWS) at the landfall at Happisburgh South. Sixteen of the records relate to findspots of material on the beach (positions at which finds have previously been discovered and recorded but at which material is no longer present). The final record (1045) is the site of Happisburgh Low Lighthouse, one of two lighthouses erected in Happisburgh in 1791. By 1886 it is recorded that the lighthouse had fallen into the sea although a survey in 1980 noted that remains of part of the foundations still survived *in situ* exposed in the cliff, although the majority of the remains lay on the beach or had been covered over by sand.
- 23. Red brick sections of masonry, assumed to be the remains of the lighthouse, were observed on the beach during a walkover carried out by Royal HaskoningDHV in November 2017. Scattered, brick, stone, breeze blocks and large flints were also observed further along the beach just to the north west of the landfall. Military features are prevalent along this stretch of coastline and the former locations of (now demolished) features such as pillboxes, Second World War coastal defences, a coastal battery and a machine gun post are recorded in the vicinity of the landfall.
- 24. Beneath the surface deposits, ground investigations at the landfall (detailed in Appendix 28.6 of the ES) have demonstrated the presence of till (sands, clays and gravels) relating to a large doline-type geological feature (sinkhole or solution





feature). The potential for archaeological material associated with this till deposit is anticipated.

### 1.6 Impact Assessment Summary

25. Potential impacts to archaeology and cultural heritage below MHWS have been assessed as part of the EIA for Norfolk Vanguard. A summary of the impacts and suggested mitigation is provided in Table 6.





Table 6 Summary of Potential Impacts Identified for Offshore and Intertidal Archaeology

Potential Impact	Receptor	Value/Sensitivity	Magnitude	Significance	Mitigation	Residual Impact
Construction	•	•	•	•	•	
Direct impact to known	Wrecks and Anomalies (A1)	High	High	Major adverse	50m AEZs	No impact
heritage assets	A3 wrecks	High	High	Major adverse	Avoid location	No impact
	Additional anomalies (A2)	High	High	Major adverse	Avoid location	No impact
	Intertidal assets	Low	No impact	No impact	None	No impact
Direct impact to potential heritage assets	In situ prehistoric, maritime or aviation sites	High	High	Major adverse	Further assessment	Minor adverse
	In situ intertidal sites	High	Negligible	Minor adverse	Further (geoarchaeological) assessment	Minor adverse
	Isolated finds	Medium	Low	Minor adverse	Protocol	Minor adverse
Indirect impact to heritage assets from changes to physical processes	Known and potential heritage assets	Low to High	Negligible	Negligible to Minor	None	Negligible to Minor adverse/ beneficial
Impacts to site preservation conditions from drilling fluid breakout	Intertidal assets	Low	Negligible / No impact	Negligible	None	Negligible
Operation						
Direct impact to known heritage assets	As for construction					No impact
Direct impact to potential heritage assets	In situ prehistoric, maritime or aviation sites	High	High	Major adverse	Further assessment	Minor adverse
Indirect impact to heritage assets from changes to physical processes	Known and potential heritage assets	Low to High	Negligible	No impact to Negligible	None	No impact to Negligible
Impacts to site preservation conditions from heat loss	Known and potential heritage assets	Low to High	No impact	No impact	None	No impact





Potential Impact	Receptor	Value/Sensitivity	Magnitude	Significance	Mitigation	Residual Impact		
from installed cables								
Decommissioning		•						
Direct impact to known heritage assets	As for construction	No impact						
Direct impact to potential heritage assets	In situ prehistoric, maritime or aviation sites	High	High	Major adverse	Further assessment	Minor adverse		
Indirect impact to heritage assets from changes to physical processes	As for construction (or less)	As for construction (or less)						
Cumulative								
Direct impact to known heritage assets	In situ prehistoric, maritime or aviation sites	Low to High	High	Major adverse	Avoidance	No impact		
Direct impact to potential heritage assets	In situ prehistoric, maritime or aviation sites	Medium to High	High	Major adverse	Further assessment/reporting protocol	Minor adverse (plus positive benefit from accumulation of data)		
Indirect impact to heritage assets from changes to physical processes	Known and potential heritage assets	Low to High	Negligible	No impact	None	No impact		
Transboundary								
Direct impact to known heritage assets	Wrecks or aircraft of non- British origin	High	High	Major adverse	Avoidance	No impact		
Direct impact to potential heritage assets	Wrecks or aircraft of non- British origin	High	High	Major adverse	Further assessment/ reporting protocol/ consideration of legal status in country of origin	Minor adverse		
	Prehistoric, maritime and aviation archaeological	Medium to High	High	Major adverse	Further assessment/ reporting protocol	Minor adverse (plus positive		





Potential Impact	Receptor	Value/Sensitivity	Magnitude	Significance	Mitigation	Residual Impact
	resource (across national boundaries)					benefit from accumulation of data)
Indirect impact to heritage assets from changes to physical processes	Tidal ellipses show that all m impacts will not occur.	ovement is in a north	south direction so	will not cross the inte	rnational boundary and trans	sboundary





### 1.7 Committed Mitigation Measures

### 1.7.1 Embedded Mitigation

- 26. In order to prevent significant impacts, the following mitigation will be embedded in the project design and is secured through conditions set out in the DCO (and DML Schedule 9 and 10, Part 4, Requirement 14 (1) (h)):
  - 50m AEZs around the extents of known wreck sites (A1s) and 50m around the point locations of A1 magnetic only anomalies within which no development related activities will take place (see section 1.9.3);
  - Avoidance, where possible, of identified anomalies (A2s) or previously recorded sites that have not been seen in the geophysical data (A3s) by micro-siting of design;
  - Further investigation of any identified anomalies (A2s) or previously recorded sites that have not been seen in the geophysical data (A3) that cannot be avoided by micro-siting of design (see section 1.9.6);
  - Further examination of potential prehistoric deposits including geoarchaeological recording of core samples, deposit modelling and archaeological input into any future sampling programme(s) (see section 1.9.5);
  - In the event of impact to potential sites, the establishment of a formal protocol to ensure that any finds are promptly reported, archaeological advice is obtained, and any recovered material is stabilised, recorded and conserved (see section 1.10);
  - Watching briefs where seabed material is brought to the surface, for example during pre-lay grapnel runs (see section 1.9.7);
  - Watching briefs for any intrusive works carried out in the intertidal landfall zone;
     and
  - The archaeological assessment of any further geophysical data (see section 1.9.3).

### 1.7.2 Additional Mitigation

27. Additional mitigation may be required where anomalies or AEZs cannot be avoided or where unexpected discoveries are encountered and reported through the protocol. This may include measures to further investigate the nature and extent of anomalies and/or discoveries, to establish the archaeological interest and to record them prior to removal. The methodology for such works would be set out in works package specific method statements and agreed with the MMO in consultation with Historic England (or the relevant Planning Authority in consultation with the Norfolk County Council (NCC) Historic Environment Service for works above MLWS) prior to works commencing.





### 1.8 Roles, Responsibilities and Communication

- 28. Overall responsibility for the implementation of the final Offshore WSI will lie with Norfolk Vanguard Limited who will ensure that its agents and contractors are contractually bound to adhere to the terms of the final Offshore WSI and to implement the protocol for archaeological discoveries (section 1.10).
- 29. For each package of archaeological works Norfolk Vanguard Limited or their agents will, as required, procure the services of specialist archaeological contractors with the requisite experience and expertise to undertake the necessary works. In addition, Norfolk Vanguard Limited will retain the services of a suitably qualified and experienced archaeological contractor (the retained archaeologist) to ensure the effective implementation of the final Offshore WSI and other contractual commitments in relation to archaeology.
- 30. The responsibilities of a retained archaeologist include:
  - Compiling, reviewing and updating this outline Offshore WSI following consultation with Norfolk Vanguard Limited and the regulators (MMO) and curators (Historic England) post-consent to produce a final, agreed Offshore WSI;
  - Advising Norfolk Vanguard Limited on their responsibilities regarding the implementation of the final Offshore WSI and the Protocol for Archaeological Discoveries;
  - Compiling, agreeing and issuing method statements for archaeological contractors to adhere to, following consultation with Norfolk Vanguard Limited and the regulators and curators;
  - Advising Norfolk Vanguard Limited on the necessary interaction with the regulators, curators and other third parties;
  - Procuring, monitoring the work of, and liaising with specialist archaeological contractors;
  - Monitoring the preparation and submission of archaeological reports as appropriate and making them available to the regulators and curators for review and approval; and
  - Advising Norfolk Vanguard Limited on any final requirements and arrangements for further analysis, archive deposition, publication and popular dissemination.
- 31. All agents and contractors engaged by Norfolk Vanguard Limited will:
  - Familiarise themselves with the requirements of the final Offshore WSI and make it available to their staff, explaining the requirements and need for strict adherence;





- Familiarise themselves with the protocol for archaeological discoveries (section 1.10) and ensure the implementation of and adherence to the protocol by staff, including ensuring staff awareness of the protocol and making staff available for training through toolbox talks, as necessary;
- Assist and afford access to archaeological contractors as advised by Norfolk Vanguard Limited and the retained archaeologist; and
- Inform the retained archaeologist and the archaeological contractors of any environmental or health and safety constraints of which they may be aware that is relevant to the archaeologist's activities on site.
- 32. The specific responsibilities of specialist archaeological contractors during subsequent phases of work will be set out in separate task/work package specific method statements.
- 33. The regulatory body responsible for enforcing conditions specified in the DML is the MMO. The regulatory body responsible for enforcing the implementation of requirements within the DCO is the relevant Planning Authority in which the works are situated.
- 34. The MMO's statutory advisor on the marine historic environment and the archaeological curators for heritage matters offshore (below MHWS) is Historic England. The archaeological curators responsible for heritage matters onshore (above MLWS) are the archaeological advisors from the NCC Historic Environment Service and Historic England's Inspector of Ancient Monuments.
- 35. Prior to and during the course of any geoarchaeological recording, assessment and analysis, consultation with the Historic England Regional Science Advisor for the East of England is also recommended to agree on the suitability of the approach.

### 1.9 Written Scheme of Investigation

36. As stated in Section 1.4 the methodologies presented below draw upon the Model Clauses for WSI (The Crown Estate, 2010). In order to avoid repetition, only key statements from the Model Clauses are paraphrased below. However, it is an essential requirement of this outline Offshore WSI that all approaches presented in this document adhere to the methodologies presented in full in the Model Clauses as appropriate and relevant to Norfolk Vanguard. Any adaptations and amendments to these standard approaches will require agreement with the MMO in consultation with Historic England.

### 1.9.1 Archaeological Recording, Reporting, Data Management and Archiving

37. With regard to survey reports, each package of works will be accompanied by written reports pursuant to the requirements of those works and demonstrating





- appropriate planning, recording and data management and archiving and public dissemination of results as appropriate.
- 38. For all aspects of recording, reporting, data management and archiving, Norfolk Vanguard Limited will adhere to standards and guidance as set out in the Model Clauses document. Key points relevant to archaeological recording, reporting, data management and archiving are outlined below.
- 39. Once agreed, the methodology for each package of works will be set out in a method statement prepared under the requirements of the final Offshore WSI, and appended to it. Each method statement (work specific WSI) will be agreed with the relevant archaeological curator prior to works commencing.
- 40. Each archaeological report will satisfy the method statement for the investigation and will present the project information in sufficient detail to allow interpretation without recourse to the project archive. Reports will typically include:
  - A non-technical summary;
  - The aims and methods of the work;
  - The results of the work including finds and environmental remains;
  - A statement of the potential of the results;
  - Proposals for further analysis and publication (if appropriate); and
  - Illustrations and appendices to support the report.
- 41. Each archaeological report will be submitted in draft to the retained archaeologist for submission to Norfolk Vanguard Limited If the report is prepared by the retained archaeologist it will be submitted directly to Norfolk Vanguard Limited.
- 42. Decisions regarding the scope of post-fieldwork assessment will be made by agreement between Norfolk Vanguard Limited and the archaeological curators following submission of investigation reports and based on the possible importance of the results in terms of their contribution to archaeological knowledge, understanding or methodological development.
- 43. The assessment phase may include (but is not limited to) the following elements:
  - The conservation of appropriate materials, including the X-raying of metalwork;
  - The spot-dating of all pottery from any investigation. This will be corroborated by the scanning of other categories of material;
  - The preparation of site matrices with supporting lists of contexts by type, by spot-dated phase, and by structural grouping supported by appropriate scaled plans;





- An assessment statement will be prepared for each category of material, including reference to quantity, provenance, range and variety, condition and existence of other primary sources; and
- A statement of potential for each material category and for the data set as a
  whole will be prepared, including specific questions that can be answered and
  the potential value of the data to local, regional and national investigation
  priorities.
- 44. On the basis of post-fieldwork assessment, and as agreed by the relevant archaeological curators, mitigation requirements will be satisfied by carrying out analysis and reporting of the post-fieldwork assessment. If appropriate, this may include publication of important results in a recognised peer-reviewed journal or as a monograph.
- 45. On completion of archaeological works relating to construction of the scheme, an overarching report on the archaeology of the scheme will be prepared and submitted to the MMO and Historic England to a timetable to be agreed with Norfolk Vanguard Limited, the regulator and the archaeological curators. The overarching report need not repeat the details contained in each preceding report, but should serve as an index to, and summary of, the archaeological investigations as a whole.
- 46. It is accepted practice to keep project archives, including written, drawn, photographic and artefactual elements (together with a summary of the contents of the archive) together wherever possible and to deposit them in appropriate receiving institutions once their contents are in the public domain. Archives will be developed in line with guidance including:
  - Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA, 2014b);
  - Environmental Guidelines for the Permanent Storage of Excavated Material from Archaeological Sites (Institute of Conservation, 1984); and
  - Guidelines for the preparation of excavation archives for long-term storage, (Walker, 1990).
- 47. The relevant archaeological curators and the archaeological contractor will agree with the receiving institution a policy for the selection, retention and disposal of excavated material, and confirm requirements in respect of the format, presentation and packaging of archive records and materials, and will notify the receiving institution in advance of any fieldwork.
- 48. In England, the NRHE is the repository for fieldwork records. The NRHE operates a policy for the selection of records relating to sites of national importance. Norfolk





Vanguard Limited or their agents will produce an OASIS form for any completed and agreed archaeological reports produced as a result of the final Offshore WSI and ensure that a copy is submitted as a PDF file to the NRHE.

### 1.9.2 Archaeological Samples and Artefacts

- 49. Environmental samples, obtained during pre-construction geotechnical surveys, that are suitable for archaeological and palaeoenvironmental assessment, will be subject to geoarchaeological assessment (see section 1.9.5 below).
- 50. Any finds encountered during activities associated with Norfolk Vanguard will be treated in accordance with the relevant guidance provided in the Model Clauses (The Crown Estate 2010) and:
  - Standards and guidance for the collection, documentation, conservation and research of archaeological materials (CIfA, 2014c); and
  - First Aid for Underwater Finds (Robinson, 1998).
- 51. General specifications set out in the Model Clauses are summarised below.
- 52. Isolated discoveries of artefacts that may come to light during the course of the development will be dealt with through the Protocol for Archaeological Discoveries (see section 1.10 below).
- 53. With regard to archaeological works from the point of discovery, all finds will be held by the archaeological contractor in appropriate conditions pending further recording, investigation, study or conservation.
- 54. Recovered objects will be selected, retained or disposed of in accordance with the policy agreed with the institution receiving the archive, and in consultation with the archaeological contractors.
- 55. Contingency will be made for specialist advice and conservation needs on-site should unexpected, unusual or extremely fragile and delicate objects be recovered.
- 56. In the event that any item(s) of ordnance is discovered it should be treated with extreme care as it may not be inert. Guidelines on addressing Unexploded Ordnance (UXO) discoveries provided to contractors by Norfolk Vanguard Limited must be followed prior to any recording of items for archaeological purposes.
- 57. If human remains are discovered, the process set out in DCO must be followed, alternatively an application for a licence from the Ministry of Justice under Section 25 of the Burials Act 1857 will be made by the Archaeological Contractor(s) (DCO Part 4 Requirement 17). The works will also take place in accordance with the appropriate Environmental Health regulations. With regard to the remains of





- crashed aircraft, the majority of aircraft wrecks are military and so fall under the legal protection of the Protection of Military Remains Act 1986. Other specific and bespoke requirements may also be required, on a case-by-case / area-by-area basis.
- 58. All archaeological artefacts that have come from a ship are wreck for the purposes of the Merchant Shipping Act 1995. Norfolk Vanguard Limited, via their archaeological contractors, will ensure that the Receiver of Wreck is notified within 28 days of recovery, by Norfolk Vanguard Limited or their agents, for all items of wreck that have been recovered.
- 59. All recovered materials, on land and underwater, will be subject to a conservation assessment to gauge whether special measures are required while the material is being held. This conservation assessment will be carried out by the retained archaeologist or an archaeological contractor with an appropriate level of expertise, with advice from appropriate specialists. The retained archaeologist (where appointed) or an archaeological contractor with appropriate expertise will implement recommendations arising from the conservation assessment. Where no special measures are recommended, finds will be conserved, bagged, boxed and stored in accordance with industry guidelines.

### 1.9.3 Archaeological Exclusion Zones

- 60. The principal objective of an AEZ is to prevent damage to or disturbance of a wreck, aircraft or features on the seafloor during activities that may cause direct impacts to a receptor.
- 61. The implementation, monitoring and modification of AEZs will take place in accordance with the measures specified in the Model Clauses.
- 62. AEZs preclude development activities from taking place within their boundaries, thereby avoiding significant impacts to assets contained within. The position, extent and design of an AEZ should take into account all available information including geology, hydrology and sediment transport and should extend around the boundaries of the asset rather than around a centre-point within the site. In addition, an AEZ will incorporate a buffer in order to ensure that all material associated with that asset is encapsulated within its boundary, as well as to reduce the risk of unintentional impacts.
- 63. As part of the embedded mitigation for Norfolk Vanguard, the size and position of AEZs agreed between Norfolk Vanguard Limited and Historic England will inform the design of the wind farm and export cable route. The size and position of AEZs are currently proposed as





- 50m around the extents of known wreck sites and debris/debris fields (A1s) as seen in the geophysical data; and
- 50m around the point location of magnetic only anomalies (A1s) with no corresponding surface expression.
- 64. AEZs have not been proposed for the A2 anomalies and the two A3 historic records. Additional work will be required to further investigate the nature and extent of anomalies, to establish the archaeological interest and to record them prior to removal, if they cannot be avoided through micro-siting of design (see section 1.9.6).
- 65. AEZs can be reduced, enlarged or removed in agreement with the MMO in consultation with Historic England if further relevant information becomes available. Unless modified by agreement, it is important that AEZs are retained throughout the project lifetime and monitoring of AEZs may be required by the regulator and curator to ensure adherence both during construction and in the future operation of the wind farm (see section 1.11).
- 66. Norfolk Vanguard Limited will ensure that details of the AEZs are supplied to all agents and contractors and will retain responsibility for ensuing adherence to the AEZs throughout the project lifespan (pre-construction, construction, operation and decommissioning).
- 67. There are 33 AEZs within the Norfolk Vanguard red line boundary. Nine of the total of 42 A1 anomalies relate to items of debris located within the AEZs already recommended for A1 wrecks. These are listed in Table 7 and illustrated in Figures 17.8 to 17.16 in Volume 2 of the ES.

Table 7 Recommended AEZs and avoidance for A1 anomalies

WA ID	Туре	Position		Recommendation	Area
		Easting	Northing		
70021	Wreck	496438	5859769	50m around extents	NV East
70058	Magnetic	494268	5856763	50m around point location	
70255	Wreck	496393	5847836	50m around extents	
70262	Wreck	498353	5847680	50m around extents	
71480	Wreck	503572	5848770	50m around extents	
71297	Magnetic	470549	5875951	50m around point location	NV West
71299	Magnetic	471001	5874207	50m around point location	
71301	Debris field	470711	5873567	50m around extents	
71314	Magnetic	471077	5871919	50m around point location	
71323	Magnetic	471157	5871003	50m around point location	
71325	Magnetic	470932	5870985	50m around point location	
71332	Debris	470686	5870865	Covered by AEZ for 71334	
71333	Debris	470763	5870863	Covered by AEZ for 71334	
71334	Wreck	470730	5870846	50m around extents	





WA ID	Туре	Position		Recommendation	Area
		Easting	Northing		
71336	Debris	470736	5870812	Covered by AEZ for 71334	
71479	Magnetic	464147	5851155	50m around point location	
70342	Wreck	477521	5849048	50m around extents	Offshore cable
70360	Wreck	466386	5846784	50m around extents	corridor
70459	Wreck	446041	5844450	50m around extents	
70460	Debris	446039	5844401	Covered by AEZ for 70459	
70565	Wreck	431217	5841986	50m around extents	
70615	Magnetic	429652	5846468	50m around point location	
70617	Wreck	429617	5846348	50m around extents	
70618	Debris	429562	5846957	50m around point location	
70639	Wreck	428802	5847632	50m around extents	
70640	Debris	428758	5847714	Covered by AEZ for 70639	
70645	Wreck	428283	5848091	50m around extents	
70659	Wreck	426967	5850445	50m around extents	
70704	Wreck	422267	5849082	50m around extents	
70709	Wreck	421671	5849182	50m around extents	
70744	Wreck	419288	5849507	50m around extents	
70784	Debris	415366	5849564	50m around point location	
70785	Debris field	415354	5849572	50m around extents	
70809	Wreck	413550	5850143	50m around extents	
70810	Debris field	413518	5850156	Covered by AEZ for 70809	
70832	Debris	412148	5850351	Covered by AEZ for 70834	
70833	Debris	412143	5850353	Covered by AEZ for 70834	
70834	Wreck	412105	5850354	50m around extents	
70934	Wreck	406929	5852021	50m around extents	
70954	Wreck	406125	5853694	50m around extents	
70958	Debris field	406085	5852987	Covered by AEZ for 70962	
70962	Wreck	406058	5852977	50m around extents	

### 1.9.4 Marine Geophysical Investigations

- 68. The following geophysical data (sidescan sonar, multibeam bathymetry, magnetometer and sub-bottom profiler data) was archaeologically assessed by Wessex Archaeology to inform the offshore archaeology baseline assessed as part of the EIA (Appendix 17.1 to the ES):
  - Geophysical survey acquired for the project by Fugro Survey B. V. (Fugro) between September and November 2016 over NV West and the offshore cable corridor; and





- Geophysical survey data previously acquired over NV East by EMU Limited (EMU) and over the eastern end of the offshore cable corridor by Coastline Surveys Ltd in 2012.
- 69. The archaeological assessment of any further geophysical data acquired for the project forms part of the commitment by Norfolk Vanguard Limited to embedded mitigation (see section 1.7.1).
- 70. Prior to the acquisition of further survey data during the pre-construction phase it is recommended that a data review is undertaken by a suitability qualified and experienced archaeological contractor in order to qualify the continued suitability of the existing data and assessment to the project. This will include the identification of any data gaps and any further regiments to inform the acquisition of further geophysical data in the light of new information which may come to light before the start of the pre-construction phase.
- 71. The overarching objectives of the assessment of marine geophysical survey data are to:
  - Identify known heritage assets and provide additional detail on the nature and extent of those assets;
  - Identify previously unidentified seabed features;
  - Identify buried palaeolandscape features that help to clarify the nature of the submerged prehistoric landscape; and
  - Monitor the construction and post-construction effects of Norfolk Vanguard.
- 72. As part of the data review, the archaeological contractor should identify specific objectives to inform the scope of further survey work. The acquisition and assessment of geophysical data will be carried out in accordance with good practice as set out in the Model Clauses and in industry guidelines including:
  - Plets R., Dix J. and Bates R. (2013) Marine Geophysical Data Acquisition,
     Processing and Interpretation guidance notes. Guidance prepared for Historic England.
- 73. Historic England will be consulted on the scope of all further geophysical surveys undertaken for the project in order to ensure that the data generated are sufficiently robust to meet these archaeological objectives and to enable professional archaeological interpretation and analysis.
- 74. Data will be processed, assessed and interpreted by a suitably experienced and qualified archaeological contractor and integrated with the existing assessments as outlined in section 1.5). Data will be provided in raw format to allow the data to be processed by the archaeological contractor using appropriate software in order to





facilitate archaeological assessment and interpretation. Vessel trackplots and factual reporting will also be made available to the archaeological contractor.

- 75. If required, a method statement will be issued by Norfolk Vanguard Limited in advance of any further geophysical survey campaigns that incorporate archaeological objectives, as advised by the retained archaeologist and/or archaeological contractor. The method statement will set out the specific details of the campaign and the methodology for archaeological assessment in order to inform consultation with Historic England. Archaeological briefings for survey staff will be carried out prior to the commencement of surveys and Norfolk Vanguard Limited will be responsible for ensuring that surveys proceed in accordance with any planned method statement as agreed with the MMO in consultation with Historic England.
- 76. The results of further geophysical interpretation will be compiled as an archaeological report consistent with the Model Clauses on reporting and will form part of the project archive (see section 1.9.1).

### 1.9.5 Marine Geoarchaeological Investigations

- 77. Geotechnical data comprising 65 vibrocores acquired by Fugro in 2016 was geoarchaeology assessed by Wessex Archaeology to inform the seabed prehistory baseline for the ES. To date, three stages of assessment have been undertaken:
  - Stage 1: Geoarchaeological review of preliminary core logs (Appendix 17.2 to the ES);
  - Stage 2: Geoarchaeological description and interpretation (Appendix 17.3 to the ES); and
  - Stage 3: Sub-sampling and palaeoenvironmental assessment (Appendix 17.4 to the ES).
- 78. As for the geophysical survey data, prior to the acquisition of further geotechnical data during the pre-construction phase it is recommended that a data review is undertaken by a suitability qualified and experienced archaeological contractor. As part of the review the archaeological contractor will identify any data gaps and any specific archaeological objectives to inform the acquisition of geotechnical data. Objectives should take account of the specific research objectives identified through previous geoarchaeological assessment undertaken for the ES.
- 79. The primary aim of any geoarchaeological investigations will be the further development of a Quaternary (sedimentary) deposit model for the study area which will both inform and be expanded by subsequent phases of work. An outline deposit model has been prepared as part of the geoarchaeological assessment undertaken to date (see section 1.5.1).





- 80. Historic England will be consulted on the scope of all further geotechnical surveys and all geotechnical investigations and subsequent geoarchaeological assessment commissioned by Norfolk Vanguard Limited will be undertaken in accordance with the Model Clauses (The Crown Estate, 2010) and with industry good practice as set out in:
  - Offshore Geotechnical Investigations and Historic Environment Analysis:
     Guidance for the Renewable Energy Sector (Gribble and Leather, 2011);
  - Environmental Archaeology: A Guide to the theory and practice of methods, from sampling and recovery to post-excavation (Historic England, 2011); and
  - Geoarchaeology: using earth sciences to understand the archaeological record (Historic England 2007).
- 81. In planning geotechnical surveys, which may be undertaken primarily to meet engineering/design objectives, in order to incorporate archaeological objectives, general provisions should include:
  - Micro-siting of borehole/vibrocore locations to avoid recommended AEZs and anomalies of possible archaeological interest, as set out in section 1.9.3;
  - Comparison of the proposed locations to the positions of previously identified paleogeographic features and deposits of archaeological interest and consideration given to micro-siting the proposed locations to ensure that opportunities to obtain samples to inform archaeological interpretation are not missed; and
  - Consideration given to the acquisition of a second 'archaeology only' cores at specific locations, if required, following advice from the retained archaeologist, the geoarchaeological contractor and in consultation with the Historic England.
- 82. During all geotechnical surveys, all operatives should observe the Protocol for Archaeological Discoveries, as set out in Section 1.10.
- 83. Norfolk Vanguard Limited will procure the services of a specialist geoarchaeological contractor to undertake assessment, and, if required, palaeoenvironmental analysis and dating. Geoarchaeological assessment will also be carried out in accordance with existing interpretations of sub-bottom profiler data assessed for Norfolk Vanguard. Any further sub-bottom profiler data acquired for the project will be assessed by a suitably qualified and experienced archaeological contractor for integration with the results of the geotechnical surveys and any subsequent geoarchaeological assessment.
- 84. Prior to the commencement of any site investigation campaign a method statement will be issued by Norfolk Vanguard Limited setting out the specific details of the campaign once the geoarchaeological requirements and locations have been





established in order to inform consultation with Historic England. Archaeological briefings for survey staff will be carried out prior to the commencement of surveys and Norfolk Vanguard Limited will be responsible for ensuring that surveys proceed in accordance with any planned method statement agreed with the MMO in consultation with Historic England.

85. The results of further marine geoarchaeological assessment will be compiled as an archaeological report consistent with the Model Clauses on reporting and will form part of the project archive (see section 1.9.1).

### 1.9.6 Archaeological Investigations Using Divers and/or ROVs

- 86. The principal objective of diver/ROV investigation will be to further establish the archaeological interest of previously unidentified seabed features seen in the geophysical data in order to inform the strategy of avoidance through revisions to the scheme design.
- 87. It is possible that certainty of the nature and extent of individual anomalies (A2s) may only be achieved through the use of drop down cameras or diver/ROV survey. Ground truthing may also be required in order to clarify the extent of a site in order to alter (enlarge, reduce, move or remove) AEZs (1.9.3).
- 88. All ground truthing that may be required to inform the construction of Norfolk Vanguard will be carried out in accordance with good practice as set out in the Model Clauses.
- 89. Diver or ROV-based investigations will take place as required and, where the primary objectives are archaeological, operations will be led by archaeologists. However, it may also be possible to combine such surveys with non-archaeological objectives, for identification of UXO for example.
- 90. In order to maximise the potential benefits of any proposed diver or ROV surveys, Norfolk Vanguard Limited will seek archaeological input at the planning stage of any such works. Any such survey specification will be informed by previous stages of the project, including the Norfolk Vanguard ES and assessment of geophysical data so that archaeological considerations can be taken into account. Following the completion of a diver/ROV survey, all data, including video footage, will be reviewed by an archaeological contractor with appropriate expertise.
- 91. A detailed method statement for any archaeological works will be agreed in advance of works commencing with the MMO in consultation with Historic England.





92. The results of diver/ROV assessment will be compiled as an archaeological report consistent with the Model Clauses on reporting and will form part of the project archive (see section 1.9.1).

#### 1.9.7 Archaeological Watching Brief

- 93. Due to the use of long HDD to install cables at the landfall, watching briefs within the intertidal area will not be required.
- 94. In the event that activities are planned which may result in archaeological material being brought to the surface, through clearance operations and pre-lay grapnel runs, for example, on board supervision by a suitably qualified and experienced archaeologist may be required.
- 95. The approach to any archaeological watching brief which may be required will be agreed with the MMO in consultation with Historic England. If areas subject to clearance are considered of medium or high archaeological importance, on board monitoring may be considered necessary to ensure appropriate consideration of archaeological material brought to the surface. In areas of low archaeological importance any material brought to the surface will be dealt with through the Protocol for Archaeological Discoveries (see section 1.10).
- 96. If required, the methodology for onboard watching briefs and/or monitoring will be set out in a method statement to be agreed in advance of works commencing with the MMO in consultation with Historic England and in accordance with the Model Clauses.

### 1.10 Archaeological Recording Protocol

- 97. In order to account for unexpected discoveries of archaeological material during construction, operation and decommissioning a formal protocol will be required. It is recommended that if any objects of possible archaeological interest are encountered, that they should be reported using the established Protocol for Archaeological Discoveries: Offshore Renewables Projects (The Crown Estate, 2014) (ORPAD). This will establish whether the objects are of archaeological interest and recommend appropriate mitigation measures where necessary.
- 98. Activities during which previously unidentified sites or unexpected discoveries of material may be encountered include:
  - Pre-construction surveys, for example:
    - Anomalies on the seabed identified by geophysical contractors;
    - Obstructions on the seabed encountered during geotechnical surveys or grab sampling;





- archaeological material within cores or grab samples; and
- Seabed features identified during diver or ROV surveys.
- Seabed clearance, pre-lay grapnel runs (e.g. finds brought to the surface);
- Vessel anchoring (e.g. anchor caught on obstruction);
- Installation of the export cables (e.g. obstruction interactions with plough); and
- Installation of wind turbine foundations (e.g. obstruction interactions with jackup legs).
- 99. ORPAD came into effect in December 2010 and applies to pre-construction, construction and installation activities in developing offshore renewable energy schemes where an archaeologist is not present on site. The protocol allows for the effective reporting of discoveries of archaeological material in order to ensure that advice, concerning measures to address discoveries, is received, and implemented, in a timely and efficient manner.
- 100. Each vessel or worksite team has a Site Champion, a single person who is responsible for reporting discoveries to a Nominated Contact within the Developer's core team. The Nominated Contact uploads discoveries onto a secure web portal and the Implementation Service is alerted to the presence of new discoveries. The Crown Estate provides for the reporting and assessment of discoveries through the ORPAD Implementation Service, currently maintained by Wessex Archaeology.
- 101. Individual Site Champions for specific activities will be specified in work package method statements and the identity of the Site Champion will be clearly communicated to work teams, via pre-commencement briefings for example.
- 102. Norfolk Vanguard Limited will be responsible for ensuring that teams are provided with appropriate training in the application of ORPAD and that all staff and contractors are aware of their responsibilities under the protocol. The ORPAD documentation, including a full description of the methodology and requirements for implementing the protocol, can be found via the following web link:
  - http://www.thecrownestate.co.uk/media/148964/ei-protocol-forarchaeological-discoveries-offshore-renewables-projects.pdf
- 103. Training to construction staff, site crews and work teams with regard to the practical application of the protocol in their day to day work can be provided by the Implementation Service or by an alternative sufficiently experienced and qualified archaeological contractor. Hard copies of the ORPAD document will be made available for use on board the construction vessels.
- 104. Provision will be made by Norfolk Vanguard Limited, in accordance with ORPAD, for the prompt reporting/recording to Historic England of archaeological remains





encountered or suspected during works. If the find is a wreck within the meaning of the Merchant Shipping Act (1996) then a report will also be made to the Receiver of Wreck. If the find is treasure within the meaning of the Treasure Act (1996) then a report will also be made to the Coroner.

105. Following completion of the construction phase, a report will be prepared presenting the results of the ORPAD implementation during activities and submitted to the MMO within four months. In the event that no discoveries are made, a nil discoveries report should be compiled in order to demonstrate adherence to the scheme.

## 1.11 Monitoring

- 106. Monitoring requirements are anticipated to comprise:
  - Monitoring of the final Offshore WSI by the retained archaeologist in order to ensure that the scheme of investigation is appropriate to the scheme design;
  - Monitoring of archaeological works by the archaeological curators, including monitoring of the effectiveness of AEZs; and
  - Monitoring during and post construction, including a conservation programme for finds (see section 1.9.2).
- 107. The performance of the final Offshore WSI will be monitored during the course of the pre-construction phase and the contents of the final Offshore WSI will be reviewed and updated as necessary prior to construction in order to inform a construction phase document specific to the final design. Provision will also be made for the final Offshore WSI to be revised as appropriate should elements of the project change or particular archaeological issues come to light. Any revisions will be prepared by the retained archaeologist and submitted by Norfolk Vanguard Limited, or their agents to the MMO for approval in consultation with Historic England.
- 108. All reports prepared for each package of archaeological works will be disseminated to MMO and Historic England by Norfolk Vanguard Limited, or their agents, so that the results can be reviewed and any concerns addressed. All survey reports undertaken for the purposes of archaeological evaluation will be submitted to the MMO and Historic England within a specified timescale of the survey being completed to be agreed with the regulator.
- 109. Historic England and the MMO will be notified in advance by Norfolk Vanguard Limited or their agents of the commencement of work timetables and the commencement of any work on site that may have an impact on archaeology, and will be informed at this time of the name and contact details for the retained archaeologist. During any site evaluation/investigation or construction work that has





the potential to impact archaeological remains the retained archaeologist may liaise directly with Historic England with regard to site monitoring and reporting only after prior reference to Norfolk Vanguard Limited. Norfolk Vanguard Limited will be kept informed of all contact between the retained archaeologist and the archaeological curators.

- 110. In order to monitor the effectiveness of AEZs, periodic archaeological reports will be prepared by Norfolk Vanguard Limited, or by the retained archaeologist on behalf of Norfolk Vanguard Limited, to review whether there have been any incursions into each zone and whether there are still archaeological grounds for maintaining each zone. The frequency of such reports will be agreed with the MMO in consultation with Historic England, but may include reports at the conclusion of key construction phases and a post-construction monitoring report, including an archaeological assessment of post-construction geophysical survey data. If it becomes apparent that activities have encroached upon an AEZ, Norfolk Vanguard Limited will seek advice from the retained archaeologist.
- 111. A post-construction monitoring report including the archaeological assessment of post-construction geophysical survey data relative to the baseline data will also assess the effects of any indirect impacts that may have occurred to heritage assets as a result of the wind farm construction. Based on the results of the initial post-construction review, any further requirements during the operation phase will be agreed in consultation with Historic England. Further monitoring may only be necessary if significant changes to coastal and/or offshore processes are identified or if new information relevant to the integrity of archaeologically important items comes to light.

#### 1.12 References

Chartered Institute for Archaeologists (2014a) Standards and guidance for an archaeological watching brief. Available at URL:

http://www.archaeologists.net/sites/default/files/CIfAS&GWatchingbrief\_2.pdf.

Chartered Institute for Archaeologists (2014b) Standards and guidance for the creation, compilation, transfer and deposition of archaeological archives. Available at URL: http://www.archaeologists.net/sites/default/files/CIFAS&GArchives\_2.pdf.

Chartered Institute for Archaeologists (2014c) Standards and guidance for the collection, documentation, conservation and research of archaeological materials. Available at URL: http://www.archaeologists.net/sites/default/files/CIfAS&GFinds 1.pdf.

Chartered Institute for Archaeologists (2017) Updated Guidelines to the Standards for Recording Human Remains. Available at URL:





https://www.archaeologists.net/sites/default/files/14\_Updated%20Guidelines%20to%20the%20Standards%20for%20Recording%20Human%20Remains%20digital.pdf.

Gribble, J. and Leather, S. (2011) Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector. Guidance prepared by Emu and issued by COWRIE. Available at URL:

http://www.thecrownestate.co.uk/media/5901/km-ex-pc-historic-012011-offshore-geotechnical-investigations-and-historic-environment-analysis-guidance-for-the-renewable-energy-sector.pdf

Historic England (2007) Geoarchaeology: using earth sciences to understand the archaeological record. Guidance prepared for Historic England. Available at URL: https://content.historicengland.org.uk/images-books/publications/geoarchaeology-earth-sciences-to-understand-archaeological-record/heag067-geoarchaeology.pdf/

Historic England (2011) Environmental Archaeology: A Guide to the theory and practice of methods, from sampling and recovery to post-excavation. Guidance prepared for Historic England. Available at URL: https://content.historicengland.org.uk/images-books/publications/environmental-archaeology-2nd/environmental-archaeology-2nd.pdf/

Institute of Conservation (1984) Environmental Guidelines for the Permanent Storage of Excavated Material from Archaeological Sites, Conservation Guidelines No. 3, ICON.

JNAPC (2006) Code for Practice for Seabed Development. Available at URL: http://www.jnapc.org.uk/jnapc\_brochure\_may\_2006.pdf

Plets R., Dix J. and Bates R. (2013) Marine Geophysical Data Acquisition, Processing and Interpretation – guidance notes. Guidance prepared for Historic England (English Heritage). Available at URL: https://content.historicengland.org.uk/images-books/publications/marine-geophysics-data-acquisition-processing-interpretation/MGDAPAI-guidance-notes.pdf/

Robinson, W. (1998) First Aid for Underwater Finds. Archetype Publications Ltd.

The Crown Estate (2010) Model Clauses for Archaeological Written Schemes of Investigation: Offshore Renewables Projects. Guidance prepared by Wessex Archaeology and issued by The Crown Estate. Available at URL:

http://www.thecrownestate.co.uk/media/5514/model-clauses-for-archaeological-written-schemes-of-investigation.pdf

The Crown Estate (2014) Protocol for Archaeological Discoveries: Offshore Renewables Projects. Prepared by Wessex Archaeology for The Crown Estate. Available at URL: http://www.wessexarch.co.uk/system/files/PAD%20Offshore%20Renewables\_reduced.pdf# sthash.xKUFBPAH.dpuf





Walker, K. (1990) Guidelines for the preparation of excavation archives for long-term storage, ICON.

Wessex Archaeology (2007) Historic Environment Guidance for the Offshore Renewable Energy Sector. Guidance prepared by Wessex Archaeology and issued by COWRIE. Available at URL: http://www.thecrownestate.co.uk/media/5876/km-ex-pc-historic-012007-historic-environment-guidance-for-the-offshore-renewable-energy-sector.pdf





# **APPENDIX 1: GAZETTEER OF PALAEOLANDSCAPE FEATURES**

WA ID	Classification	Archaeological Discrimination	Description	Age
NV East				
			Broad, approximately NNW-SSE trending, unit below the base of BNB Formation (Unit 5), appears to	
			be the fill of a large topographically controlled depression. Relatively low relief basal reflector with	
75000	Infilled	P2	single phase of fill characterised by sub-parallel internal reflectors. Feature acoustically blanked	Ipswichian or
75000	Depression	1 2	(probably by shallow gas) along its western edge so exact extent unknown, although it is likely to be	Devensian
			part of feature 75003. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4).	
			Depth Range: 4.1m - 31.9m BSB.	
	Acoustic		Small area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and	
75001	Blanking	P2	indicative of organic material within the sediment. Only identified on one survey line. Depth Range:	Devensian
	Dialikilig		11.6m - 11.7m BSB.	
	Acoustic		Extensive, approximately NNW-SSE trending area of acoustic blanking within BNB Formation (Unit 5),	
75002	Blanking	P2	probably caused by shallow gas and indicative of organic material within the sediment. Depth Range:	Devensian
			3.5m - 26.3m BSB.	
			Broad, approximately NNW-SSE trending, unit below the base of BNB Formation (Unit 5), appears to	
			be the fill of a large topographically controlled depression. Relatively low relief basal reflector with	
75003	Infilled	P2	single phase of fill characterised by sub-parallel internal reflectors. Feature acoustically blanked	Devensian
73003	Depression	ΓZ	(probably by shallow gas) along its eastern edge so exact extent unknown, although it is likely to be	Devensian
			part of feature 75000. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4).	
			Depth Range: 7.5m - 26.8m BSB.	
	Acoustic		Extensive, approximately NNW-SSE trending area of acoustic blanking within BNB Formation (Unit 5),	
75004	Blanking	P2	probably caused by shallow gas and indicative of organic material within the sediment. Depth Range:	Devensian
	Didriking		3.5m - 26.3m BSB.	
75005	Acoustic	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and	Devensian
7 3003	Blanking	1 <b>4</b>	indicative of organic material within the sediment. Depth Range: 6.7m - 7.9m BSB.	Devension
75006	Acoustic	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and	Devensian
75000	Blanking	1 4	indicative of organic material within the sediment. Depth Range: 7.8m - 12.3m BSB.	Devension





WA ID	Classification	Archaeological Discrimination	Description	Age
75007	Acoustic Blanking	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and indicative of organic material within the sediment. Depth Range: 7.1m - 10.1m BSB.	Devensian
75008	Acoustic Blanking	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and indicative of organic material within the sediment. Only identified on one survey line. Depth Range: 8.9m - 9.7m BSB.	Devensian
75009	Infilled Depression	P2	Broad unit below the base of BNB Formation (Unit 5), appears to be the fill of a large topographically controlled depression. Relatively low relief basal reflector with single phase of fill characterised by poorly defined sub-parallel internal reflectors. Possible second phase of acoustically unstructured fill in some areas, though this is unclear. Unit is acoustically blanked (probably by gas) along its eastern edge, and so extent is unknown. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Depth Range: 8.6m - 25.5m BSB.	lpswichian or Devensian
75010	Acoustic Blanking	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and indicative of organic material within the sediment. Depth Range: 7.6m - 11.7m BSB.	Devensian
75011	Infilled Depression	P2	Broad, approximately NNW-SSE trending, unit below the base of BNB Formation (Unit 5), appears to be the fill of a large topographically controlled depression. Relatively low relief basal reflector with single phase of fill characterised by poorly defined sub-parallel internal reflectors. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Depth Range: 6.8m - 18.0m BSB.	Ipswichian or Devensian
75012	Acoustic Blanking	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and indicative of organic material within the sediment. Only identified on a single survey line. Depth Range: 10.3m - 11.1m BSB.	Devensian
75013	Acoustic Blanking	P2	Area of acoustic blanking within BNB Formation (Unit 5), probably caused by shallow gas and indicative of organic material within the sediment. Only identified on a single survey line. Depth Range: 9.8m - 11.0m BSB.	Devensian
75014	High Amplitude Reflector	P1	Area of intermittent high amplitude reflectors, possibly within YM Formation (Unit 2) although this is unclear. Possibly indicative of preserved organic material. Depth Range: 13.7m - 19.0m BSB.	Pre-Anglian





WA ID	Classification	Archaeological Discrimination	Description	Age
75015	Infilled Depression	P2	Broad unit below the base of BNB Formation (Unit 5), appears to be the fill of a large topographically controlled depression. Relatively low relief basal reflector with single phase of fill characterised by poorly defined sub-parallel internal reflectors. Possible second phase of acoustically unstructured fill in some areas, though this is unclear. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Depth Range: 6.2m - 38.9m BSB.	lpswichian or Devensian
75016	Infilled Depression	P2	Unit below the base of BNB Formation (Unit 5), appears to be the fill of a topographically controlled depression. Characterised by a single phase of fill characterised by numerous sub-parallel internal reflectors. Unit not definitely known, but could be EE or an early deposit of BNB (Unit 4). Depth Range: 5.7m - 10.7m BSB.	Ipswichian or Devensian
75017	Infilled Depression	P2	Unit below the base of BNB Formation (Unit 5), appears to be the fill of a large topographically controlled depression. Relatively low relief basal reflector with single phase of fill characterised by poorly defined sub-parallel internal reflectors. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Present within both NV East and the ECR. Depth Range: 6.1m - 13.6m BSB.	lpswichian or Devensian
NV West				
75018	High Amplitude Reflector	P1	Extensive, relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Feature is occasionally cut/disrupted by cut and fill features, particularly channel 75021. Peat recovered from vibrocore VC088 suggest this represents a buried land surface (Unit 7). Depth Range: 0.8 - 5.8m BSB.	Holocene (Pre- Transgression)
75019	Simple Cut and Fill	P2	Small, relatively poorly defined possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of fill, with relative strong basal reflector. Possible remains of a fluvial feature associated with the same surface as high amplitude reflector 75018 (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth Range: 2.0 - 3.1m BSB.	Holocene (Pre- Transgression)
75020	Simple Cut and Fill	P2	Small, relatively poorly defined possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of fill, with poorly defined basal reflector. Possible remains of a fluvial feature associated with the same surface as high amplitude reflector 75018 (Unit 7), although could be an internal reflector. Depth range: 4.0 - 7.0m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75021	Channel	P1	Relatively small but distinct channel feature cut into the BNB Formation (Unit 5), identified on a number of survey lines. Relatively poorly defined basal reflector, with a single phase of acoustically chaotic fill. Possible fluvial feature, possibly associated with channel 75025 and the same surface as high amplitude reflectors 75018, 75023 and 75022 (Unit 7). Depth Range: 1.5 - 6.5m BSB.	Holocene (Pre- Transgression)
75022	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Feature is cut/disrupted by channel 75021. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 2.1 - 4.2m BSB.	Holocene (Pre- Transgression)
75023	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Feature is cut/disrupted by channel 75021. Peat recovered from vibrocore VC085 suggest this represents a buried land surface (Unit 7). Depth Range: 1.6 - 3.8m BSB.	Holocene (Pre- Transgression)
75024	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Feature is cut/disrupted by channel 75025. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 0.8 - 3.0m BSB.	Holocene (Pre- Transgression)
75025	Channel	P1	Relatively small but distinct channel feature cut into the BNB Formation (Unit 5), identified on a number of survey lines. Relatively poorly defined basal reflector, with a single phase of acoustically chaotic fill. Possible fluvial feature, possibly associated with channel 75021 and the same surface as high amplitude reflector 75024 (Unit 7). Depth Range: 1.6 - 6.7m BSB.	Holocene (Pre- Transgression)
75026	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line, but probably related to similar feature 75028. Feature is cut/disrupted by cut and fill feature 75027. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 2.4 - 3.8m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75027	Simple Cut and Fill	P2	Small, relatively poorly defined possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of fill, with relative strong basal reflector. Possible remains of a fluvial feature associated with the same surface as high amplitude reflectors 75028 and 75026 (Unit 7), although could be an internal reflector. Identified on two survey lines. Depth Range: 1.6 - 5.4m BSB.	Holocene (Pre- Transgression)
75028	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Feature is cut/disrupted by cut and fill feature 75027. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 1.6 - 5.4m BSB.	Holocene (Pre- Transgression)
75029	High Amplitude Reflector	P1	Extensive, relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on numerous survey lines. Feature is intermittent in places, but closely spaced anomalies have been grouped together. Feature is occasionally cut/disrupted by cut and fills, particularly channels 75035 and 75038. Peat recovered from vibrocores VC075, VC076, and VC080, plus roots recovered from vibrocore VC081, suggest this represents a buried land surface (Unit 7). Depth Range: 0.6 - 10.5m BSB.	Holocene (Pre- Transgression)
75030	Simple Cut and Fill	P2	Small, possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of layered fill, with a well defined basal reflector. Possible remains of a fluvial feature associated with the same surface as high amplitude reflector 75029 (Unit 7), although could be an internal reflector. Depth range: 2.5 - 3.8m BSB.	Holocene (Pre- Transgression)
75031	Simple Cut and Fill	P2	Small, possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of layered fill, with a well defined basal reflector. Possible remains of a fluvial feature, possibly associated with the same surface as high amplitude reflector 75029 (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth range: 3.6 - 4.8m BSB.	Holocene (Pre- Transgression)
75032	Simple Cut and Fill	P2	Possible cut and fill feature cut into BNB Formation (Unit 5). Relatively poorly defined basal reflector with single phase of acoustically layered fill. Possible remnants of a fluvial feature, possibly associated with the same surface as high amplitude reflector 75029 (Unit 7), although could be an internal feature. Depth Range: 3.2 - 7.9m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75033	Simple Cut and Fill	P2	Distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line. Distinct basal reflector with a single phase of acoustically structured fill. Possible remnants of a fluvial channel, possibly relating to the same surface as high amplitude reflector 75029 (Unit 7). Depth Range: 1.6 - 5.2m BSB.	Holocene (Pre- Transgression)
75034	Simple Cut and Fill	P2	Distinct cut and fill feature cut into BNB Formation (Unit 5). Distinct basal reflector with a single phase of acoustically structured fill. Possible remnants of a fluvial channel, possibly relating to the same surface as high amplitude reflector 75029 (Unit 7). Depth Range: 1.5 - 8.4m BSB.	Holocene (Pre- Transgression)
75035	Channel	P1	Distinct channel feature cut into BNB Formation (Unit 5), identified on a number of survey lines.  Poorly defined basal reflector with a single phases of acoustically layered fill. Possible fluvial feature, possibly associated with the same surface as high amplitude reflector 75029 (Unit 7). Depth Range: 2.4 - 13.0m BSB.	Holocene (Pre- Transgression)
75036	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Feature is cut/disrupted by channel 75035. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 1.3 - 6.4m BSB.	Holocene (Pre- Transgression)
75037	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.3 - 4.5m BSB.	Holocene (Pre- Transgression)
75038	Channel	P1	Distinct channel feature cut into BNB Formation (Unit 5), identified on a number of survey lines. Poorly defined basal reflector with a single phases of acoustically layered fill. Possible fluvial feature, possibly associated with the same surface as high amplitude reflectors 75029 and 75039 (Unit 7). Depth Range: 1.3 - 7.7m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75039	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Feature is cut/disrupted by channel 75038. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 4.2m BSB.	Holocene (Pre- Transgression)
75040	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 2.7m BSB.	Holocene (Pre- Transgression)
75041	Simple Cut and Fill	P2	Distinct cut and fill feature cut into BNB Formation (Unit 5). Distinct basal reflector with a single phase of acoustically structured fill. Possible remnants of a fluvial channel, possibly relating to the same surface as high amplitude reflector 75029 (Unit 7). Depth Range: 4.7 - 8.7m BSB.	Holocene (Pre- Transgression)
75042	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Feature is cut/disrupted by cut and fill 75043. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 3.3 - 4.2m BSB.	Holocene (Pre- Transgression)
75043	Simple Cut and Fill	P2	Possible cut and fill feature cut into BNB Formation (Unit 5). Relatively poorly defined basal reflector with single phase of unstructured fill. Possible remnants of a fluvial feature, possibly associated with the same surface as high amplitude reflector 75029 (Unit 7), although could be an internal reflector. Depth Range: 4.2 - 6.6m BSB.	Holocene (Pre- Transgression)
75044	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.8 - 4.2m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75045	Channel	P1	Possible channel feature cut into BNB Formation (Unit 5), identified on a number of survey lines. Relatively poorly defined basal reflector, with a single phase of acoustically layered fill. Possible buried fluvial feature (Unit 7). Depth Range: 1.6 - 9.0m BSB.	Holocene (Pre- Transgression)
75046	Simple Cut and Fill	P2	Small, possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of layered fill, with a well defined basal reflector. Possible remains of a fluvial feature (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth range: 1.4 - 3.4m BSB.	Holocene (Pre- Transgression)
75047	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.0 - 3.8m BSB.	Holocene (Pre- Transgression)
75048	Simple Cut and Fill	P2	Small, possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of layered fill, with a well defined basal reflector. Possible remains of a fluvial feature (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth range: 2.4 - 4.6m BSB.	Holocene (Pre- Transgression)
75049	Simple Cut and Fill	P2	Small, possible cut and fill feature cut into BNB Formation (Unit 5). Single phase of layered fill, with a well defined basal reflector. Possible remains of a fluvial feature (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth range: 1.4 - 2.8m BSB.	Holocene (Pre- Transgression)
75050	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.4 - 2.3m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75051	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.1 - 3.9m BSB.	Holocene (Pre- Transgression)
75052	Acoustic Blanking	P2	Irregular area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth Range: 2.3 - 4.8m BSB.	Holocene (Pre- Transgression)
75053	Simple Cut and Fill	P2	Possible poorly defined cut and fill feature cut into BNB Formation (Unit 5). Poorly defined basal reflector with single phase of acoustically transparent fill. Possible remnant fluvial feature, possibly associated with the same surface as high amplitude reflector 75054 (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth Range: 2.9 - 4.6m BSB.	Holocene (Pre- Transgression)
75054	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Feature is cut/disrupted by cut and fill 75053. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.5 - 4.2m BSB.	Holocene (Pre- Transgression)
75055	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by possible poorly developed dune features, suggesting a significant time of exposure.  Possible buried land surface. Depth Range: 3.3 - 9.3m BSB.	Devensian
75056	Acoustic Blanking	P2	Area of acoustic blanking within the lower layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material. Identified on more than one survey line. Depth Range: 9.9 - 12.4m BSB.	Devensian





WA ID	Classification	Archaeological Discrimination	Description	Age
75057	Acoustic Blanking	P2	Small area of acoustic blanking within the lower layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material. Only identified on one survey line. Depth Range: 11.2 - 11.9m BSB.	Devensian
75058	Simple Cut and Fill	P2	Relatively poorly defined cut and fill feature cut into BNB Formation (Unit 5), identified on more than one survey line. Intermittent basal reflector with a single phase of acoustically unstructured fill. Possible remnants of a fluvial system, possibly related to the same surface as high amplitude reflector 75029 (Unit 7). Depth Range: 2.4 - 6.3m BSB.	Holocene (Pre- Transgression)
75059	Simple Cut and Fill	P2	Possible poorly defined cut and fill feature cut into BNB Formation (Unit 5). Poorly defined basal reflector with single phase of acoustically transparent fill. Possible remnant fluvial feature, possibly associated with the same surface as high amplitude reflector 75029 (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth Range: 3.6 -6.8m BSB.	Holocene (Pre- Transgression)
75060	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Feature is cut/disrupted by channel 75061. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.2 - 5.6m BSB.	Holocene (Pre- Transgression)
75061	Channel	P1	Small but distinct channel feature cut into BNB Formation (Unit 5), identified on a number of survey lines. Generally well defined basal reflector with a single phases of acoustically transparent fill. Possible buried fluvial feature, possibly associated with the same surface as high amplitude reflector 75060 (Unit 7). Depth Range: 1.3 - 4.4m BSB.	Holocene (Pre- Transgression)
75062	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth Range: 2.2 - 2.8m BSB.	Devensian





WA ID	Classification	Archaeological Discrimination	Description	Age
75063	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 2.6m BSB.	Holocene (Pre- Transgression)
75064	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth Range: 2.0 - 2.9m BSB.	Devensian
75065	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5), identified on a number of survey lines. Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth Range: 1.6 - 3.2m BSB.	Devensian
75066	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth Range: 2.0 - 2.5m BSB.	Devensian
75067	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.4 - 2.5m BSB.	Holocene (Pre- Transgression)
75068	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.2 - 1.9m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75069	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth Range: 1.2 - 1.4m BSB.	Devensian
75070	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 1.7m BSB.	Holocene (Pre- Transgression)
75071	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 0.9m BSB.	Holocene (Pre- Transgression)
75072	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.9m BSB.	Holocene (Pre- Transgression)
75073	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.3 - 2.8m BSB.	Holocene (Pre- Transgression)
75074	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth Range: 3.6 - 4.1m BSB.	Devensian





WA ID	Classification	Archaeological Discrimination	Description	Age
75075	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.0 - 3.6m BSB.	Holocene (Pre- Transgression)
75076	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on more than one survey line. Feature is cut/disrupted by cut and fill feature 75077. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 1.6 - 5.4m BSB.	Holocene (Pre- Transgression)
75077	Channel	P1	Distinct channel feature cut into BNB Formation (Unit 5), identified on more than one survey line. Poorly defined basal reflector with a single phase of acoustically layered fill. Possible fluvial feature, possibly associated with the same surface as high amplitude reflectors 75076 and 75078 (Unit 7). Depth Range: 2.0 - 8.8m BSB.	Holocene (Pre- Transgression)
75078	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on more than one survey line. Feature is cut/disrupted by cut and fill feature 75077. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 1.3 - 3.8m BSB.	Holocene (Pre- Transgression)
75079	Simple Cut and Fill	P2	Distinct cut and fill feature cut into BNB Formation (Unit 5). Distinct basal reflector with a single phase of acoustically structured fill. Possible remnants of a fluvial channe (Unit 7), although only identified on one survey line. Depth Range: 2.0 - 6.5m BSB.	Holocene (Pre- Transgression)
75080	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 1.2 - 4.6m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75081	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by possible poorly developed dune features, suggesting a significant time of exposure.  Possible buried land surface (Unit 7). Depth Range: 2.7 - 5.0m BSB.	Devensian
75082	High Amplitude Reflector	P1	Relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)), identified on a number of survey lines. Peat recovered from within similar features suggest this represents a buried land surface (Unit 7). Depth Range: 1.5 - 3.3m BSB.	Holocene (Pre- Transgression)
75083	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 2.5m BSB.	Holocene (Pre- Transgression)
75084	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line, and located at the edge of the area. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.3 - 2.0m BSB.	Holocene (Pre- Transgression)
75085	Simple Cut and Fill	P2	Small but distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line. Distinct basal reflector with single phase of acoustically layered fill. Possible remnants of a fluvial system (Unit 7). Depth Range: 2.6 - 3.8m BSB.	Holocene (Pre- Transgression)
75086	Simple Cut and Fill	P2	Small but distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line. Distinct basal reflector with single phase of acoustically layered fill. Possible remnants of a fluvial system (Unit 7). Depth Range: 2.0 - 4.8m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75087	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line, and reflector extends over the top of cut and fill features 75085 and 75087. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.0 - 3.3m BSB.	Holocene (Pre- Transgression)
75088	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.6 - 3.2m BSB.	Holocene (Pre- Transgression)
75089	High Amplitude Reflector	P1	Area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line, and reflector is situated partially on top of channel feature 75092. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 2.8m BSB.	Holocene (Pre- Transgression)
75090	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.6 - 2.5m BSB.	Holocene (Pre- Transgression)
75091	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 0.8 - 1.7m BSB.	Holocene (Pre- Transgression)
75092	Channel	P1	Small but distinct channel feature cut into BNB Formation (Unit 5), identified on a number of survey lines. Generally well defined basal reflector with a single phase of acoustically transparent fill.  Possible buried fluvial feature (Unit 7). Depth Range: 1.3 - 4.8m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75093	High Amplitude Reflector	P1	Area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line, and reflector is situated partially on top of channel feature 75092. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.7 - 3.2m BSB.	Holocene (Pre- Transgression)
75094	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line, but is close to the edge of channel 75092. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.0 - 1.2m BSB.	Holocene (Pre- Transgression)
75095	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.2 - 2.3m BSB.	Holocene (Pre- Transgression)
75096	Simple Cut and Fill	P2	Small but distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line. Distinct basal reflector with single phase of acoustically layered fill. Possible remnants of a fluvial system (Unit 7). Depth Range: 1.7 - 4.4m BSB.	Holocene (Pre- Transgression)
75097	Simple Cut and Fill	P2	Possible poorly defined cut and fill feature cut into BNB Formation (Unit 5). Poorly defined basal reflector with single phase of acoustically transparent fill. Possible remnant fluvial feature (Unit 7), although could be an internal reflector. Only identified on one survey line. Depth Range: 1.8 - 4.8m BSB.	Holocene (Pre- Transgression)
75098	Simple Cut and Fill	P2	Small but distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line. Distinct basal reflector with single phase of acoustically layered fill. Possible remnants of a fluvial system (Unit 7), although could be an internal BNB feature. Depth Range: 1.4 - 7.2m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75099	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line. Overlain by large, well-developed dune features, suggesting a significant time of exposure. Possible buried land surface. Depth Range: 3.0 - 7.9m BSB.	Devensian
75100	Acoustic Blanking	P2	Long, but relatively narrow, area of acoustic blanking within the upper layers of BNB Formation (Unit 5), identified on a number of survey lines. Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer or erosion surface. Appears to be associated with channels 75103 and 66046. Depth Range: 1.5 - 4.9m BSB.	Devensian
75101	Simple Cut and Fill	P2	Possible poorly defined cut and fill feature cut into BNB Formation (Unit 5). Poorly defined basal reflector with single phase of acoustically transparent fill. Possible remnant fluvial feature (Unit 7), although could be an internal reflector. Depth Range: 1.7 -4.2m BSB.	Holocene (Pre- Transgression)
75102	Simple Cut and Fill	P2	Poorly defined cut and fill feature, cut through the BNB Formation (Unit 5) and into the underlying YM Formation (Unit 2). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure and YM/BNB boundary reflector. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Only identified on one survey line. Possible remnants of a fluvial system (Unit 7). Depth Range: 1.4 - 7.3m BSB.	Holocene (Pre- Transgression)
75103	Channel	P1	Poorly defined channel feature (Unit 7) identified on a number of survey lines, cut through BNB Formation (Unit 5) and into the underlying YM Formation (Unit 2). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure and YM/BNB boundary reflector. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Depth Range: 1.3 - 6.1m BSB.	Holocene (Pre- Transgression)
75104	Simple Cut and Fill	P2	Shallow, possible cut and fill feature cut into BNB Formation (Unit 5), although only identified on one survey line. Strong, well defined basal reflector with single phase of unstructured fill. Possible remnants of an eroded fluvial system (Unit 7), although is located in an area of shallow gas and so may be associated. Depth Range: 0.8 - 3.7m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75105	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.2 - 1.7m BSB.	Holocene (Pre- Transgression)
75106	High Amplitude Reflector	P1	Area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on more than one survey line. Feature is cut/disrupted by cut and fills 75107 and 75108, and partially overlaps possible shallow gas 75100. Peat recovered from within similar features suggest it could be an area of buried land surface (Unit 7). Depth Range: 0.5 - 3.4m BSB.	Holocene (Pre- Transgression)
75107	Simple Cut and Fill	P2	Shallow, possible cut and fill feature cut into BNB Formation (Unit 5), identified on more than one survey line. Strong, well defined basal reflector with single phase of unstructured fill. Possible remnants of an eroded fluvial system (Unit 7), although is located in an area of shallow gas and so may be associated. Depth Range: 0.8 - 2.6m BSB.	Holocene (Pre- Transgression)
75108	Simple Cut and Fill	P2	Shallow, possible cut and fill feature cut into BNB Formation (Unit 5), although only identified on one survey line. Strong, well defined basal reflector with single phase of unstructured fill. Possible remnants of an eroded fluvial system (Unit 7), although is located in an area of shallow gas and so may be associated. Depth Range: 1.2 - 2.7m BSB.	Holocene (Pre- Transgression)
75109	Simple Cut and Fill	P2	Small but distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line. Distinct basal reflector with single phase of acoustically layered fill. Possible remnants of a fluvial system (Unit 7). Depth Range: 1.7 - 4.4m BSB.	Holocene (Pre- Transgression)
75110	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer or erosion surface. Appears to be associated with channel 75112. Only identified on one survey line. Depth Range: 2.7 - 3.2m BSB.	Devensian





WA ID	Classification	Archaeological Discrimination	Description	Age
75111	Simple Cut and Fill	P2	Possible poorly defined cut and fill feature cut into BNB Formation (Unit 5), only identified on one survey lines. Very poorly defined basal reflector with single phase of acoustically transparent fill. Possible remnants of an eroded fluvial system (Unit 7). Depth Range: 2.7 - 5.2m BSB.	Holocene (Pre- Transgression)
75112	Channel	P1	Distinct shallow channel feature cut into BNB Formation (Unit 5), identified on a number of survey lines. Well defined basal reflector with a single phase of acoustic unstructured fill, often associated with areas of possible shallow gas within BNB. Possible buried fluvial feature, possibly associated with the same surface as high amplitude reflector 75113 (Unit 7). Depth Range: 1.4 - 5.4m BSB.	Holocene (Pre- Transgression)
75113	High Amplitude Reflector	P1	Extensive area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5) (possibly above a thin layer of TN Formation (Unit 6)). Identified on a number of survey lines, the feature follows the course of, overlies, and extends slightly beyond, channel 75112. Peat recovered from within similar features suggest it could be the remnants of a buried land surface (Unit 7). Depth Range: 1.0 - 3.6m BSB.	Holocene (Pre- Transgression)
75114	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer or erosion surface. Appears to be associated with channel 75112 (Unit 7). Depth Range: 2.4 - 3.8m BSB.	Devensian
75115	Erosion Surface	P1	Extensive internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line. Overlain by large, well-developed dune features, suggesting a significant time of exposure. Possible buried land surface (Unit 7). Depth Range: 1.3 - 9.2m BSB.	Devensian
75116	Simple Cut and Fill	P2	Poorly defined cut and fill feature cut into the BNB Formation (Unit 5), identified on more than one survey line. Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possible remnants of an eroded fluvial system (Unit 7). Depth Range: 2.1 - 8.8m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75117	Simple Cut and Fill	P2	Poorly defined cut and fill feature cut into the BNB Formation (Unit 5), but only identified on one survey line. Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possible remnants of an eroded fluvial system (Unit 7). Depth Range: 1.6 - 6.0m BSB.	Holocene (Pre- Transgression)
75118	Simple Cut and Fill	P2	Poorly defined cut and fill feature cut into the BNB Formation (Unit 5), identified on more than one survey line. Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possible remnants of an eroded fluvial system (Unit 7). Depth Range: 2.2 - 4.7m BSB.	Holocene (Pre- Transgression)
75119	Simple Cut and Fill	P2	Poorly defined cut and fill feature cut into the BNB Formation (Unit 5), but only identified on one survey line. Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possible remnants of an eroded fluvial system (Unit 7). Depth Range: 1.9 - 5.4m BSB.	Holocene (Pre- Transgression)
75120	Simple Cut and Fill	P2	Poorly defined cut and fill feature identified on a number of survey lines, cut through BNB Formation (Unit 5) and into the underlying YM Formation (Unit 2). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure and YM/BNB boundary reflector. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possible remnants of an eroded fluvial feature (Unit 7). Depth Range: 1.4 - 9.5m BSB.	Holocene (Pre- Transgression)
75121	simple Cut and Fill	P2	Poorly defined cut and fill feature only identified on one survey line, cut through BNB Formation (Unit 5) and into the underlying YM Formation (Unit 2). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure and YM/BNB boundary reflector. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possible remnants of an eroded fluvial feature (Unit 7). Depth Range: 2.5 - 6.9m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75122	Channel	P1	Poorly defined channel feature identified on a number of survey lines, cut through BNB Formation (Unit 5) and into the underlying YM Formation (Unit 2). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure and YM/BNB boundary reflector. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possibly related to nearby cut and fill 75123 (Unit 7). Depth Range: 1.6 - 7.3m BSB.	Holocene (Pre- Transgression)
75123	Simple Cut and Fill	P2	Poorly defined cut and fill feature identified on more than one survey line, cut through BNB Formation (Unit 5) and into the underlying YM Formation (Unit 2). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the internal BNB structure and YM/BNB boundary reflector. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined. Possibly related to nearby channel 75122 (Unit 7). Depth Range: 1.4 - 7.3m BSB.	Holocene (Pre- Transgression)
75124	Simple Cut and Fill	P2	Distinct cut and fill feature cut into BNB Formation (Unit 5), but only identified on one survey line.  Distinct basal reflector with a single phase of acoustically layered fill. Possible remnants of a fluvial channel (Unit 7), possibly relating to features 75122 and 75123, although appears slightly higher in the stratigraphy and is different in character, so may be a later phase feature. Depth Range: 0.6 - 3.9m BSB.	Holocene (Pre- Transgression)
75125	Channel	P1	Relatively poorly defined channel feature identified on a number of survey lines, cut into BNB Formation (Unit 5). Very poorly defined basal reflector, but with a relatively strong internal structure characterised by layered reflectors. Possible remains of a fluvial system (Unit 7). Depth Range: 1.6 - 5.8m BSB.	Holocene (Pre- Transgression)
75126	Simple Cut and Fill	P2	Poorly defined cut and fill feature only identified on one survey line, cut into BNB Formation (Unit 5). Poorly defined basal reflector, with a single phase of acoustically transparent fill. Possible remnants of an eroded fluvial feature (Unit 7). Depth Range: 2.0 - 4.3m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75127	Coarse Sediment Deposit	P2	Isolated, possible small coarse sediment deposit at the base of BNB Formation (Unit 5), identified on one survey line only. Possible bank deposit or transgression feature. Depth Range: 5.0 - 6.2m BSB.	Ipswichian or Devensian
Offshore Cable	e Corridor			
75128	Infilled Depression	P2	Broad, approximately NNW-SSE trending, unit below the base of BNB Formation (Unit 5), appears to be the fill of a large topographically controlled depression. Relatively low relief basal reflector with single phase of fill characterised by sub-parallel internal reflectors. Feature appears to extend eastwards into NV East but feature not identified during data interpretation of this area, probably due to differences in data quality. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Depth Range: 7.6m - 12.6m BSB.	Ipswichian or Devensian
75129	Infilled Depression	P2	Approximately WNW-ESE trending unit below the base of BNB Formation (Unit 5), appears to be the fill of a topographically controlled depression. Relatively low relief basal reflector with single phase of fill characterised by sub-parallel internal reflectors. Feature appears to extend eastwards into NV East but feature not identified during data interpretation of this area, probably due to differences in data quality. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Depth Range: 7.5m - 26.8m BSB.	Ipswichian or Devensian
75130	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth range: 2.3 - 2.8m BSB.	Devensian
75131	Channel	P1	Poorly defined channel feature identified on a number of survey lines cutting into BNB Formation (Unit 5). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined, and apparent blanking of underlying data may indicate the presence of diffuse shallow gas. Feature appears to extend eastwards into NV East but feature not identified during data interpretation of this area, probably due to differences in data quality. Depth Range: 1.1 - 3.9m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description	Age
75132	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth range: 1.7 - 2.4m BSB.	Devensian
75133	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth range: 2.0 - 2.3m BSB.	Devensian
75134	Acoustic Blanking	P2	Small area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Only identified on one survey line. Depth range: 2.1 - 2.9m BSB.	Devensian
75135	Simple Cut and Fill	P2	Small, simple cut and fill identified beneath a veneer of Holocene sediment, cut into the top of the BNB Formation (Unit 5). Single phase of fill characterised by closely spaced, subparallel horizons, indicating well layered sediment. Some slight blanking of lower horizons. Feature only identified on one line. Depth range: 1.2 - 6.4m BSB.	Holocene (Pre- Transgression)
75136	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5), identified on more than one survey line. Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth range: 1.6 - 3.9m BSB.	Devensian
75137	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5), identified on more than one survey line. Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth range: 2.1 - 3.6m BSB.	Devensian





WA ID	Classification	Archaeological Discrimination	Description	Age
75138	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5), identified on more than one survey line. Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth range: 2.1 - 3.5m BSB.	Devensian
75139	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5), identified on more than one survey line. Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth range: 1.1 - 6.6m BSB.	Devensian
75140	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5), identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.1 - 3.4m BSB.	Holocene (Pre- Transgression)
75141	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.1 - 3.1m BSB.	Holocene (Pre- Transgression)
75142	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5), identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.9 - 4.5m BSB.	Holocene (Pre- Transgression)
75143	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5), identified on more than one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 3.1 - 5.0m BSB.	Holocene (Pre- Transgression)





WA ID	Classification	Archaeological Discrimination	Description				
75144	Channel	P1	Poorly defined channel feature identified on a number of survey lines cutting into BNB Formation (Unit 5). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined, and apparent blanking of underlying data may indicate the presence of diffuse shallow gas. Depth Range: 0.3 - 7.0m BSB.	Holocene (Pre- Transgression)			
75145	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.5 - 3.8m BSB.	Holocene (Pre- Transgression)			
75146	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 2.0 - 3.4m BSB.	Holocene (Pre- Transgression)			
75147	High Amplitude Reflector	P1	Small area of a relatively flat, high amplitude reflector at the top of the BNB Formation (Unit 5). Only identified on one survey line. Peat recovered from within similar features suggest it could be an isolated area of buried land surface (Unit 7). Depth Range: 1.3 - 5.2m BSB.	Holocene (Pre- Transgression)			
75148	Simple Cut and Fill	P2	Possible simple cut and fill feature identified cutting into the BNB Formation (Unit 5), beneath possible Holocene sediment. Only identified on one survey line. Single phase of acoustically chaotic fill, suggesting well mixed channel fill. Basal reflector very poorly defined. Depth range: 1.0 - 2.6m BSB.	Holocene (Pre- Transgression)			
75149	Simple Cut and Fill	P2	Possible simple cut and fill feature identified cutting into the BNB Formation (Unit 5), beneath possible Holocene sediment. Only identified on one survey line. Single phase of acoustically chaotic fill, suggesting well mixed channel fill. Basal reflector very poorly defined. Depth range: 1.2 - 3.8m BSB.	Holocene (Pre- Transgression)			





WA ID	Classification	Archaeological Discrimination	Description				
75150	Channel	P1	Poorly defined channel feature identified on a number of survey lines cutting into BNB Formation (Unit 5). Very poorly defined basal reflector, and feature is mainly delineated by disruption to the BNB structure. Possible single phase of fill comprising very faint internal reflectors, although the structure cannot be definitively determined, and apparent blanking of underlying data may indicate the presence of diffuse shallow gas. Depth Range: 1.8 - 5.1m BSB.	Holocene (Pre- Transgression)			
75151	Simple Cut and Fill	P2	Possible simple cut and fill feature identified cutting into the BNB Formation (Unit 5), beneath possible Holocene sediment. Only identified on one survey line. Single phase of acoustically chaotic fill, suggesting well mixed channel fill. Basal reflector very poorly defined. Depth range: 1.2 - 3.8m BSB.	Holocene (Pre- Transgression)			
75152	Infilled Depression	P2	Localised unit below the base of BNB Formation (Unit 5), appears to be the fill of a topographically controlled depression. Relatively low relief basal reflector with single phase of acoustically chaotic fill. Unit not definitely known, but possibly EE or an earlier BNB unit (Unit 4). Data from vibrocore VC116 suggests the unit comprises dense sand. Depth Range: 5.1m - 10.3m BSB.	Ipswichian or Devensian			
75153	Channel	P1	Possible channel feature identified cutting into the top of BNB (or possible EE) and YM Formation (Unit 2). Feature has a poorly defined basal reflector and closely spaced, subparallel internal reflectors indicated well layered sediment. Possible remnant fluvial feature. Identified on a number of survey lines. Depth range 1.4 - 10.6m BSB.	Holocene (Pre- Transgression)			
75154	Acoustic Blanking	P2	Area of acoustic blanking within the upper layers of BNB Formation (Unit 5). Possible accumulation of shallow gas, indicating preserved organic material, although could be a localised gravelly layer. Depth Range: 1.1 - 1.9m BSB.	Devensian			
75155	Simple Cut and Fill	P2	Possible, poorly defined cut and fill feature identified cutting into BNB Formation (Unit 5), possibly with more than one phase of fill. Fill is characterised by parallel internal reflectors, with some possible blanking of lower horizon. Basal reflector not particularly distinct. Depth range: 1.3 - 7.7 m BSB.	Holocene (Pre- Transgression)			





WA ID	Classification	Archaeological Discrimination	Description				
75156	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by relatively poorly-developed dune features, suggesting a significant time of exposure.  Possible buried land surface. Depth Range: 4.3 - 11.0m BSB.	Devensian			
75157	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by relatively poorly-developed dune features, suggesting a significant time of exposure.  Possible buried land surface. Depth Range: 4.6 - 9.9m BSB.	Devensian			
75158	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by relatively poorly-developed dune features, suggesting a significant time of exposure.  Possible buried land surface. Depth Range: 7.4 - 12.8m BSB.	Devensian			
75159	Simple Cut and Fill	P2	Possible simple cut and fill feature cut into BNB Formation (Unit 5), identified on more than one survey line. Base of feature not particularly distinct, possibly an internal reflector within the possible BNB or EE Formation (Unit 4) or could be the remnants of an eroded fluvial feature. Depth range: 0.5 - 6.9 m BSB.	Holocene (Pre- Transgression)			
75160	High Amplitude Reflector	P1	High amplitude reflector identified within well layered sediments of interpreted BNB. Some possible blanking of lower horizons. Feature identified on one line. Could indicate shallow gas or a layer of organic material. Depth range: 4.9 - 6.1 m BSB.	Devensian			
75161	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by relatively well-developed dune features, suggesting a significant time of exposure.  Possible buried land surface. Depth Range: 5.3 - 17.6m BSB.	Devensian			





WA ID	Classification	Archaeological Discrimination	Description					
75162	Erosion Surface	P1	Internal erosion surface within the BNB Formation (Unit 5), identified on more than one survey line.  Overlain by relatively well-developed dune features, suggesting a significant time of exposure.  Possible buried land surface. Depth Range: 9.4 - 16.1m BSB.	Devensian				
75163	Simple Cut and Fill	P2	Cut and fill feature identified cutting into top of the BNB Formation (Unit 5). Feature has a distinct, high amplitude base and possible blanking of lower horizons. Feature identified on one line. Possible remnants of an eroded fluvial feature. Depth range: 0.6 - 2.9 m BSB.	Holocene (Pre- Transgression)				
75164	Simple Cut and Fill	P2	Possible cut and fill feature identified cutting into possible EE formation (Unit 4). Poorly defined basal reflector with indistinct fill, and only identified on one line, possible continuation of 75165 however this isn't clear. Depth range: 1.0 - 4.2m BSB.	Post- Ipswichian				
75165	Simple Cut and Fill	P2	Possible cut and fill feature identified cutting into possible EE formation (Unit 4). Poorly defined basal reflector with indistinct fill, and only identified on one line, possible continuation of 75164 however this isn't clear. Depth range: 1.0 - 9.4m BSB.	Post- Ipswichian				
75166	Simple Cut and Fill	P2	Possible small simple cut and fill feature cut into possible WK Formation (Unit 1). Poorly defined basal reflector with indistinct fill, and only identified on one line. Could be an internal reflector. Depth range: 1.0 - 5.8 m BSB.	Unknown				
75167	Complex Cut and Fill	P2	Possible indistinct complex cut and fill feature cutting into the top of the possible WK Formation (Unit 1). Only identified on one line, possible continuation of 75168 however this isn't clear. Depth range: 0.7 - 4.7 m BSB.	Unknown				





WA ID	Classification	Archaeological Discrimination	Description				
75168	Complex Cut and Fill	P2	Possible indistinct complex cut and fill feature cutting into the top of the possible WK Formation (Unit 1). Only identified on one line, possible continuation of 75167 however this isn't clear. Depth range: 0.3 - 3.2 m BSB.	Unknown			
75169	Simple Cut and Fill	P2	Possible small simple cut and fill feature cutting into possible WK Formation (Unit 1). Feature is poorly defined and only identified on one line. Depth range: 0.6 - 2.0 m BSB.	Unknown			
75170	Acoustic Blanking	P2	Indistinct reflector identified in upper unit beneath seabed, possibly WK Formation (Unit 1). Feature not particularly distinct, but some possible blanking/disturbance to lower horizons indicating possible shallow gas accumulation or a localised gravel deposit. Feature only identified on one line. Depth range 1.8 - 3.3 m BSB.	Unknown			





# **APPENDIX 2: GAZETTEER OF SEABED FEATURES**

WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
NV East										
70000	Magnetic	503394	5861745	A2	-	-	-	547	Large asymmetrical dipolar anomaly, no recorded wrecks or obstructions and possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70001	Dark reflector	504907	5861509	A2	0.8	0.5	0.1	-	Approximately oval shaped anomaly with a slight L-shape to it, appears partially buried.	
70002	Magnetic	504689	5861472	A2	-	-	-	20	Distinct dipolar anomaly on ridge of sandwave, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70003	Dark reflector	504173	5861185	A2	3.4	1.3	0	-	Four oval shaped intermittent anomalies, possibly partially buried object.	
70004	Magnetic	503394	5861153	A2	-	-	-	11	Small but distinct dipolar anomaly in an area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70005	Magnetic	502797	5861124	A2	-	-	-	11	Negative monopolar anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
			l	Discrimination		I		(nT)	Distinct division or an experience with the riverse	References
70006	Magnetic	502673	5861066	A2	-	-	-	8	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70007	Magnetic	499082	5861061	A2	-	-	-	8	Dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70008	Magnetic	502893	5860998	A2	-	-	-	123	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70009	Dark reflector	500616	5860788	A2	7.9	5.4	0.3	-	Bathymetric anomaly of a possible mound located in an area of sand ripples with a diamond shaped anomaly measuring 3.1m x 2.7m x 0.7m with scour, possibly piece of debris.	
70010	Dark reflector	500160	5860738	A2	2.5	1.7	0.2	-	Almost triangular shaped anomaly with weak tiny circular anomaly nearby, possibly debris.	
70011	Magnetic	499005	5860571	A2	-	-	-	17	Asymmetrical dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70012	Magnetic	498786	5860491	A2	-	-	-	23	Two anomalies approximatey 25m apart and possibly associated. Stronger is a dipole of 23nT with the weaker a small dipole anomaly of 8nT, in an area of noise. Possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70013	Magnetic	503479	5860359	A2	-	-	-	10	Narrow peaked monopolar positive anomaly but in an area of larger broad anomalies possibly natural in origin.	
70014	Dark reflector	496046	5860324	A2	5.6	0.4	0	-	Thick linear anomaly, possibly partially buried, faint scour trailing off one end.	
70015	Magnetic	503289	5860278	A2	-	-	-	5	Distinct small dipolar anomaly in area of broad dipolar anomalies, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70016	Magnetic	499999	5860245	A2	-	-	-	14	Narrow peaked positive monopolar anomaly, stronger than other anomalies in area that are possibly natural, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70017	Debris	501768	5860169	A2	10.4	3.9	0.7	-	Possible rounded mound located in an area of sand ripples with associated scour on its north-west side visible in the bathymetry data. Complex irregular looking anomaly and weakly contrasting but with a prominent pointed oval shaped shadow with scour. Possibly piece of debris lying on seabed.	
70018	Magnetic	503474	5860142	A2	-	-	-	5	Distinct but weak asymmetrical dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70019	Magnetic	496390	5859947	A2	-	-	-	111	Distinct asymmetric medium dipole anomaly on single line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70020	Rope/chain	498804	5859831	A2	18	0.7	0.1	-	Narrow curvilinear anomaly possibly rope or chain.	
70021	Wreck	496438	5859769	A1	21.5	9.7	0.6	62	Elongated oval shaped area containing several linear crossing dark reflectors showing degrading structure of a wreck partially buried in sediment with two further pieces of debris lying nearby approximately 5.5m x 0.5m and 2m x 0.5m in size. The pieces of debris are both within 10m of the main wreck site. Associated is a very distinct medium sized asymmetric dipole anomaly of 62nT and just to south and possibly associated is a second magnetic small and wide dipole of 19nT suggesting the presence of ferrous material. The wreck is located at the edge of a sandwave in an area of sand ripples.	
70022	Magnetic	497097	5859655	A2	-	-	-	7	Small negative monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70023	Magnetic	505096	5859429	A2	-	-	-	40	Distinct asymmetrical dipolar anomaly, possible piece of ferrous, but located on crest of a sandwave, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70024	Seafloor disturbance	498418	5859302	A2	26	3.7	0.1	19	Elongated oval shaped area in sand ripples containing at least four short crescent-shaped dark reflectors, possibly partially buried objects. Associated are two magnetic anomalies possibly indicating ferrous material within the seafloor disturbance.	
70025	Dark reflector	498638	5859111	A2	3.3	2.3	0	-	Three parallel short linear anomalies, possibly buried debris.	
70026	Magnetic	492881	5859097	A2	-	-	-	26	Small sized dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70027	Magnetic	502666	5858973	A2	-	-	-	20	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location. Slightly to the south of cable visible in magnetic and sidescan sonar data.	
70028	Dark reflector	492537	5858942	A2	10.1	0.8	0.1	-	Two anomalies adjacent to each other which appear partially buried and possibly part of the same feature, a short narrow linear with a subrectangular anomaly.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70029	Magnetic	494668	5858805	A2	-	-	-	36	Small sized negative dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70030	Dark reflector	497304	5858631	A2	2.7	1.8	0.6	-	Triangular shaped anomaly in scour mark and appears partially buried.	
70031	Dark reflector	492935	5858549	A2	3.1	1.6	0.1	-	Sub-rectangular anomaly with shadow only at one end, possibly a piece of debris.	
70032	Magnetic	497868	5858486	A2	-	-	-	32	Distinct small sized dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70033	Seafloor disturbance	497923	5858432	A2	6.9	5.3	0	-	Irregular shaped and complex looking anomaly, possibly debris.	
70034	Magnetic	493082	5858410	A2	-	-	-	49	Small asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70035	Magnetic	492203	5858215	A2	-	-	-	674	Large asymmetric distinct dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70036	Dark reflector	497815	5858202	A2	4.2	1	0.1	-	Wedge shaped anomaly, possibly partially buried.	
70037	Dark reflector	499425	5858175	A2	5.1	0.3	0.1	-	Narrow linear anomaly, possibly piece of debris.	
70038	Seafloor disturbance	494116	5858120	A2	3	2.9	0.5	-	Approximately circular anomaly, possibly second immediately adjacent but difficult to distinguish, appears partially buried.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70039	Magnetic	495993	5858052	A2	-	-	-	31	Small sized positive monopole with weaker asymmetric dipole adjacent, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70040	Seafloor disturbance	491024	5857988	A2	8.7	4.9	0.6	-	Irregular shaped anomaly, mounded area with scour mark, unable to discern any further detail, possibly piece of buried debris. Bathymetry data shows a small depression in an area of sand ripples which corresponds to location of scour, object not visible within it.	
70041	Dark reflector	505466	5857809	A2	4	3.2	0.3	-	Weak approximately rectangular anomaly partially buried in sediment.	
70042	Seafloor disturbance	487240	5857789	A2	17.9	5.7	0.7	-	Strong curvilinear dark reflector, no complex detail suggesting structure seen but large object partially buried in sand ripples. Possibly outline structure of a large object or wreck. In area of mobile sediment and not much more visible.	
70043	Dark reflector	490963	5857598	A2	2	0.5	0.3	-	Short bar shaped anomaly with scour, possibly piece of debris.	
70044	Dark reflector	495647	5857503	A2	15	0.5	0	-	Two anomalies, approximately 15m apart east-west orientation. Smaller is a short narrow linear 5m x 0.5m at edge of range. The larger is an intermittent curvilinear anomaly 11m x 0.5m and possibly length of rope/chain.	
70045	Dark reflector	495783	5857497	A2	35.2	0.5	0	-	Three small rectangular anomalies in a linear orientation, possibly all associated and pieces of debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70046	Magnetic	487263	5857491	A2	-	-	-	24	Thin and small asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70047	Debris	489828	5857487	A2	6.9	4.9	0	-	Complex looking curvilinear anomaly.	
70048	Magnetic	489977	5857473	A2	-	-	-	15	Small but distinct dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70049	Magnetic	502862	5857341	A2	-	-	-	11	Distinct small dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70050	Magnetic	487263	5857272	A2	-	-	-	39	Narrow and distinct dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70051	Dark reflector	498125	5857264	A2	15.4	0.4	0.1	-	Two small oval shaped anomalies which are possibly opposite ends of single object but buried by sediment in between.	
70052	Magnetic	487575	5857230	A2	-	-	-	19	Distinct asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70053	Dark reflector	491197	5857213	A2	4.1	0.7	0.2	-	Short thick linear anomaly with slight curvilinear at one end. Possibly piece of debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70054	Magnetic	501273	5857103	A2	-	-	-	13	Narrow positive monopolar anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70055	Seafloor disturbance	497740	5856926	A2	32.5	7	0	-	Irregular shaped area containing a semi- circular dark reflector and several further weak diffuse irregular-shaped dark reflectors. Possibly partially buried or possibly natural.	
70056	Dark reflector	505309	5856926	A2	9.1	0.5	0	-	Short thick linear with weaker curvilinear attached, possibly piece of debris lying on seabed.	
70057	Magnetic	495866	5856773	A2	-	-	-	62	Medium distinct asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70058	Magnetic	494268	5856763	A1	-	-	-	6587	Very large dipole, possibly wreck anomaly but there is no sidescan sonar or bathymetry anomaly visible at this location and there is not recorded wreck or obstructions at this location.	
70059	Dark reflector	492814	5856660	A2	7.8	2	0.1	-	Irregular shaped anomaly in area of sand ripples, possibly piece of debris.	
70060	Magnetic	504055	5856657	A2	-	-	-	11	Positive monopolar anomaly, in an area of broader negative anomalies, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70061	Dark reflector	485178	5856649	A2	5.4	3.1	0.8	-	Oval shaped anomaly with tiny circular dark reflectors scattered around it, straight edged shadow, possibly piece of debris.	
70062	Magnetic	488589	5856545	A2	-	-	-	34	Small sized asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70063	Magnetic	491867	5856487	A2	-	-	-	21	Irregular shaped dipole anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70064	Seafloor disturbance	504729	5856405	A2	12.4	8.8	0	-	Depression orientated approximately north-south and containing numerous small circular dark reflectors, possibly natural in origin but multibeam bathymetry data indicates it is on top of big sandbank, which means more likely to be anthropogenic.	
70065	Magnetic	488672	5856342	A2	-	-	-	67	Narrow and distinctive medium dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70066	Dark reflector	485119	5856280	A2	5.5	0.3	0.2	-	Narrow linear anomaly possibly in two pieces and broken up.	
70067	Magnetic	502260	5856204	A2	-	-	-	28	Asymmetrical dipolar anomaly, stronger anomaly than other on survey line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70068	Bright reflector	487554	5856136	A2	4.7	3.4	0.5	-	Triangular anomaly, difficult to distinguish dark reflector to identify object causing shadow/bright reflector. Scour marks off either side and possibly a piece of debris. Bathymetry anomaly is a possible rounded mound located in an area of sand ripples with associated scour to the north.	
70069	Magnetic	505763	5856107	A2	-	-	-	13	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70070	Magnetic	505161	5856080	A2	-	-	-	23	Irregular looking dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70071	Rope/chain	499023	5856038	A2	6.3	2.8	0	10	L-shaped anomaly, slight scour visible off one end. Negative monopolar anomaly at location suggesting presence of ferrous material.	
70072	Dark reflector	496642	5855951	A2	8	0.4	0	-	Curvilinear anomaly with further small circular anomaly nearby, possibly associated.	
70073	Dark reflector	500429	5855944	A2	6	0.4	0	-	Narrow curvilinear anomaly disappearing into the sediment.	
70074	Magnetic	485967	5855913	A2	-	-	-	13	Distinct and narrow dipolar anomaly possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70075	Dark reflector	499246	5855881	A2	3.5	1.1	0.3	-	Circular shaped anomaly with attached narrow linear in a small hollow in the sediment, scour off one side too.  Possibly boulders in depressions.	
70076	Dark reflector	484924	5855802	A2	13.4	3.6	0.1	-	Thick diffuse crescent shaped anomaly and two further, smaller, yet more distinct crescent shaped anomalies in discrete area at edge of range, possibly all associated.	
70077	Magnetic	487047	5855798	A2	-	-	-	30	Distinct small sized negative monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70078	Magnetic	489268	5855761	A2	-	-	-	24	Medium sized distinct asymmetric isolated dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70079	Recorded Obstruction	485478	5855681	A3	2	1	0.8	-	An unidentified obstruction, first detected in 1994. Survey data indicates the presence of a very small contact with no associated magnetometic anomaly. The surveyed position of this obstruction is regarded as having an accuracy of 13m. No geophysical anomaly observed in previous zoning assessment or in 2013 data.	11216 (UKHO)
70080	Dark reflector	499103	5855643	A2	2.5	0.5	0.1	-	Small rectangular anomaly, appears partially buried.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70081	Dark reflector	489787	5855640	A2	5.1	2.7	0.1	-	Two linear anomalies lying side by side, one slightly larger at 5.1m in length with the second linear 4.1m and appears more intermittent possibly broken up or buried along parts of its length.	
70082	Magnetic	489962	5855407	A2	-	-	-	18	Small dipole in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70083	Dark reflector	491397	5855393	A2	1.1	0.2	0.2	-	Short narrow linear.	
70084	Dark reflector	491241	5855392	A2	6.8	1.4	0	-	Two oval shaped anomalies lying side by side, at edge of range and when viewed on adjacent line there is an approximately oval shaped bright reflector which was interpreted as part of a sand ripple. Possible oval shaped area of darker reflection but very weak contrast if it is an object here and it does not resemble anomaly on adjacent survey line.	
70085	Dark reflector	488532	5855336	A2	12.1	5.9	0	-	Weak linear dark reflector at different orientation to direction of sand ripples in area. Further small approximate circular anomalies next to it. Possibly piece of debris partially buried.	
70086	Rope/chain	490106	5855226	A2	67.3	0.5	0.2	-	Intermittent short linear dark reflectors in a linear orientation, possibly exposed length or cable.	
70087	Magnetic	493570	5855185	A2	-	-	-	21	Small sized asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70088	Magnetic	492176	5855153	A2	-	-	-	43	Asymmetric dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70089	Magnetic	496642	5855051	A2	-	-	-	37	Distinct narrow dipolar anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70090	Magnetic	490850	5855047	A2	-	-	-	35	Small sized negative monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70091	Bright reflector	490130	5854931	A2	8.5	0.5	0	-	Linear anomaly lying across area of sand ripples.	
70092	Magnetic	486060	5854895	A2	-	-	-	15	Asymmetric dipole anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70093	Magnetic	484178	5854884	A2	-	-	-	20	Small sized, distinct asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70094	Dark reflector	493207	5854854	A2	25	1	0.3	-	Two dark reflectors space approximately 25m apart and possibly associated through their proximity. The larger is a diffuse sub-rectangular shaped anomaly 5.1m x 1m with the second a much smaller triangular anomaly 0.7m x 0.6m x 0.3m.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70095	Magnetic	505371	5854790	A2	-	-	-	5	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70096	Magnetic	500251	5854775	A2	-	-	-	13	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70097	Rope/chain	501824	5854746	A2	22	0.4	0	-	Intermittent curvilinear dark reflector, possibly length of buried rope or chain.	
70098	Dark reflector	492205	5854602	A2	4.5	1.1	0	-	Narrow rectangular anomaly possibly piece of debris. Quite strong return.	
70099	Magnetic	488661	5854581	A2	-	-	-	9	Thin and small positive monopole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70100	Magnetic	483855	5854536	A2	-	-	-	29	Asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70101	Dark reflector	488771	5854515	A2	2.1	0.7	0.4	-	Short rectangular anomaly with straight edged shadow and slight scour.	
70102	Magnetic	503166	5854425	A2	-	-	-	11	Dipolar but possibly similar anomalies along survey line, in an area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70103	Dark reflector	484120	5854366	A2	3.7	0.7	0	-	Curvilinear anomaly at edge of range, in area of sand ripples.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70104	Magnetic	493765	5854362	A2	-	-	-	15	Irregular shaped dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70105	Dark reflector	501126	5854334	A2	7	1.9	0.1	-	Curvilinear anomaly which splits into two linears at one end, possibly piece of debris lying on seabed.	
70106	Magnetic	489563	5854198	A2	-	-	-	33	Narrow and distinct asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70107	Magnetic	493640	5854141	A2	-	-	-	9	Asymmetric dipole in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70108	Dark reflector	487600	5854137	A2	2	0.3	0.1	-	Discrete cluster of three small oval shaped anomalies.	
70109	Magnetic	495444	5854110	A2	-	-	-	60	Medium asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70110	Dark reflector	487598	5854067	A2	11.3	3	1	-	Weak semi-circular shaped anomaly with second short curvilinear adjacent and appearing partially buried with weak contrast.	
70111	Rope/chain	505646	5854054	A2	81.7	0.4	0	15	Short narrow intermittent linears in a linear orientation, possibly buried cable or seabed scarring. Magnetic anomaly 50m to south-east of a dipolar anomaly, distinct from the larger broader anomalies in the vicinity possibly suggesting presence of ferrous material.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70112	Magnetic	505252	5854031	A2	-	-	-	12	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70113	Magnetic	501451	5853953	A2	-	-	-	12	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70114	Magnetic	485244	5853882	A2	-	-	-	16	Small but distinct dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70115	Debris field	501902	5853766	A2	18.1	16.9	0.3	-	One main area containing numerous circular anomalies with two separate larger curvilinear dark reflectors nearby, possible further debris in between. No obvious structure and appears partially buried. Previously recorded as a seafloor disturbance measuring 46m x 32m x 0.3m so the smaller dimensions recorded here possibly show that it has been further buried in sediment since the area was last surveyed.	
70116	Debris	495933	5853642	A2	6.8	0.5	0.1	-	Linear anomaly partially buried in soft sediment, possibly further curvilinear attached could be piece of isolated debris.	
70117	Magnetic	495862	5853578	A2	-	-	-	36	Asymmetric dipole in area of noise, possibly natural or possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70118	Magnetic	492245	5853570	A2	-	-	-	133	Distinct dipole anomaly, anomaly across two lines, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70119	Magnetic	495758	5853504	A2	-	-	-	70	Medium dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70120	Rope/chain	492280	5853486	A2	119.1	0.3	0		Small intermittent linear dark reflectors in a linear orientation, possibly buried cable.	
70121	Dark reflector	487381	5853436	A2	4.7	4.5	0.1	-	Triangular shaped anomaly with parallel linear dark reflector along one side, partially buried but there is a possibility that the feature is natural.	
70122	Magnetic	505966	5853429	A2	-	-	-	67	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70123	Dark reflector	501789	5853412	A2	5.6	2.6	0	-	Two oval shaped anomalies side by side.	
70124	Dark reflector	494017	5853383	A2	4.2	3.8	0	-	Irregular shaped anomaly, breaks up the crest of a sand ripple.	
70125	Dark reflector	491980	5853369	A2	2.3	0.7	0.1	-	Sub-oval shaped anomaly with triangular shadow.	
70126	Magnetic	501042	5853297	A2	-	-	-	12	Narrow peaked monopolar anomaly, stronger that similar anomalies along survey line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70127	Magnetic	486576	5853273	A2	-	-	-	33	Distinct asymmetric small sized dipole, possibly part of a trend but kept due to its strength or possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70128	Magnetic	501448	5853207	A2	-	-	-	35	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70129	Dark reflector	499800	5853197	A2	1.8	1.7	0.4	-	Oval shaped anomaly, diffuse in appearance with think narrow linear protruding.	
70130	Debris	489326	5853090	A2	5.5	0.3	0.1	-	Narrow linear anomaly with second separate short linear at one end.	
70131	Dark reflector	488985	5852970	A2	4	0.4	0	-	Narrow, short, slightly curved linear.	
70132	Dark reflector	502833	5852920	A2	5.1	4.1	0.8	-	Partially buried so difficult to see but a linear possibly with second anomaly adjacent whose scour is more prominent.	
70133	Magnetic	503572	5852838	A2	-	-	-	16	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70134	Magnetic	486645	5852832	A2	-	-	-	37	Narrow and distinct dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70135	Dark reflector	495005	5852802	A2	7	3.3	0	-	Curvilinear anomaly, weak and intermittent and appears partially buried, possibly piece of debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70136	Magnetic	487560	5852795	A2	-	-	-	34	Narrow and distinct asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70137	Dark reflector	493518	5852779	A2	10.4	2.3	0.1	-	Two anomalies adjacent to each other, possibly associated, possibly debris. Circular anomaly and linear narrow anomaly next to it disappearing into the sediment.	
70138	Dark reflector	489316	5852761	A2	4.9	1	0	-	Thick curvilinear anomaly.	
70139	Dark reflector	504704	5852697	A2	4	2.9	0.2	-	Two parallel irregular shaped linears, possibly partially buried debris.	
70140	Magnetic	484365	5852618	A2	-	-	-	62	Medium distinct asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70141	Magnetic	483846	5852465	A2	-	-	-	29	Small sized possible dipole anomaly, looks more uniform than surrounding data, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70142	Dark reflector	503940	5852441	A2	1.7	0.4	0.3	-	Oval shaped anomaly with rectangular shadow and slight scour.	
70143	Seafloor disturbance	487598	5852370	A2	12.2	7	0.3	-	Semi-circular shaped area of dark reflectors comprising two adjacent curvilinear anomalies. Diffuse with no obvious structure but could be partially buried object, buried at base of sandwave.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70144	Dark reflector	487793	5852307	A2	3.8	0.5	0.2	-	Rectangular anomaly lying on sand ripples.	
70145	Magnetic	484434	5852277	A2	-	-	-	46	Distinct asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70146	Magnetic	488043	5852258	A2	-	-	-	44	Small sized distinctive asymmetric dipole	
70147	Magnetic	491954	5852251	A2	-	-	-	218	Large asymmetric dipole anomaly across adjacent lines, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70148	Dark reflector	505075	5851991	A2	0.9	0.7	0.4	-	Approximately V-shaped anomaly with slight scour, possibly partially buried. Possible extending scour visible as a depression measuring 17.8m x 7.5m x 0.5m in the multibeam bathymetry data.	
70149	Dark reflector	489096	5851966	A2	2	1	0.1	-	Two semi-circular anomalies lying sideby-side.	
70150	Seafloor disturbance	492070	5851830	A2	13.5	12.3	0.2	-	Discrete oval shaped area containing at least three sub-circular dark reflectors, one with height which is measured here. Possibly piece of debris and could indicate further buried debris. Area has harder sediments also compared to surrounding area.	
70151	Magnetic	503852	5851811	A2	-	-	-	8	Distinct dipolar anomaly in broader area of positive anomalies, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70152	Magnetic	492847	5851804	A2	-	-	-	28	Asymmetric dipole, also present on adjacent line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70153	Dark reflector	500184	5851664	A2	2	0.6	0.2	-	Short thick linear, possibly piece of debris.	
70154	Magnetic	497146	5851631	A2	-	-	-	127	Medium positive monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70155	Dark reflector	500003	5851455	A2	4	0.4	0.1	-	Strong linear anomaly.	
70156	Magnetic	503436	5851329	A2	-	-	-	14	Distinct dipolar anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70157	Magnetic	493040	5851206	A2	-	-	-	12	Asymmetric dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70158	Dark reflector	490770	5851202	A2	2.2	0.2	0.1	-	Small, oblong anomaly, isolated.	
70159	Magnetic	492545	5851167	A2	-	-	-	48	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70160	Rope/chain	502675	5851160	A2	41.2	0.4	0	-	Intermittent linear dark reflector, possibly buried cable or seabed scarring.	
70161	Dark reflector	495776	5851121	A2	2.5	0.3	0	-	Short, narrow linear anomaly.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70162	Magnetic	502739	5851034	A2	-	-	-	16	Negative monopolar anomaly, stonger than other similar anomalies along survey line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70163	Dark reflector	493434	5851023	A2	3.3	0.6	0	-	Curvilinear anomaly, appears partially buried, at edge of range.	
70164	Magnetic	485548	5850999	A2	-	-	-	34	Two anomalies approximately 35m apart, asymmetric dipolar anomaly and small sized dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70165	Rope/chain	502997	5850944	A2	94.2	0.6	0	-	Intermittent curvilinear dark reflectors in a curvilinear orientation, possibly buried cable or rope/chain or possibly seabed scarring.	
70166	Seafloor disturbance	499790	5850889	A2	6.4	2.4	0.5	-	Irregular shaped anomaly, possibly piece of debris lying at crest of a sand ripple.	
70167	Dark reflector	499228	5850858	A2	3.7	1.2	0.3	-	Pear drop shaped anomaly with shadow only in the curved part of the anomaly, possibly piece of debris.	
70168	Seafloor disturbance	501684	5850769	A2	13.7	13.3	0.2	-	Discrete area containing numerous small circular and short linear dark reflectors, possibly debris but badly degraded and broken up, no structure visible to identify definitely as wreck but possible.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70169	Magnetic	487356	5850767	A2	-	-	-	40	Narrow and distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70170	Dark reflector	492800	5850749	A2	6.2	0.3	0	-	Linear anomaly at different orientation to direction of sand ripples in the area.	
70171	Dark reflector	488448	5850728	A2	1.9	0.5	0	-	Two small circular anomalies lying adjacent to each other.	
70172	Seafloor disturbance	492382	5850684	A2	33.3	20.8	0.2	-	Discrete area in sand ripples containing several circular and curvilinear dark reflectors some with height. Three are possibly in linear orientation. Could indicate buried debris.	
70173	Dark reflector	486313	5850680	A2	3.8	0.3	0.3	-	Narrow, short curvilinear anomaly with uneven height.	
70174	Dark reflector	492696	5850661	A2	3.2	0.6	0	-	Short linear anomaly, possibly partially buried and located approximately 35m to the north-east of debris field anomaly <b>70176</b> and possibly further associated debris.	
70175	Seafloor disturbance	497297	5850658	A2	27.8	7.3	0	-	Irregular shaped anomaly that has numerous dark reflectors mostly circular in shape. Possibly object partially or nearly wholly buried.	
70176	Debris field	492663	5850640	A2	16.6	12.4	0	-	Irregular shaped discrete area containing several small circular and curvilinear dark reflectors which could be debris on the seabed.	
70177	Dark reflector	492580	5850624	A2	2.2	0.7	0.2	-	Sub-oval shaped anomaly with one part of it exhibiting height.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70178	Magnetic	504025	5850596	A2	-	-	-	25	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70179	Magnetic	492356	5850591	A2	-	-	-	20	Irregular shaped anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70180	Dark reflector	485248	5850585	A2	1.1	0.6	0.2	-	Small approximately circular anomaly, isolated.	
70181	Bright reflector	487994	5850520	A2	5.3	2.9	0	-	Rectangular anomaly, possibly piece of debris of material such as plastic or rubber or wood.	
70182	Dark reflector	497488	5850430	A2	2.2	0.7	0.1	-	Approxmately triangular shaped anomaly partially buried in sediment possibly piece of debris.	
70183	Magnetic	500734	5850366	A2	-	-	-	46	Distinct dipolar anomaly, in an area of sand ripples but anomalies responding to those are weaker and follow curvilinear pattern. Possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70184	Rope/chain	492374	5850291	A2	40.6	0.4	0	-	Intermittent linear dark reflector possibly buried rope/chain or larger object such as cable.	
70185	Dark reflector	487927	5850289	A2	3.5	0.7	0.4	-	Approximately square-shaped anomaly, possibly piece of debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70186	Magnetic	502340	5850183	A2	-	-	-	20	Dipolar anomaly, stronger than other dipolar anomalies along survey line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70187	Debris	492357	5850168	A2	13	0.4	0	65	Two thick curvilinear anomalies approximately 13m apart. The slightly larger one is 4.4m and the smaller one is 3.7m. A medium magnetic anomaly is associated, indicating ferrous content.	
70188	Debris	492166	5850155	A2	12.8	8.5	0	20	Three curvilinear anomalies in a discrete area possibly all part of same object as it looks like the curvilinears disappear into and out of the sediment and therefore partially buried. Approximately 30m to the east is a weak almost triangular dark reflector 3m x 0.7m possibly associated. Magnetic contact therefore possibly debris is ferrous.	
70189	Seafloor disturbance	484208	5850135	A2	22.8	8.6	0.8	-	Boomerang shaped dark reflector perpendicular to direction of sand ripples, possibly buried object with height. Second associated narrow linear off one area, full extent unknown as partially buried in sediment, no obvious structure to indicate a wreck but large object nonetheless with scour measuring 7.3m x 5.4m x 1.5m.	
70190	Dark reflector	491059	5850095	A2	3.3	0.4	0	-	Short, weak linear anomaly.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70191	Debris field	502303	5850080	A2	14.6	2.8	0	-	Discrete area containing at least two objects, weak curvilinear dark reflector 4m x 2.5m and ring shaped dark reflector nearby 1.7m wide, possible further tiny circular dark reflectors are also debris.	
70192	Dark reflector	502705	5850057	A2	0.9	0.7	0.2	-	Approximately circular anomaly in area of sand ripples.	
70193	Magnetic	503738	5849999	A2	-	-	-	7	Asymmetrical dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70194	Dark reflector	487788	5849932	A2	5.1	3.1	0.4	-	Approximately rectangular anomaly, possibly with narrow linear coming off one side, appears nearly wholly buried with slight scour.	
70195	Magnetic	483957	5849862	A2	-	-	-	39	Irregular dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location. Two other anomalies are aligned with <b>70195</b> in a linear orientation - <b>70196</b> and <b>70198</b> - they are possibly associated with each other.	
70196	Magnetic	483954	5849778	A2	-	-	-	37	Irregular dipole, at the same location as previously identified zoning anomaly. Possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location. Two other anomalies are aligned with <b>70196</b> in a linear orientation - <b>70195</b> and <b>70198</b> - they are possibly associated with each other.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70197	Magnetic	498232	5849755	A2	-	-	-	24	Two adjacent anomalies, a small dipole of 12nT in noisy data and a larger irregular shaped dipole of 24nT. Possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70198	Magnetic	483954	5849715	A2	-	-	-	34	Irregular dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location. Two other anomalies are aligned with <b>70198</b> in a linear orientation - <b>70195</b> and <b>70196</b> - they are possibly associated with each other.	
70199	Dark reflector	490320	5849691	A2	18.5	1.8	0	-	Diffuse linear anomaly measuring 18.5m x 1.8m and is located approximately 60m to the north-east of debris field anomaly <b>70202</b> , possibly associated with it.	
70200	Magnetic	502043	5849688	A2	-	-	-	10	Dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70201	Magnetic	486621	5849687	A2	-	-	-	28	Small sized asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
								(nT)	Irregular shaped discrete area partially	
									visible in the bathy as an elongated	
									mound overlying sand ripples. Area	
70202	Debris field	400277	E040C70	A2	25	12	0.8		contains one major curvilinear and	
70202	Debris field	490377	5849670	AZ	25	12	0.8	-	several narrow curvilinear dark	
									reflectors but with no obvious structure.	
									Possibly associated is anomaly <b>70199</b>	
									approximately 60m to the north-west.	
									Discrete area containing at least three	
									curvilinear regular spaced dark	
70203	Seafloor disturbance	487053	5849457	A2	16	5.8	0.5	-	reflectors with scour coming off each	
									one. No obvious structure therefore not	
									classified as debris or wreck.	
									Rectilinear anomaly, weak and	
70204	Dark reflector	495916	5849456	A2	4.1	2.2	0	-	intermittent, partially buried, possibly	
									piece of debris.	
70205	Dark reflector	491997	5849437	A2	2.8	1.6	0.2	_	Triangular anomaly in area of sand	
							-		ripples, possibly piece of debris.	
									Distinct wide dipole anomaly in noisy	
									area, possibly buried ferrous object as	
70206	Magnetic	484545	5849367	A2	-	-	-	31	there is no sidescan sonar or	
									bathymetry anomaly visible at this	
									location.	
									Narrow small sized positive monopole in	
70207	NA	400544	5040240	4.2				27	area of noise, possibly buried ferrous	
70207	Magnetic	490544	5849349	A2	-	-	-	37	object as there is no sidescan sonar or	
									bathymetry anomaly visible at this	
									location.  Irregular and wide dipole anomaly,	
									possibly buried ferrous object as there is	
70208	Magnetic	493932	5849341	A2	-	-	-	46	no sidescan sonar or bathymetry	
									anomaly visible at this location.	
									anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70209	Magnetic	484632	5849196	A2	-	-	-	41	Distinct small sized dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70210	Seafloor disturbance	487018	5849159	A2	24.7	4.3	0.2	13	Curvilinear diffuse dark reflector, height is a minimum as object at edge of range and data is of average quality, weather noise visible and it appears partially buried. Anomaly has scour and is in an area of slightly raised seabed. Thin and distinctive small negative monopole anomaly indicates possibility of ferrous material.	
70211	Dark reflector	493073	5849147	A2	3.4	0.2	0.1	-	Short thick linear anomaly, possibly piece of debris lying on seabed.	
70212	Dark reflector	486171	5849025	A2	10.3	4.9	0	-	Curvilinear dark reflector with further rectangular 'frame' shaped dark reflector attached, possibly piece of debris.	
70213	Dark reflector	492690	5849012	A2	3.3	0.3	0.1	-	Narrow weak linear.	
70214	Dark reflector	496592	5849011	A2	1.5	0.4	0	-	Narrow strong linear, possibly piece of debris lying on seabed.	
70215	Dark reflector	491266	5848989	A2	5.3	0.4	0	-	Short intermittent linear anomaly.	
70216	Magnetic	503341	5848973	A2	-	-	-	45	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70217	Magnetic	496019	5848907	A2	-	-	-	10	Asymmetric distinct dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70218	Dark reflector	503180	5848758	A2	2.5	0.4	0.1	-	Thick short linear with height only at one end.	
70219	Magnetic	501631	5848736	A2	-	-	-	25	Positive narrow peaked monopolar anomaly, possibly associated with anomalies <b>70220</b> and <b>70221</b> making up part of a larger feature. Possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70220	Magnetic	501532	5848734	A2	-	-	-	23	Negative monopolar anomaly, possibly associated with anomalies <b>70219</b> and <b>70221</b> making up part of a larger feature. Possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70221	Dark reflector	501464	5848700	A2	6.8	0.4	0	-	S-shaped anomaly, possibly length of rope or chain, possibly associated with anomalies <b>70219</b> and <b>70220</b> making up part of a larger feature.	
70222	Magnetic	502144	5848683	A2	-	-	-	15	Dipolar anomaly, stronger than other similar anomalies on survey line. possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70223	Dark reflector	491994	5848582	A2	25.3	0.4	0	-	Three narrow, short intermittent linears measuring between 1.6 to 2.5m in length and 0.3 to 0.4m in width. Only one has height. Possibly linear feature such as a cable but not magnetic contacts associated	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70224	Dark reflector	500986	5848577	A2	4.2	0.3	0	-	Short curvilinear anomaly in area of sand ripples, possibly partially buried.	
70225	Dark reflector	500956	5848554	A2	4.6	0.5	0	-	Narrow linear anomaly, slightly fatter at one end, possibly second tiny linear nearby.	
70226	Magnetic	500832	5848536	A2	-	-	-	19	Positive monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70227	Dark reflector	486970	5848523	A2	3.6	0.5	0.3	-	Sub-rectangular anomaly in area of sand ripples, possibly partially buried piece of debris.	
70228	Magnetic	500734	5848497	A2	-	-	-	34	Negative monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70229	Magnetic	484020	5848428	A2	-	-	-	29	Small sized positive monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70230	Debris	502521	5848325	A2	4.3	3.6	0	6	One linear and one curvilinear anomaly side by side with weak magnetic contact suggesting presence of ferrous material.	
70231	Magnetic	498816	5848245	A2	-	-	-	42	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70232	Magnetic	488544	5848226	A2	-	-	-	58	Asymmetric dipole, very distinctive, could be part of linear alignment, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
70233	Magnetic	498628	5848225	A2	-	-	-	(nT) 28	Small sized negative monopole, possibly sandwave but distinct against other anomalies in the area, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70234	Magnetic	501630	5848215	A2	-	-	-	10	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70235	Dark reflector	502685	5848184	A2	6.4	0.4	0	-	Curvilinear anomaly with one end disappearing into sediment and very weak, possibly piece of partially buried debris.	
70236	Dark reflector	494187	5848166	A2	3.3	0.3	0.1	-	Narrow linear with uneven height.	
70237	Magnetic	496948	5848156	A2	-	-	-	17	Very distinct, thin symmetric dipole, isolated on one line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70238	Magnetic	498933	5848154	A2	-	-	-	15	Negative monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70239	Dark reflector	484465	5848117	A2	3.3	0.7	0	-	Small rectangular anomaly, in area of sand ripples, is located on the route of a cable but has been kept as it is in a different orientation from the cable anomalies.	
70240	Dark reflector	495887	5848117	A2	3.9	0.3	0.3	-	Narrow linear with large rounded shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70241	Magnetic	488544	5848052	A2	-	-	-	71	Asymmetric dipole, very distinctive, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70242	Magnetic	484614	5848037	A2	-	-	-	38	Distinct small sized negative monopole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70243	Magnetic	497745	5848014	A2	-	-	-	49	Irregular shaped dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70244	Dark reflector	490292	5848011	A2	6.3	0.5	0	-	Narrow linear lying across sediment.	
70245	Magnetic	490739	5847970	A2	-	-	-	11	Small asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70246	Dark reflector	489010	5847966	A2	1.5	0.6	0.3	-	Sub-oval shaped small anomaly.	
70247	Dark reflector	492329	5847948	A2	2.2	1.4	0.4	-	Diffuse curvilinear anomaly with several tiny circular anomalies around it.	
70248	Dark reflector	496496	5847899	A2	1.6	1.1	0.3	-	Sub-oval shaped anomaly with slight scour which is possibly a boulder in a depression but due to its locations approximately 60m north-east of wreck 70255 it is potentially inferred as debris.	
70249	Dark reflector	487436	5847874	A2	9.5	3.2	0.1	-	Irregular complex looking anomaly with slight height, possibly piece of debris but there is a possibility that the feature is natural.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70250	Debris field	496455	5847872	A2	23.3	4.2	0.2	-	At least 5 smaller approximately circular dark reflectors in a discrete area ranging from 0.5m to 2.5m in size and lying approximately 120m from the main wreck area of <b>70255</b> .	
70251	Dark reflector	484970	5847866	A2	8.8	6.1	1.2	-	Oval shaped anomaly with weaker, more diffuse irregular shaped area coming off one side. In area of sand ripples.  Rectangular 'frame' shaped anomaly with scour obscuring part of the object, in area of sand ripples and appears partially buried, true extent therefore unknown.	
70252	Magnetic	494540	5847865	A2	-	-	-	11	Small negative monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70253	Debris	496470	5847849	A2	1.5	0.4	0.1	-	Small thick linear dark reflector, possibly associated debris from wreck anomaly <b>70255</b> .	
70254	Dark reflector	489981	5847837	A2	12	0.2	0.1	-	Two short, narrow linears one 3m x 0.2m x 0.1m and the second 2.2m x 0.2m x 0.1m.	
70255	Wreck	496393	5847836	A1	60	22	1.5	2879	Discrete irregular shaped area in soft sediment containing one prominent L-shaped dark reflector which looks structural and numerous linear and curvilinear dark reflectors scattered around. It is interpreted as a wreck, damaged, partially buried and orientated north-west to south-east. An unknown wreck, first detected in 1994 with the surveyed position of this wreck regarded	11213 (UKHO)





				Archaeological				Magnetic		External
WA ID	Classification	Easting	Northing	Discrimination	Length (m)	Width (m)	Height (m)	Amplitude	Description	References
				Discrimination				(nT)		References
									as having an accuracy of 15m. According	
									to the UKHO description the 1994 survey	
									data indicates the presence of an entire	
									wreck, largely buried, lying just below the	
									crest of an adjacent sandwave. Only a	
									small portion of the wreck was observed	
									standing above the seabed level. The	
									wreck is thought to be orientated south-	
									east to north-west measuring 35m x 5m x	
									2.9m, the orientation corresponding to	
									the 2013 results. Magnetometer data	
									indicate that the wreck extends to the SE	
									for approximately 40m. At the location of	
									the recorded wreck position is a small	
									irregular shaped area 7.5m x 4m x 0.5m	
									containing diffuse dark reflectors with	
									the majority of the wreck debris visible	
									to the north-west of the site and	
									measuring 37.5m x 16m x 1.5m.	
									Potentially we are seeing the two ends of	
									the wreck site with the rest significantly	
									buried, this would increase the length of	
									the wreck to 60m from the UKHO	
									recorded length of 35m. A significant	
									amount of ferrous material is suggested	
									by a very large and wide dipole anomaly	
									across two lines. Possible associated	
									wreck debris ranges from 1.5m x 1m in	
									size to 23.5m x 4m for a discrete area	
									containing more than one piece of	
									debris, the anomalies are 70248, 70250	
									and <b>70253</b> . To the north-east, south-east	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
									and west are five pieces of debris visible but there is possibility of further debris buried in sediment potentially up to 125m away from main wreck site.	
70256	Magnetic	487809	5847825	A2	-	-	-	39	Small sized negative monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70257	Magnetic	500622	5847810	A2	-	-	-	18	Distinct dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70258	Dark reflector	495584	5847766	A2	3.8	1.5	0	-	Possibly anthropogenic origin, small oval shaped anomaly at intersection of two orientations of sand ripples. Diffuse and difficult to distinguish shape.	
70259	Rope/chain	490067	5847758	A2	57.2	2.8	0	-	Series of several curvilinear or linear small dark reflectors in a linear orientation. Possibly buried cable causing seafloor disturbance.	
70260	Magnetic	486351	5847758	A2	-	-	-	18	Small asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70261	Debris	489869	5847738	A2	3.8	0.5	0.1	14	Pointed, sub-oval shaped anomaly with small negative monopole anomaly, possibly piece of debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70262	Wreck	498353	5847680	A1	33.0	8.0	1.7	153	Discrete area containing several curvilinear and rectilinear dark reflectors 33m x 8m x 1.7m and showing structure of a wreck lying on its side, partially buried in sediment going from sand ripples to coarser sediment.  Further small anomalies nearby are debris. Several parallel linear dark reflectors and areas of numerous tiny circular dark reflectors showing nearly wholly buried structure of a wreck, upright, looks like deck structure. Three pieces of potential wreck debris to east and south-east of wreck. Debris ranges in size from 1m x 0.5m x 0.2m to 2.6m x 1.2m and are either oval shaped or square-shaped dark reflectors. Strongest associated magnetic contact at location of wreck is a large negative monopole anomaly. An unknown wreck, first detected in 1994. Survey data indicates that the wreck is small and present in its entirety lying NW/SE, although it is broken up, it measures 30m x 5m x 0.6m. A magnetic anomaly associated with the wreck was also observed. The surveyed position of this wreck is regarded as having an accuracy of 13m.	11214 (UKHO)
70263	Debris	498368	5847678	A2	1.1	0.6	0.2	-	Small approximately oval shaped dark reflector near wreck <b>70262</b> and possibly associated debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70264	Dark reflector	486628	5847669	A2	6.3	1.1	0.3	-	Weak intermittent linear with four separate triangular shadows with overall scour.	
70265	Debris	498385	5847642	A2	2.6	1.2	0	-	Approximately oval shaped dark reflector in vicinity of wreck <b>70262</b> and possibly associated. Looks partially buried.	
70266	Debris	498770	5847617	A2	13.8	1.1	0.2	-	Diffuse approximately oval shape with second short narrow linear adjacent and a narrow curvilinear attached, possibly partially buried debris as several anomalies visible in a discrete area.	
70267	Dark reflector	491777	5847612	A2	2.9	0.5	0.2	-	Short bar-shaped anomaly with only a narrow linear shadow at one point, not along full length.	
70268	Dark reflector	498171	5847533	A2	40	3.5	0.2	-	Discrete elongated area containing four anomalies either rectangular in shape or approximately triangular ranging in size from 4.5m x 3.5m x 0.2m to 1.8m x 0.8m x 0.1m. They are all possible associated forming a roughly linear orientation from north to south.	
70269	Magnetic	498416	5847500	A2	-	-	-	9	Thin negative small monopole anomaly in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70270	Magnetic	501416	5847500	A2	-	-	-	22	Negative monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70271	Dark reflector	501684	5847486	A2	7.2	0.9	0.1	-	Rectilinear, intermittent anomaly, appears partially buried, possibly piece of debris.	
70272	Magnetic	498218	5847447	A2	-	-	-	25	Asymmetric irregular shaped dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70273	Debris	485872	5847427	A2	16.3	5.2	0.2	-	Discrete area on crest of sand ripple containing two curvilinear dark reflectors adjacent to each other with possibly further circular dark reflectors nearby. Possibly further anomalies buried.	
70274	Magnetic	489530	5847358	A2	-	-	-	39	Asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70275	Magnetic	493723	5847351	A2	-	-	-	47	Asymmetric dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70276	Magnetic	501005	5847336	A2	-	-	-	16	Dipolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70277	Dark reflector	497835	5847280	A2	1.7	0.7	0.1	-	Small sub-oval shaped anomaly, appears partially buried.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70278	Magnetic	485925	5847252	A2		-	-	45	Irregular shaped dipole of 23nT and irregular shaped negative monopole of 45nT, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70279	Magnetic	496524	5847248	A2	-	-	-	25	Small sized distinct dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70280	Magnetic	501124	5847245	A2	-	-	-	33	Negative monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70281	Magnetic	489740	5847210	A2	-	-	-	24	Distinct small sized dipole in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70282	Debris field	484776	5847154	A2	4.7	2.9	0.1	-	Narrow curvilinear, further three very small similar anomalies in immediate vicinity, possibly associated and making up a group of debris.	
70283	Magnetic	483815	5847110	A2	-	-	-	38	Small sized possible monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70284	Dark reflector	491558	5847076	A2	1.3	0.7	0.1	-	Two small circular anomalies grouped together, only one has height.	
70285	Bright reflector	486522	5847068	A2	2.8	0.9	0	-	Sub-rectangular anomaly with scour, possibly piece of debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70286	Dark reflector	495677	5847039	A2	3.4	1.3	0	-	Adjacent small triangular anomalies, partially buried and possibly a piece of debris.	
70287	Magnetic	500212	5846982	A2	-	-	-	29	Negative narrow monopolar anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70288	Dark reflector	489235	5846982	A2	4.2	0.8	0	-	Pointed oval shaped anomaly.	
70289	Dark reflector	495462	5846968	A2	2.5	0.2	0	-	Short narrow linear, in area of sand ribbons.	
70290	Rope/chain	496587	5846868	A2	130	0.9	0.1	-	Intermittent linear bright reflector, possibly seabed scar or buried cable.	
70291	Magnetic	489929	5846868	A2	-	-	-	67	Medium negative monopole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70292	Debris	489362	5846856	A2	1.3	0.6	0.5	-	Circular anomaly but with narrow thin, linear, shadow.	
70293	Dark reflector	487569	5846833	A2	1.5	0.4	0.3	-	Circular anomaly with straight edged shadow it is possible debris but could be a boulder	
70294	Dark reflector	493264	5846790	A2	1.6	0.6	0	-	Small pointed oval shaped anomaly, appears partially buried in sediment.	
70295	Magnetic	495940	5846725	A2	-	-	-	12	Small but distinct dipole, could be natural or possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70296	Dark reflector	491990	5846614	A2	2.8	0.4	0	-	Narrow rectangular, nearly T-shaped anomaly at edge of range.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70297	Dark reflector	492952	5846516	A2	5.8	3.8	0.6	-	Small sub-oval area of dark reflection and which appears to be partially buried. Possible small shallow areas of scour off either side of object, possibly piece of debris.	
70298	Dark reflector	492651	5846464	A2	2.7	1	0.2	-	Irregular looking oval shaped anomaly, area contains at least three connecting curvilinear dark reflectors, possibly buried object.	
70299	Dark reflector	484679	5846411	A2	2.4	2.2	0.3	-	Square shaped anomaly in area of sand ripples, possibly piece of debris.	
70300	Dark reflector	488859	5846389	A2	6.3	0.6	0.1	-	Strong narrow linear anomaly possibly with weak curvilinear anomaly attached, lying on sediment, possibly piece of debris.	
70301	Dark reflector	486924	5846351	A2	6.8	0.2	0.7	-	Weak narrow linear anomaly in a depression.	
70302	Magnetic	495213	5846302	A2	-	-	-	37	Small sized negative monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External
	Ciussinication	Lusting		Discrimination	20116111 (111)	,		(nT)	Description	References
70303	Seafloor disturbance	486469	5846205	A2	65	11.5	1.1	-	Discrete area measuring 40m x 11.5m x 1m consisting of one larger pointed oval shaped dark reflector with irregular shadow. Main anomaly is surrounded by intermittent curvilinears in no regular order and showing no obvious structure. Appears partially buried with at least one further piece of associated debris 45m to the south-east of the main area in the form of a linear anomaly measuring 6m x 1m x 0.1m. Scour extending immediately north for a distance of up to 50m. Classified as seafloor disturbance as there is no structure visible to confirm it is a wreck.	
70304	Magnetic	488007	5846204	A2	-	-	-	38	Small sized negative monopole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.  Approximately rectangular frame-	
70305	Debris	488363	5846158	A2	5.3	4.3	0.7	-	shaped anomaly with further linear and circular dark reflector adjacent.	
70306	Magnetic	488523	5846103	A2	-	-	-	22	Small and distinct asymmetric dipole, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70307	Dark reflector	487339	5846089	A2	4.4	2.9	0	-	Sub-rectangular, diffuse anomaly, appears partially buried in area of sand ripples.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70308	Magnetic	493406	5846085	A2	-	-	-	11	Distinct small dipole in area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70309	Magnetic	491314	5846074	A2	-	-	-	16	Thin asymmetric dipole in a area of noise, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70310	Dark reflector	484577	5846055	A2	19.6	4.3	0.9	-	Elongated depression cutting across sand ripples measuring 10.5m x 7.4m x 0.7m which is a thick bar shaped structure, with narrow linear protruding off shorter end which increases the dimensions of the overall anomaly.  Appears partially buried in sediment therefore dimensions are a minimum.	
70311	Magnetic	484815	5845871	A2	-	-	-	100	Medium and distinct thin dipole anomaly on one line, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70312	Debris	485572	5845620	A2	15.5	12.5	0.4	-	Irregular shaped discrete area containing a complex anomaly of numerous dark reflectors that suggest structure but weak contrast. Looks broken up and damaged but partially buried so difficult to see full condition. Partially buried therefore true extent unknown. It is situated in trend of high magnetic anomalies and therefore the presence of magnetic material cannot be ruled out.	
70313	Dark reflector	488229	5845487	A2	3.5	2.2	0.2	-	Irregular shaped complex looking anomaly.	
70314	Magnetic	484316	5845272	A2	-	-	-	90	Irregular shaped dipole anomaly in noisy area but large magnetic value compared to other anomalies in the area, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70315	Magnetic	486921	5845260	A2	-	-	-	68	Distinct dipole anomaly, possibly buried ferrous object as there is no sidescan sonar or bathymetry anomaly visible at this location.	
70316	Dark reflector	486968	5845181	A2	6.5	4.8	0.4	-	Oval shaped anomaly with second but weaker oval anomaly and a narrow curvilinear anomaly adjacent. Appears partially buried in area of sand ripples.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71480	Wreck	503572	5848770	A1	64	20	4.4	600	Wreck of a submarine. Narrow elongated bathymetry anomaly oriented north-east to south-west and measuring 63.2 x 5.8 x 4.m and with an isolated scour to the north-east end. Prominent thick long dark reflector with numerous small linear, curvilinear and circular dark reflectors showing structure of wreck, intact, upright, heavily buried in sediment, disrupts sediment pattern in area with scour of approximately 160m extending to the north-east. Solid large linear dark reflectors showing bulk structure of wreck, possibly on side but looking intact, partially buried in sediment and debris seen scattered in vicinity, potentially more buried. Width of main wreck site is 6m but debris extending from wreck measures up to 20m. Possibly further debris to the south at a distance of approximately 40m from end of wreck shown by two magnetic anomalies	79542 (UKHO)
NV Wes	t									
71296	Bright reflector	470936	5876930	A2	5.4	4.5	0	-	A large and slightly bulbous bright reflector object located within sandwaves, looks anomalous to the surrounding seabed.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
71297	Magnetic	470549	5875951	A1	-	-	-	(nT) 953	Very large asymmetric dipole identified on more than one survey line. Indicative of possible substantial buried ferrous debris.	
71298	Debris	467660	5874419	A2	9.6	3.6	0.5	-	Large piece of debris, a distinct dark reflector with an irregular shape, has two short and thin curvilinear dark reflectors attached and a bright shadow, isolated on a sandy and even area of the seabed.	
71299	Magnetic	471001	5874207	A1	-	-	-	1450	Very large asymmetric dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris. Lies approximately 180m west of charted pipeline and not part of linear anomaly associated with it.	
71300	Dark reflector	467655	5873863	A2	4.4	0.7	0.2	-	Small straight object with a bright shadow on a different alignment to sandripples.	
71301	Debris field	470711	5873567	A1	23.0	0.9	0.2	7022	Several distinct linear dark reflectors with height identified in an area of megaripples. Features appear to be in a line therefore possibly represent one, partially buried feature such as a possible wreck and, as such, have been grouped together as one. Length measurement represents length of entire feature. Largest individual dark reflector measures 7.6m. Feature has a very large associated magnetic anomaly, indicating ferrous material.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71302	Magnetic	470559	5873521	A2	-	-	-	343	Large asymmetric dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71303	Dark reflector	467627	5873298	A2	8.1	0.9	0	-	A thick linear dark reflector with no shadow, may be geological.	
71304	Bright reflector	469341	5873168	A2	5.3	2.6	0	-	A linear and slightly right angled bright reflector, isolated and distinct feature, in a noisy area.	
71305	Debris	467374	5872945	A2	4.2	2.6	0.3	-	A medium sized piece of possible debris, very distinct square shaped dark reflector with a dull shadow and in a depression, located near sandwaves.	
71306	Magnetic	469173	5872781	A2	-	-	-	244	Large negative monopole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71307	Dark reflector	464983	5872669	A2	7.4	1.2	0.3	-	Poorly defined, irregular dark reflector with a shadow at either end. Image possibly distorted by movement of the sonar fish.	
71308	Debris	471006	5872655	A2	3.2	1.7	0.1	-	A medium sized oval possible debris feature, distinct dark reflector with a very slight shadow located within sandwaves.	
71309	Dark reflector	471069	5872611	A2	6.5	0.5	0	-	A thick and distinct right angled linear dark reflector with no shadow but in a depression.	
71310	Magnetic	470829	5872335	A2	-	-	-	33	Small monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71311	Bright reflector	464688	5872253	A2	9.3	2.3	0	-	Slightly elongated, irregularly shaped, bright reflector. Other, smaller and less distinct bright reflectors possible nearby.	
71312	Bright reflector	464545	5872107	A2	3.8	3.3	0	-	Irregular bright reflector, possibly a shadow but with no discernible contact, close to dark reflector 71313.	
71313	Dark reflector	464549	5872098	A2	7.9	1.3	0.6	-	Elongated dark reflector with a broad shadow. Identified in an area of megaripples, 8m from bright reflector 71312.	
71314	Magnetic	471077	5871919	A1	-	-	-	896	Large asymmetric dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71315	Magnetic	470861	5871493	A2	-	-	-	135	Medium anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
71316	Magnetic	470505	5871285	A2	-	-	-	269	Large dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71317	Dark reflector	466117	5871188	A2	6.1	4.8	0.6	-	Poorly defined dark reflector with a slight shadow identified in an area of megaripples.	
71318	Dark reflector	466214	5871180	A2	11.1	6.0	0	-	Distinct dark reflector, with a bright reflector at the front section, identified on the crest of a sandwave. Possibly a natural feature however looks quite distinct.	
71319	Dark reflector	466065	5871119	A2	4.7	0.8	0.2	-	Straight dark reflector identified in an area of megaripples. Feature has a slight shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71320	Dark reflector	464647	5871067	A2	5.5	2.0	0	-	Small, elongated dark reflector identified in an area of megaripples. Feature possibly has a slight shadow. May be a natural feature.	
71321	Dark reflector	464666	5871039	A2	6.9	1.8	0.2	-	Small, elongated dark reflector identified in an area of megaripples. Feature possibly has a slight shadow. May be a natural feature.	
71322	Magnetic	470425	5871023	A2	-	-	-	230	Large asymmetric dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.  Located 327 north-west of wreck 71334.	
71323	Magnetic	471157	5871003	A1	-	-	-	1320	Very large positive monopole only identified on one survey line. Indicative of possible substantial buried ferrous debris. Located 450m north-east of wreck 71334.	
71324	Seafloor disturbance	466673	5870988	A2	14.6	10.3	0.5	-	Patch of seafloor disturbance. Comprised of irregularly shaped dark reflectors, some with slight height. One particularly distinct feature in its centre, measuring 4.9 x 0.9m, with a height of 0.5m. Some bright reflectors identified. Possible linear extending across the sandwaves. Observed in the MBES data as an indistinct rounded mound with a slight surrounding build-up (16 x 14 x 0.7m).	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71325	Magnetic	470932	5870985	A1	-	-	-	1127	Very large dipolar anomaly only identified on one survey line. Indicative of possible substantial substantial buried ferrous debris. Located 245m north-east of wreck 71334.	
71326	Magnetic	470807	5870969	A2	-	-	-	92	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris. Located 105m north-east of wreck 71334.	
71327	Dark reflector	463349	5870964	A2	6.4	0.6	0.5	-	Thin rounded edge of an object with corresponding bright shadow.	
71328	Magnetic	470473	5870947	A2	-	-	-	113	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris. Located 255m northwest of wreck 71334.	
71329	Bright reflector	464869	5870908	A2	4.2	1.9	0	-	Small, irregular bright reflector identified in an area of megaripples. Possibly a natural feature however looks quite distinct.	
71330	Magnetic	465967	5870899	A2	-	-	-	67	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71331	Dark reflector	463715	5870879	A2	2.9	0.6	0.2	-	A linear dark reflector, slightly tapered in the centre and with a bright shadow, located on an uneven sandwave rich area of the seabed.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71332	Debris	470686	5870865	A1	4.6	1.8	0.3	-	A long and thick curvilinear dark reflector with a bright shadow, likely debris and possibly related to nearby wreckage. Feature may be ferrous but any magnetic anomaly here is likely to be masked by the very large anomaly associated with the main area of wreckage 71334.	
71333	Debris	470763	5870863	A1	5.3	0.4	0.1	-	A long, thin and distinct dark reflector with a dull shadow, located at the edge of the range and may be slightly stretched. Possibly part of the wreckage 71334 however, due to the quality of the data it is difficult to discern whether this is the case.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71334	Wreck	470730	5870846	A1	54.0	41.2	0.6	5974	Large spread of debris comprising mainly linear and curvilinear thin dark reflectors with height, longest is 12m, could be highly broken up or partially buried wreckage. Identified as a very large magnetic anomaly on the magnetometer data, indicating a substantial quantity of ferrous material. Magnetic anomaly is noisy and widely spaced, possible slight positioning error between lines of data, or possible indication of buried material extending beyond the boundaries identified on the sonar data. Identified by UKHO as a non-dangerous wreck, well buried, almost flush with the seabed. Observed in MBES data as irregular mound within an area of sandwaves aligned north-east to south-west, measuring 28 x 18m.	11190 (UKHO)
71335	Magnetic	470880	5870838	A2	-	-	-	175	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris. Located 135m east from wreck 71334.	
71336	Debris	470736	5870812	A1	3.6	0.2	0.2	-	A long and very thin discreet dark reflector. Feature has a slight shadow and is located in sandwaves, possibly debris related to wreck 71334 (35m to the north).	
71337	Dark reflector	465168	5870750	A2	7.0	0.8	0	-	Slightly curved dark reflector identified in an area of megaripples. No discernible height. Possibly natural however looks a little more distinct.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71338	Magnetic	470732	5870708	A2	-	-	-	92	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris. Located 120m east of wreck 71334.	
71339	Bright reflector	466335	5870354	A2	8.2	2.2	0	-	Series of three, slightly oval bright reflectors in a row. Image possibly distorted by movement of the sonar fish.	
71340	Magnetic	471050	5869966	A2	-	-	-	57	Medium dipole anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
71341	Dark reflector	464209	5869963	A2	3.0	1.2	0.1	-	A distinct rectangular shaped dark reflector with a bright but short shadow.	
71342	Dark reflector	469214	5869852	A2	4.0	2.3	0	-	A medium sized very distinctive rounded dark reflector with no shadow located within sandwaves.	
71343	Dark reflector	464015	5869754	A2	8.1	0.9	0.6	-	A long, thin and curvilinear dark reflector with a large and bright shadow, located in sandwaves and possibly related to nearby dark reflector feature 71344.	
71344	Dark reflector	464025	5869733	A2	5.1	1.4	0.4	-	A slightly jagged dark reflector with a shadow, located within sandwaves. The full extent may be covered. Possibly related to nearby dark reflector feature 71343.	
71345	Dark reflector	461224	5869547	A2	6.6	1.0	0.2	-	Small thin object with bright shadow, distorted at one end.	
71346	Dark reflector	462783	5869346	A2	2.7	0.5	0.1	-	A long and thin linear dark reflector with a short shadow, indistinct anomaly.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71347	Bright reflector	463783	5869207	A2	9.6	4.0	0	-	A large bright reflector anomaly, looks anthropogenic with a fanned profile shape, located within sandwaves.	
71348	Magnetic	463241	5868689	A2	-	-	-	51	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71349	Bright reflector	467825	5868655	A2	9.2	1.7	0	-	Slightly rectangular bright reflector identified in an area of megaripples. Possibly part of a natural formation however looks relatively distinct.	
71350	Magnetic	460521	5868531	A2	-	-	-	620	Large asymmetric dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71351	Dark reflector	459422	5868511	A2	2.7	0.3	0.3	-	An indistinct but long and thin dark reflector with a short but bright shadow, may be associated with nearby dark reflector 71352 and debris field 71353.	
71352	Debris	459417	5868507	A2	4.3	3.0	0	84	An indistinct dark reflector that may be associated or part of debris field on opposite channel 71353. An irregular shaped feature that may be buried and with no obvious shadow. Identified approximately 10m east south-east of a magnetic anomaly measuring 8nT, however difficult to discern which feature, if any, it is associated to.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
		_		Discrimination				(nT)		References
									Possible debris field, with several small	
									dark reflectors with height, identified on	
									two lines. One large piece of debris, a	
									rounded dark reflector with indistinct	
									curvilinear dark reflectors surrounding	
									it, or possibly partially buried pieces,	
71353	Debris field	459393	5868497	A2	25.2	12.3	0.3	84	object has some shadow visible, possibly	
									some associated debris on other	
									channel (71352). Identified	
									approximately 10m south-west of a	
									magnetic anomaly measuring 8nT,	
									however difficult to discern which	
									feature, if any, it is associated with.	
									Poorly defined dark reflector, not	
71354	Dark reflector	469281	5868494	A2	7.8	2.5	0.6	_	particularly distinct, with a broad	
71354	Dark reflector	403201	3000434	A2	7.0	2.5	0.0		shadow. Identified in an area of	
									megaripples. Possibly a natural feature.	
									Large dark reflector that appears broken	
									up or partially buried by sands. The	
									feature has a thick and distinct	
71355	Dark reflector	464179	5868285	A2	10.3	6.3	0.2	-	curvilinear edge and smaller dark	
									reflectors within and bright shadows,	
									has some possible scouring orientated	
									east and measuring 6m.	
									Large negative monopole only identified	
71356	Magnetic	470801	5868241	A2	-	-	-	586	on one survey line. Indicative of possible	
									substantial buried ferrous debris.	
									Slightly oval dark reflector with a	
71357	Dark reflector	466335	5868205	A2	8.9	5.5	0	_	brighter reflector in the centre.	
/135/	Daik Tellectol	400555	3000203	HZ	0.5	3.3	U	-	Identified in an area of megaripples,	
									possibly a natural feature.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71358	Bright reflector	464400	5868104	A2	5.3	4.4	0	-	A distinct bulbous bright reflector with a slight dark reflector outline and a possible bright reflector linear object attached, located within sandwaves.	
71359	Magnetic	466645	5867823	A2	-	-	-	122	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71360	Dark reflector	469581	5867798	A2	4.3	3.1	0.3	-	Poorly defined dark reflector, possibly with a slight shadow. Some possible disturbance to surrounding sediment. Possibly a natural feature however looks a little anomalous.	
71361	Debris field	465600	5867662	A2	40.8	15.3	0.6	-	A large area of partially buried debris features, a structural looking crossed linear dark reflector is visible in parts with bright shadows and smaller possible associated debris in the sands surrounding the feature. Not visible in the bathymetry data.	
71362	Debris	465576	5867598	A2	20.1	0.9	0.2	-	A very long and thin slightly curvilinear shaped dark reflector with a bright, short shadow, located in sandwaves and may be partially buried debris.	
71363	Bright reflector	468278	5867476	A2	12.3	6.0	0	-	Elongated bright reflector, appears to be an 'x' shape. Not particularly distinct.	
71364	Dark reflector	467225	5867314	A2	5.8	0.8	0.4	-	Elongated dark reflector with slight height. Not particularly distinct. Identified in an area of megaripples, possibly a natural feature.	
71365	Dark reflector	459025	5867120	A2	3.0	0.7	0.4	-	A distinct crescent shaped dark reflector with a bright shadow, located within sandwaves, isolated feature.	





				Archaeological				Magnetic		External
WA ID	Classification	Easting	Northing	Discrimination	Length (m)	Width (m)	Height (m)	Amplitude	Description	References
								(nT)	Decayly defined deal, reflector with an	
									Poorly defined dark reflector with an irregular shadow. Feature identified	
71366	Dark reflector	468502	5867011	A2	5.0	2.8	0.6	-	towards the limit of the data therefore	
									hard to discern.	
									A partially buried or broken up thin	
									linear dark reflector with a shadow	
71367	Rope/chain	465416	5867008	A2	12.7	0.6	0.1	-	located within sandwaves. Quite distinct	
									possible rope or chain.	
									Poorly defined, elongated dark reflector	
71368	Dark reflector	469839	5866908	A2	7.7	1.6	0.6	_	with a very slight shadow. Identified in	
/1308	Dark reflector	403633	3800308	AZ	7.7	1.0	0.0	_	an area of megaripples.	
									A long and thick linear dark reflector	
71369	Dark reflector	464095	5866854	A2	4.5	0.7	0.1	_	with a short and bright shadow, distinct	
71309	Dark reflector	404033	3800834	AZ	4.5	0.7	0.1	_	anomaly within large sandwaves.	
									A distinct and slightly curvilinear dark	
71370	Dark reflector	466587	5866795	A2	2.7	0.5	0.2	_	reflector with a bright shadow, located	
/13/0	Dark reflector	400367	3600793	AZ	2.7	0.5	0.2	_	within sandwaves.	
									Large positive monopole only identified	
71371	Magnetic	469685	5866793	A2	_	_	_	218	on one survey line. Indicative of possible	
/13/1	iviagnetic	403083	3600793	AZ	_	_	_	210	substantial buried ferrous debris.	
									A large and slightly oval shaped distinct	
71372	Dark reflector	470665	5866788	A2	5.8	1.2	0	_	dark reflector with no shadow, distinct	
71372	Dark Tellector	470003	3000700	A2	5.0	1.2	Ů		anomaly within sandwaves.	
									Small patch of disturbed seafloor	
									comprised several dark reflectors. Not	
									particularly distinct however looks a	
71373	Seafloor disturbance	462025	5866580	A2	20.5	11.1	0	-	little anomalous. Observed in the MBES	
									data as a small irregular mound within	
									area of sandwaves (18 x 17 x 1.1m).	
									arca or sandwaves (10 x 17 x 1.1111).	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71374	Debris	463190	5866253	A2	16.2	0.8	0	-	Straight, linear dark reflector identified in an area of megaripples. Not particularly distinct, possibly a natural feature however appears to be perpendicular to the natural orientation of the ripples.	
71375	Debris	457509	5866051	A2	7.4	1.6	0.2	-	An indistinct possible large piece of debris, a cross shaped dark reflector with shadows in parts, located on the edge of sandwaves.	
71376	Dark reflector	466574	5865877	A2	2.8	0.2	0.2	-	An indistinct linear dark reflector with a bright shadow, situated on a sandwave and may be partially buried.	
71377	Recorded Obstruction	467513	5865872	А3	-	-	-	-	UKHO have a record of an area of foul ground however nothing anthropogenic was identified on the geophysical data.	11236 (UKHO)
71378	Seafloor Disturbance	454526	5865807	A2	10.9	10.6	0	-	An anomalous area of small bright and dark reflectors. Has a rather speckled appearance. In area of rippled seabed.	
71379	Dark reflector	469084	5865720	A2	6.9	0.2	0.1	-	Straight, narrow dark reflector with a slight shadow. Not particularly distinct.	
71380	Dark reflector	462262	5865503	A2	6.9	2.6	0.6	-	Elongated, irregularly shaped dark reflector with a slight shadow. Possibly a natural feature or item of debris.	
71381	Magnetic	456149	5865143	A2	-	-	-	62	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71382	Dark reflector	464999	5865023	A2	7.9	0.8	0.5	-	A long and thick linear dark reflector with a large and bright shadow, looks anthropogenic within large sandwaves.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71383	Debris	462861	5864962	A2	4.1	3.2	2.2	-	Small oval patch of disturbed seafloor around a distinct, angular dark reflector with height in its centre (disturbed seabed measures 20.4 x 7.4m). UKHO describes feature as a low mound, possibly a wellhead however with no associated magnetic anomaly. Observed in the MBES data as a small sub-rounded object (7 x 6 x 1.7m) within a slight depression with some scour to the north-west. No charted wellheads or pipelines here.	11235 (UKHO)
71384	Dark reflector	467186	5864794	A2	5.2	0.2	0.1	-	A long and thin distinct linear dark reflector with a bright shadow located within sandwaves.	
71385	Dark reflector	458836	5864552	A2	4.7	2.8	0	-	A large, distinct and isolated rectangular shaped dark reflector with no shadow, looks anomalous to the surrounding seabed.	
71386	Dark reflector	456581	5864541	A2	7.7	1.7	0.6	-	Indistinct feature with a clear and bright shadow. Located on a rippled seabed.	
71387	Dark reflector	467740	5864536	A2	4.8	2.2	0	-	A large and distinct oval shaped dark reflector with no shadow, located on the edge of a sandwave. Isolated feature.	
71388	Magnetic	459359	5864415	A2	-	-	-	34	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71389	Dark reflector	459434	5864415	A2	2.3	0.5	0	-	A linear dark reflector with no shadow, located within sandwaves, isolated and distinct feature.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71390	Dark reflector	462250	5863977	A2	11.3	0.7	0.2	-	A very long and thin linear dark reflector with a slight shadow visible, lying within sandwaves this looks anthropogenic rather than part of them.	
71391	Bright reflector	463556	5863945	A2	8.8	1.5	0	-	Elongated bright reflector identified in an area of megaripples. Possibly part of a natural feature however looks quite distinct.	
71392	Bright reflector	470190	5863857	A2	4.6	3.2	0	-	'L' shaped bright reflector, close to other, similar bright reflectors. Possibly part of a natural feature.	
71393	Dark reflector	463009	5863847	A2	13.9	0.8	0	-	Short, slightly bent linear dark reflector.  No discernible height. Possibly natural however looks slightly more distinct.	
71394	Dark reflector	460449	5863844	A2	7.8	2.1	0.3	-	Three rounded small dark reflectors aligned with a shadow with a thick linear (5.2m length) dark reflector with no shadow attached to this.	
71395	Seafloor disturbance	458042	5863627	A2	17.6	4.1	0.9	-	A large feature with a very distinct and large area of shadows. The dark reflectors are vaguely visible as thin curvilinear features, there is a main piece with two linears coming off, one bright reflector and one thin dark reflector with a shadow.	
71396	Dark reflector	455890	5863588	A2	10.5	1.5	0.4	-	Elliptical object which appears across sand ripples. Some slight varying bright shadow.	
71397	Dark reflector	469886	5863181	A2	3.1	1.5	0.5	-	Small rounded dark reflector with a broad, irregular shadow. Feature is not particularly distinct.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71398	Rope/chain	470616	5862905	A2	44.4	0.7	0	-	Curvilinear dark reflector, with a bright reflector at the front in the central section. Feature not always particularly distinct. Possible rope or chain.	
71399	Magnetic	461333	5862863	A2	-	-	-	87	Distinct medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71400	Debris	466420	5862227	A2	10.1	2.4	0.4	-	A large possible piece of debris, a rounded and hollow dark reflector with a linear piece attached to this, has a bright reflector shadow and possibly in a depression. Located within sandwaves.	
71401	Magnetic	463131	5862213	A2	-	-	-	480	Large asymmetric dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71402	Dark reflector	465775	5862092	A2	7.1	0.4	0.1	-	Small, slightly curved elongated dark reflector with a slight shadow.	
71403	Magnetic	463049	5862063	A2	-	-	-	44	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71404	Dark reflector	465137	5862030	A2	15.0	1.5	0.6	-	Slightly wavy linear dark reflector with a broad shadow. Identified in an area of megaripples.	
71405	Debris field	465303	5861937	A2	23.7	16.9	0.5	-	Small patch of possible debris features comprising several dark reflectors of different shapes with height. Identified in an area of megaripples.	
71406	Magnetic	462347	5861921	A2	-	-	-	58	Medium distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71407	Dark reflector	470782	5861681	A2	3.8	2.3	0.5	-	Poorly defined dark reflector with a relatively distinct, irregular shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71408	Dark reflector	469247	5861598	A2	5.8	2.8	0.5	-	An indistinct large dark reflector with a shadow in parts, appears broken up or partially buried by sands, appears to have a rounded dark reflector with smaller anomalies joined to this.	
71409	Seafloor disturbance	459980	5861546	A2	22.0	10.2	0.6	-	Discrete area of small dark reflectors of varying shapes with varying height shadows.	
71410	Dark reflector	456808	5861509	A2	4.2	0.3	0.1	-	Distinct linear object with height in area of irregular seabed.	
71411	Dark reflector	458062	5861390	A2	2.6	0.9	0.3	-	Rather indistinct feature with height and scour.	
71412	Debris field	462554	5861336	A2	22.2	9.8	0.5	26	Large spread of possible debris located within sandwaves, approximately 9 dark reflectors of various shapes and sizes, the largest measures 3.8 x 2m. The full extent of this debris may be buried by sands. Identified on the magnetic data as a small dipole indicating some ferrous material.	
71413	Dark reflector	470441	5861228	A2	4.7	1.0	0.2	-	Poorly defined straight, elongated dark reflector with a very faint shadow. Identified in an area of megaipples.	
71414	Dark reflector	459229	5860911	A2	31.2	0.8	0	-	A long, thin and slightly curvilinear dark reflector with no shadow. At far extent of data.	
71415	Magnetic	457611	5860895	A2	-	-	-	107	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71416	Seafloor disturbance	458624	5860621	A2	11.6	10.5	0.4	-	Sub-rounded area of dark and bright reflectors. Appears indistinct with corresponding rounded bright shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71417	Dark reflector	465118	5860542	A2	4.8	1.6	0	-	Elongated dark reflector, poorly defined.	
71418	Debris field	463437	5860495	A2	40.1	8.2	0.3	-	A group of parallel curvilinear dark reflectors with bright shadows in a triangular alignment, approximately six at the widest point though very indistinct, possibly buried by sandwaves.	
71419	Dark reflector	456525	5860463	A2	4.9	0.8	0.4	-	Small linear item with height near 71420. In an area of sandwaves.	
71420	Dark reflector	456530	5860457	A2	4.8	0.5	0.6	-	Rather indistinct small linear feature with height in area of small sandwaves, close to dark reflector 71419	
71421	Debris field	463311	5859642	A2	17.5	6.2	0.3	-	Large spread of possible debris, including an irregular oval shaped dark reflector hollow anomaly. Features don't look joined up so may be partially buried by sands, some have shadows and some not. Looks to be situated in an area of disturbed seabed.	
71422	Dark reflector	463323	5859580	A2	3.5	1.8	0.2	-	A medium sized dark reflector with a small shadow that does not appear to be solid, may be slightly buried by sands or broken up.	
71423	Dark reflector	457700	5859220	A2	6.6	0.6	0	-	A thin curvilinear dark reflector feature, isolated object.	
71424	Dark reflector	467511	5859031	A2	10.2	3.1	0.6	-	Slightly rectangular dark reflector with a bright reflector in the centre and a broad shadow. Identified in an area of megaripples.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
								(nT)		
									A distinct long and thin linear dark	
71425	Debris	463547	5859014	A2	5.7	0.7	0.3	-	reflector with a dull shadow, distinct	
									feature lying perpendicular to the sandwaves.	
									Distinct linear dark reflector with height.	-
71426	Debris	458485	5858743	A2	5.4	0.7	0.2	-	Possibly slightly stretched data here.	
									Oval shaped area of disturbed seabed.	-
71427	Seafloor disturbance	459917	5858607	A2	21.1	8.0	0	-	Possibly contains some debris.	
									,	
71428	Debris field	459669	E0E0242	4.2	41.7	9.6	0.7		A large debris field. Contains mostly	
/1428	Debris field	459669	5858243	A2	41.7	9.6	0.7	-	linear debris. In area of rippled seabed.	
									Some bright reflectors.	
71429	Dark reflector	467349	5858041	4.2	6.4	1.0	0.4		Elongated dark reflector, bent round in	
/1429	Dark reflector	46/349	5858041	A2	6.4	1.0	0.4	-	a slight 'v' shape, with a distinct shadow.	
									Identified in an area of megaripples.  A long thin and slightly curvilinear dark	
71430	Dark reflector	463366	5857745	A2	4.9	0.6	0.4	_	reflector with a bright shadow, located	
71430	Dark reflector	403300	3837743	AZ	4.9	0.6	0.4	-		
									at the edge of a sandwave.  Two small dark reflectors situated next	
71431	Dark reflector	459404	5857717	A2	5.1	0.8	0	-	to each other.	
									Small round dark reflector with a bright	
									ı -	
71432	Dark reflector	468081	5857433	A2	3.8	1.5	0.5	_	reflector in its centre. Feature appears to extend out. Contact has a distinct,	
/1432	Dark reflector	408081	3837433	AZ	3.8	1.5	0.5	-	relatively broad shadow, identified in an	
									area of megaripples.	
									A large spread of small dark reflectors,	
71433	Debris field	463740	5857305	A2	12.6	3.1	0.3	_	some with shadows, close together	
/1433	Debits field	403740	3637303	AZ	12.0	3.1	0.5	_	within sandwaves, possible debris field.	
									Depression or scour containing possible	
71434	Seafloor Disturbance	460065	5857241	A2	7.1	2.8	0	_	debris. Bright reflector on the near side,	
/1434	Seamour Disturbance	400003	3037241	AZ	7.1	2.0	U	-	backed by a dark reflector.	
									backed by a dark reflector.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71435	Magnetic	469435	5857207	A2	-	-	-	120	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71436	Dark reflector	458818	5857042	A2	5.4	1.2	0	-	Rather indistinct elongate feature.  Possible scouring around one end. In area of rippled seabed.	
71437	Seafloor disturbance	459385	5856973	A2	20.5	10.2	0	-	Irregularly shaped area of bright and dark reflectors. Appears situated at one end of a patch of coarser sediment. Possibly contains debris.	
71438	Dark reflector	462846	5856794	A2	3.8	0.5	0.2	-	A very distinct thick linear dark reflector with a bright shadow lying perpendicular to the sandwaves.	
71439	Bright reflector	464942	5856502	A2	4.3	0.2	0	-	Small straight thin object with no obvious dark reflector or shadow.	
71440	Dark reflector	459416	5856382	A2	4.2	0.3	0.2	-	Small and thin linear feature with height. Possible debris. Isolated object on rippled seabed.	
71441	Bright reflector	460814	5856368	A2	6.5	1.0	0	-	Linear bright reflector feature with no apparent object in front. Seabed is irregular with ripples and shadows nearby but this one looks anomalous.	
71442	Dark reflector	470099	5856157	A2	5.5	0.7	0.3	-	An indistinct linear dark reflector with a large pointed shadow, located within sandwaves.	
71443	Magnetic	469821	5856125	A2	-	-	-	51	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
		,		Discrimination				(nT)		References
									Possible area of seafloor disturbance,	
									may just be a localised area of irregular	
71444	Seafloor Disturbance	461437	5855625	A2	28.5	18.2	0	-	seabed but it is anomalous here.	
									Consists of many small bright reflectors	
									and some dark reflectors.	
									Medium dipole only identified on one	
71445	Magnetic	462945	5855147	A2	-	-	-	177	survey line. Indicative of possible buried	
									ferrous debris.	
									A long, thin and distinct linear dark	
71446	Dark reflector	463880	5855077	A2	4.4	0.4	0.2	-	reflector with a bright shadow, lying	
									perpendicular to sandwaves.	
									Elliptical area of dark and small	
71447	Seafloor disturbance	467803	5854603	A2	20.2	5.9	0.3	-	reflectors. Seems off the angle of	
									sandwaves.	
									Linear feature with possible height	
71448	Dark reflector	460687	5854541	A2	3.4	0.6	0.2	-	located on an uneven area of the	
									seabed and 6m from 71449.	
71449	Dark reflector	460690	5854535	A2	4.5	0.8	0.3	_	An elongate object with height, located	
				· . <del>-</del>					6m from 71448.	
71450	Bright reflector	460711	5854518	A2	3.7	1.0	0	_	An elongate bright reflector feature with	
7 - 100	21.6.1	.00711	000 1010	, <del>-</del>	0.7	2.0	ŭ		no obvious object in front.	
71451	Dark reflector	469491	5854489	A2	3.6	2.0	0.6	_	Dark reflector with a relatively broad	
7 10 1	Barkreneetor	103 131	303 1 103	, 12	3.0	2.0	0.0		shadow.	
									A large piece of possible debris, an	
									irregular triangle shaped dark reflector	
									with a bright, pointed shadow, isolated	
									object within sandwaves, has some	
71452	Debris	464769	5854398	A2	11.9	4.5	0.9	-	slight scouring orientated north and	
									measuring 9m. Observed in the MBES	
									data as a small sub-rounded object	
									within a slight depression to the south-	
									west of a possible cable.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71453	Debris field	463732	5854346	A2	33.5	17.1	0.3	239	A large scatter of potential debris, approximately 10 dark reflector anomalies, some with shadows, rounded, linear and square objects visible within an area of sandwaves and further anomalies may be buried. The largest is 4.1 x 2.5m. Has a large magnetic anomaly associated indicating ferrous debris. Observed as an irregular mound (26 x 10 x 0.5m) in the MBES data.	
71454	Dark reflector	460370	5854342	A2	3.4	1.0	0.5	-	An elongate dark reflector with variable height indicated by shadow.	
71455	Debris	463706	5854335	A2	1.7	0.5	1.1	239	Possible piece of debris, very thin and long dark reflector with a bright distinct shadow, located 27m south-west from possible debris field 71453 and may be related. Has a large magnetic anomaly associated indicating ferrous debris. Observed as a small round mound in the MBES data measuring 3 x 3 x 0.2m.	
71456	Debris	463481	5853862	A2	2.9	1.3	0.4	38	A rectangular shaped dark reflector with a bright and tapered shadow, isolated and distinct feature on a sandwave rich area of the seabed. Has a small magnetic anomaly associated indicating ferrous debris.	
71457	Magnetic	463503	5853825	A2	-	-	-	43	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71458	Mound	465194	5853745	A2	21.3	7.0	0.5	-	A large object visible as a slightly curvilinear dark reflector that is wider but more indistinct at one end than the other with a large dull shadow.  Observed in the MBES data as a long tapering mound of sloping height, aligned north-west to south-east, within sandwaves but on a different alignment.	
71459	Dark reflector	465987	5853739	A2	3.0	0.7	0.2	-	A distinct dark reflector, appears as a rounded dark reflector with a shadow and a very thin linear dark reflector attached to this, located in sandwaves and isolated.	
71460	Magnetic	465955	5853643	A2	-	-	-	220	Large dipole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
71461	Magnetic	462057	5853581	A2	-	-	-	91	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71462	Debris	461860	5853426	A2	6.7	0.7	0.2	-	Curvilinear object with height in area of rippled seabed.	
71463	Seafloor disturbance	470959	5853148	A2	14.4	8.3	0	-	Medium sized, mottled patch of disturbed seafloor identified in an area of megaripples. Possibly a natural feature however looks a little anomalous.	
71464	Seafloor disturbance	470963	5853127	A2	20.5	7.3	1.1	-	Large and slightly oval shaped area of disturbed seafloor identified in an area of megaripples. Possibly a natural feature however looks anomalous to the surrounding seabed.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71465	Debris	464915	5852959	A2	5.2	0.8	0.3	-	A linear alignment of four possible objects close together, only has a shadow at one end of the feature and possibly in a slight depression within an area of sandwaves, possible debris.	
71466	Dark reflector	470286	5852755	A2	5.5	5.2	0.4	-	Angular bent object with slight shadow. Follows sand ripples so could be part of natural feature but looks anomalous.	
71467	Dark reflector	470245	5852729	A2	9.4	6.1	0.4	-	Sub rounded object which looks dappled and some rounded bright reflector.	
71468	Dark reflector	470244	5852718	A2	3.4	2.5	0.3	-	Small angular object with corresponding bright shadow.	
71469	Debris	462289	5852648	A2	12.5	2.8	0	-	A curvilinear feature with no height and possible scouring around it. Located within sandwaves.	
71470	Dark reflector	462472	5852549	A2	4.4	0.4	0.3	-	Long and thin linear object with height, possibly associated with nearby debris field 71471.	
71471	Debris field	462479	5852515	A2	15.7	9.0	2.4	-	Area containing several objects with height. Some linear and some more blocky. Identified by UKHO as a possible cable with anchor attached. Observed in the MBES data as a small sub-rounded mound within a possible larger seafloor disturbance. The nearest magnetic survey line is located 47m away and this may explain why, if it is an anchor, there is no magnetic anomaly associated this this feature.	11246 (UKHO)





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71472	Debris field	461988	5852355	A2	11.8	7.8	0	-	Medium sized area containing dark reflectors, some of which are linear. Bright reflectors indicate height or scouring.	
71473	Dark reflector	470419	5852141	A2	2.5	1.7	0.9	-	Irregular dark reflector with a distinct shadow and some possible associated scour.	
71474	Dark reflector	470335	5852008	A2	7.5	2.4	0.6	-	Irregular object, possibly in stretched data, with some bright angular shadow.	
71475	Debris field	466763	5851999	A2	6.8	4.3	0.3	-	An irregular shaped dark reflector with shadows in parts, large object that appears to be broken up or partially buried by sediment, appears to be two crossed linear features and some small, rounded dark reflectors.	
71476	Magnetic	470359	5851917	A2	-	-	-	52	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71477	Debris	469565	5851813	A2	5.5	2.0	0.5	-	Dark reflector identified within sandwaves, a very distinct curvilinear thick dark reflector with a bright shadow and possibly in a slight depression.  Possible non-ferrous item of debris.	
71478	Debris field	467849	5851714	A2	11.5	10.7	1.2	-	Large spread of possible debris located within large sandwaves and possibly partially buried. Small but distinct dark reflectors with shadows, largest is 1.5 x 0.7m. Observed in the MBES data as an indistinct mound with an apex (50 x 20 x 1m) aligned north-east to south-west.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71479	Magnetic	464147	5851155	A1	-	-	-	4455	Very large dipole identified on more than one survey line. Indicative of possible substantial buried ferrous debris.	
Offshore	e Cable Corridor									
70317	Debris	483654	5850867	A2	6.0	1.3	0.6	-	Observed in 2012 OFTO data. Weakly contrasting and diffuse narrow rectangular anomaly in depression, possibly piece of debris. Associated multibeam bathymetry beam showing slight mound amongst sandwaves but no associated magnetic contact. Not observed in the most recent 2016 dataset and may have since been buried	
70318	Seafloor disturbance	483569	5847632	A2	9.2	4.0	0.7	-	Observed in 2012 OFTO data. Weak, larger diffuse irregular shaped anomaly with height, possibly natural but larger in size than other natural features in area. Distinct depression with mound to the south visible on the multibeam bathymetry. Located approximately 25m north of 70319. No associated magnetic contact. Not observed in the most recent 2016 dataset and may have since been buried.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70319	Mound	483557	5847594	A2	9.0	7.0	0.6	-	Observed originally in 2012 OFTO data. Weak, larger diffuse irregular shaped anomaly with height, possibly natural but larger in size than other natural features in area. Distinct mound on quiet seafloor with two adjacent depressions separated by central barrier orientated north - south. Larger depression is located to the west of the mound. Located approx. 25m south of 70318. No associated magnetic contact. In the 2016 bathymetry data this is visible as a small mound within natural features/possible dredging scars.	
70320	Debris	483355	5847396	A2	8.0	6.0	0.3	-	Observed originally in 2012 OFTO data.  Diffuse, large curvilinear anomaly, appears partially buried and with scour, possibly piece of debris. A distinct depression is visible on the multibeam bathymetry. No associated magnetic contact. In the 2016 bathymetry data this is visible as a large object within a depression, slightly rounded shaped feature, has scouring orientated north measuring 25 m. The depression measures 8 m x 6 m	
70321	Dark reflector	483255	5848355	A2	8.2	1.7	0	-	A large dark reflector with no shadow, distinct and irregular shaped anomaly	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70322	Debris field	483134	5848791	A2	38.3	6.0	0.2	-	A very large oval shaped area of possible debris. Indistinct group of bright and dark reflectors that appear to be partially buried by sands. It has a long rope or chain coming off the feature orientated to the north. Not visible in bathymetry data.	
70323	Debris	483073	5848816	A2	6.5	2.1	0.2	-	Observed in 2012 OFTO data.  Approximately oval shaped anomaly with three short linear dark reflectors on the outer edge with an inner area of curvilinear bright reflector, possibly nonferrous piece of debris as there is no associated magnetic contact. Not observed in the most recent 2016 dataset and may have since been buried	
70324	Magnetic	483028	5855129	A2	-	-	-	27	Observed in 2012 OFTO data. Small distinct anomaly located amongst sandwaves. No associated multibeam bathymetry or side scan sonar contact. Not observed in the most recent 2016 dataset however retained given magnetometer line spacing.	
70325	Magnetic	482987	5849995	A2	-	-	-	39	Small anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70326	Magnetic	482932	5851879	A2	-	-	-	157	Observed in 2012 OFTO data. Medium sized distinct negative anomaly located amongst sandwaves. No associated multibeam bathymetry or side scan sonar contact. Not observed in the most recent 2016 dataset however retained given magnetometer line spacing.	
70327	Dark Reflector	482777	5846618	A2	7.2	2.3	0	-	Observed in 2012 OFTO data. Weak, partially buried oval shaped anomaly. No associated magnetic contact. Not observed in the most recent 2016 dataset and may have since been buried	
70328	Dark reflector	482605	5852302	A2	4.2	0.4	0.2	-	A long and thin distinct dark reflector with a dull tapered shadow, located on an area of sandwaves	
70329	Debris	482491	5849286	A2	2.5	1.4	0	-	A triangular shaped bright reflector, located in an area of sandwaves small and very distinct anomaly, possibly debris	
70330	Magnetic	482393	5851869	A2	-	-	-	33	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70331	Bright reflector	482374	5848830	A2	7.2	1.9	0	-	Large oval shaped bright reflector, distinct anomaly.	
70332	Bright reflector	482368	5849369	A2	5.6	1.1	0	-	Slightly tapered linear shaped bright reflector, possibly part of sandwaves though looks to be quite isolated from them.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70333	Magnetic	482302	5849420	A2	-	-	-	62	Observed in 2012 OFTO data. Distinct dipole anomaly located amongst sandwaves. No associated multibeam bathymetry or side scan sonar contact. Not observed in the most recent 2016 dataset however retained given magnetometer line spacing.	
70334	Dark reflector	482146	5850322	A2	7.8	2.0	0.7	-	One or possibly two dark reflectors directly next to one another with very bright shadows. Very distinctive anomaly located within sandwaves.	
70335	Debris field	482142	5850334	A2	8.6	5.5	0.3	-	A medium sized possible debris field located within sandwaves. The anomaly comprises indistinct dark reflectors with bright shadows, located on the crest of a sandwave. Possible area of gravel	
70336	Debris field	482107	5848737	A2	9.1	4.1	0.2	-	A possible area of debris or perhaps partially buried debris. A half butterfly shaped dark reflector with bright shadows situated in a depression. The full extent is possibly buried, may just be natural	
70337	Magnetic	481997	5848895	A2	-	-	-	41	Observed in 2012 OFTO data. Distinct dipole anomaly located amongst sandwaves. No associated multibeam bathymetry or side scan sonar contact. Not observed in the most recent 2016 dataset however retained given magnetometer line spacing.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70338	Magnetic	481631	5849897	A2	-	-	-	29	Observed in 2012 OFTO data. A broad irregular magnetic anomaly. No associated multibeam bathymetry or side scan sonar contact. Not observed in the most recent 2016 dataset however retained given magnetometer line spacing.	
70339	Magnetic	480753	5849174	A2	-	-	-	52	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70340	Mound	480053	5849399	A2	4.2	3.8	0.7	-	A large oval shaped hollow dark reflector with a large but dull shadow, located in sandwaves and the full extent may be hidden, there is some scouring visible. Identified in the bathymetry data as a small but distinct mound	
70341	Dark reflector	477907	5849684	A2	7.3	0.8	0	-	A long, thin and curvilinear dark reflector with no shadow. Looks slightly more anthropogenic than part of a sandwave	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70342	Wreck	477521	5849048	<b>A1</b>	33.0	14.0	1.0	50	Very indistinct area of wreckage. An oval shaped area of bright and dark reflectors, some with shadows and some without, lying perpendicular to sandwaves. There is very little detail visible to identify this as a wreck. In the bathymetry data a long and thick linear mound is visible, lying slightly perpendicular to the large sandwaves and may be masked by sediment, it is aligned north-east to south-west and has faint scouring orientated north and measuring 50m. Has a medium magnetic anomaly associated, though nearest mag line is 27m away. Associated with UKHO record (11091) of Golden Oriole (possibly), a British trawler Sunk 22/01/1915. Previously observed in 2014 as well broken-up with dimensions of 26m x 8.3m x 1.4m.	11091 (UKHO)
70343	Magnetic	477288	5849286	A2	-	-	-	28	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70344	Debris field	477130	5848283	A2	5.4	0.8	0.2	-	Three small dark reflectors with shadow located on the edge of a sandwave, largest measures 1.9 m x 0.7 m. Possibly rocks though not many seen in this area of the seabed.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70345	Dark reflector	474764	5848339	A2	8.6	0.5	0.2	-	A very long and thin linear dark reflector with a bright shadow, feature looks slightly disjointed. Located within sandwaves and full extent may be partially buried	
70346	Debris field	473868	5847907	A2	11.7	0.8	0.4	-	A spread of possible debris comprising three very thin linear dark reflectors with shadows, possibly broken up single piece of debris, full extent may be buried by fine sediments	
70347	Debris	473461	5847936	A2	4.3	0.9	0	-	Medium sized rectangular shaped bright reflector located in between sandwaves, distinctive possible debris feature.	
70348	Debris field	472271	5848199	A2	11.0	3.7	0.5	-	Possible debris field comprising 5+ medium sized dark reflectors with shadows. Curvilinear and linear features, the largest measures 0.4 m x 3.3 m. Located in sandwaves and full extent may be buried. Not visible in bathymetry data.	
70349	Magnetic	472004	5849266	A2	-	-	-	42	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70350	Bright reflector	471930	5848358	A2	7.3	3.1	0	-	A large half circular shaped bright reflector, located on the edge of a sandwave and may be part of it, though looks larger and more distinctive than surrounding seabed.	
70351	Magnetic	471821	5849407	A2	-	-	-	22	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70352	Magnetic	471771	5848989	A2	-	-	-	36	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70353	Dark reflector	471589	5847886	A2	2.1	0.7	2.1	-	A small/medium sized rectangular shaped dark reflector with a large, bright and bulbous shadow, very similar to 70354 which is 5 m away	
70354	Dark reflector	471584	5847884	A2	1.4	0.7	2.1	-	A small rectangular shaped dark reflector with a very long, thin and bright shadow, located within sandwaves, very similar to 70353 which is 5 m away	
70355	Debris	471567	5847880	A2	7.1	1.5	1.9	-	A long and thick linear dark reflector with a large shadow, very distinctive feature in an area of sandwaves, possible debris	
70356	Bright reflector	471561	5850060	A2	8.7	1.8	0	-	A large and distinctive bright reflector, appears as two semi-circles aligned, looks highly anthropogenic.	
70357	Debris	470982	5848241	A2	8.9	0.5	0	-	A long and thick linear bright reflector anomaly, looks too straight to be a sandwave, possible debris.	
70358	Dark reflector	469971	5847765	A2	3.0	0.4	0	-	A thin and distinct dark reflector with no shadow, located on the edge of a sandwave.	
70359	Magnetic	467009	5847525	A2	-	-	-	15	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70360	Wreck	466386	5846784	A1	54.0	11.0	4.0	15867	An area of wreck debris consisting of a large spread of linear, curvilinear and smaller dark reflectors with shadows located within sandwaves. The full extent of the wreck may be buried. The largest piece measures 5.8m x 1.4m. The wreck is relatively broken up and in poor condition. Large amount of scour visible. Not seen in full in sidescan data as towfish went over the top and not good quality data. In the bathymetry data the wreck is aligned north-east to southwest, it possibly has some debris or broken structure situated directly to the north-east end of the vessel (70361). The wreck stands upright prominently within large sandwaves and has a large amount of scouring orientated north to south and measuring over 300m visible. Very high magnetic anomaly associated. Some possible debris associated. Associated with UKHO record (11093) of HMS Dunoon (possibly), a British minesweeper with original dimensions 70.4m x 8.5m x 2.1m. Sunk by a mine on 30/05/1940. Last observed as relatively intact but damaged in the bows with a length of 62m and a recorded height of 5.2m.	11093 (UKHO)





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70361	Debris	466368	5846827	A2	6.4	1.9	0.2	-	A thick linear dark reflector with a shadow on a rough and uneven area of the seabed. Large piece of possible debris associated with wreck 70360 situated 47 m to the south-east.	
70362	Magnetic	465809	5847281	A2	-	-	-	52	Medium dipole identified on more than one survey line Indicative of possible buried ferrous debris.	
70363	Magnetic	465267	5847174	A2	-	-	-	14	Small anomaly identified on more than one survey line. Indicative of possible buried ferrous debris.	
70364	Magnetic	464769	5846759	A2	-	-	-	6	Small but distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70365	Debris	464150	5846800	A2	8.7	3.6	1.2	-	A large piece of possible debris, very solid and distinct dark reflector with a short but bright shadow, has some scour associated orientated north and measuring 24 m	
70366	Magnetic	464076	5846817	A2	-	-	-	31	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70367	Magnetic	463601	5846121	A2	-	-	-	29	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70368	Dark reflector	463238	5845318	A2	3.6	0.6	0.4	-	A long and thin distinct dark reflector with a large but dull shadow, very distinct anomaly on a rough and uneven area of the seabed, possibly in a slight depression	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70369	Dark reflector	463126	5845352	A2	3.2	2.2	0.3	-	A very distinctive rectangular shaped dark reflector with a dull shadow, feature possibly has some scouring orientated north and measuring 40 m	
70370	Magnetic	462912	5845478	A2	-	-	-	18	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70371	Magnetic	462780	5845538	A2	-	-	-	11	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70372	Dark reflector	462763	5846108	A2	3.8	0.7	0.5	-	A medium sized rectangular shaped dark reflector with a bright and tapered shadow, possibly broken in two and located on a sandwave rich are of the seabed	
70373	Magnetic	462342	5844954	A2	-	-	-	17	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70374	Debris field	462243	5846617	A2	8.4	3.8	0.7	-	A medium sized possible area of debris. Three very distinct and aligned circular dark reflectors with bright, bulbous shadows, with some scouring. The full extent of the features may be buried by sandwaves	
70375	Dark reflector	461996	5850153	A2	4.2	1.3	0.6	-	A distinct medium sized curvilinear shaped dark reflector with a bright, tapered shadow, isolated anomaly with scouring orientated north-west and measuring 50 m	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70376	Debris	461852	5846402	A2	3.6	0.6	0.3	-	A very distinct long and curvilinear shaped dark reflector with a bright shadow, has some slight scour or sediment build up to the north measuring 4.5 m	
70377	Debris	461821	5845391	A2	8.5	0.5	0.2	-	A long and thin linear dark reflector with a bright shadow and situated in a slight depression, located on the edge of a sandwave, possibly debris	
70378	Magnetic	461635	5851612	A2	-	-	-	9	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70379	Debris field	461596	5850052	A2	29.0	11.0	0.5	-	A large spread of debris comprising six dark reflectors, five of which have shadows. The largest is a long and thin curvilinear feature with dimensions of 22.6 m x 1 m, located in an area of sandwaves and the full extent may be buried. In the bathymetry data this is visible as a large and distinct mound with little height in an area of small sandwaves. Oval shaped and anomalous to the surrounding seabed, there is a slight depression within the mound's centre	
70380	Debris	461555	5851073	A2	8.8	1.6	0.1	-	A curved dark reflector with corresponding curvilinear shadow. Has scouring associated orientated northwest and measuring 32.5 m, possible debris	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70381	Dark reflector	461439	5851955	A2	12.3	1.2	0.6	-	A medium sized curvilinear shaped dark reflector with a bright triangular shaped shadow. Some faint possible scouring orientated north-west and measuring 5.4 m is associated.	
70382	Magnetic	461374	5850385	A2	-	-	-	23	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70383	Debris	461351	5850856	A2	5.8	0.4	0.2	-	A very distinct, long curvilinear dark reflector with a short but bright shadow and situated in a depression, possible item of debris	
70384	Dark reflector	461287	5846389	A2	9.0	0.5	0	-	A very long and thick linear dark reflector with no shadow. Distinct feature located within sandwaves, looks more anthropogenic than natural.	
70385	Bright reflector	461270	5850984	A2	17.7	2.1	0	-	Possible wide curvilinear shaped bright reflector in poor quality data, does not look like a sandwave. Not visible in bathymetry data.	
70386	Dark reflector	461051	5847518	A2	2.6	0.5	0.2	-	An indistinct thin linear dark reflector with a bright shadow. Isolated anomaly in noisy data	
70387	Dark reflector	460834	5844988	A2	12.8	0.5	0	-	Long and thin linear dark reflector with no shadow, possibly in a slight depression. Not visible in bathymetry data.	
70388	Magnetic	460694	5847360	A2	-	-	-	37	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
70389	Debris	460582	5851838	A2	5.8	0.8	0.3	(nT) -	Very distinct dark reflector with a bright shadow, a curvilinear feature distinct and isolated on a sandy and even area of the seabed. Possibly debris	
70390	Magnetic	460421	5847701	A2	-	-	-	43	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70391	Dark reflector	460364	5846227	A2	2.4	1.2	0.3	-	A small dark reflector with a very bright shadow and sediment build up around its extent. Possibly natural though distinct on a sandy area of the seabed	
70392	Dark reflector	460345	5851503	A2	6.1	1.5	0.7	-	A right angled dark reflector with bright triangular shadow, possibly natural though distinctive and isolated on a sandy area of the seabed	
70393	Dark reflector	460314	5848410	A2	3.7	1.1	0.5	-	A distinct long and curvilinear shaped dark reflector with a bright shadow and situated in a depression, located within sandwaves	
70394	Dark reflector	460279	5851418	A2	2.4	1.5	0.3	-	A distinct rounded dark reflector with a bright shadow. Possibly large rock though quite infrequent on this area of the seabed. Located within sandwaves.	
70395	Magnetic	460265	5846817	A2	-	-	-	41	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70396	Debris field	460236	5854038	A2	28.8	11.9	1.1	-	Large spread of possible debris. It appears to be a hollow oval shaped indistinct dark reflector with two long and thin curvilinear ropes/chain coming off it, located on a gravelly area of the seabed.	





WA ID	Classification	Easting	Northing	Archaeological	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External
				Discrimination				(nT)		References
70397	Dark reflector	459916	5844318	A2	3.9	0.3	0.3	-	A very distinct curvilinear dark reflector with a bright shadow, possibly slightly stretched in data, isolated feature	
70398	Magnetic	459845	5848062	A2	-	-	-	189	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70399	Debris field	459385	5845426	A2	9.5	8.0	2.5	-	A large, but indistinct spread of possible debris. Thick curvilinear shaped dark reflector with a very large and bright shadow. The feature is situated within sandwaves and may be partially buried. There is some scouring to the south and possible scour or a smaller scatter of debris to the north measuring 14 m. In the bathymetry data this is visible as a medium sized distinct rounded mound with height situated in a depression and with associated scouring 2 m deep, orientated north and measuring 100 m	
70400	Debris	459354	5845416	A2	3.8	2.1	0.6	-	A medium sized angular shaped dark reflector with a thin bright shadow, situated in a depression with scouring orientated to the north and measuring 7.7 m.	
70401	Magnetic	457715	5844963	A2	-	-	-	57	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70402	Magnetic	457658	5844953	A2	-	-	-	266	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70403	Magnetic	457049	5844090	A2	-	-	-	13	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70404	Magnetic	456701	5844519	A2	-	-	-	64	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70405	Magnetic	456350	5843541	A2	-	-	-	90	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70406	Magnetic	455205	5843522	A2	-	-	-	38	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70407	Bright reflector	455075	5844256	A2	4.0	2.7	0	-	A medium sized circular bright reflector feature located on the edge of a sandwave, anomalous to the surrounding seabed.	
70408	Dark reflector	454424	5844932	A2	2.8	0.7	0	-	A long and thick linear dark reflector with no shadow, very distinct feature located within sandwaves	
70409	Debris field	454152	5844749	A2	23.0	12.0	1.0	-	A large area of possible debris, appears as a scattering of tiny dark reflectors Possibly partially covered by sands, feature is distinct and anomalous to the surrounding seabed, located within sandwaves which may be disguising the full extent. In the bathymetry this is visible as a large and distinct oval shaped mound situated within small sandwaves. Very distinct and isolated feature.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70410	Debris	454044	5844958	A2	3.8	1.1	0.3	-	A long and thick curvilinear dark reflector with a shadow. Very distinct feature in an area of sandwaves, possible debris	
70411	Magnetic	453482	5843765	A2	-	-	-	6	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70412	Magnetic	453207	5843922	A2	-	-	-	18	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70413	Debris	452921	5843296	A2	17.8	0.8	0.0	-	Broken up or disjointed linear shaped bright reflector feature, large and indistinct anomaly on a sandy area of the seabed, isolated possible debris feature. Not visible in bathymetry data.	
70414	Magnetic	452700	5844836	A2	-	-	-	44	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70415	Magnetic	452631	5844717	A2	-	-	-	10	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70416	Magnetic	452252	5843213	A2	-	-	-	6	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70417	Debris	452221	5842953	A2	4.6	0.4	0.1	-	A long and thin distinct linear dark reflector with a bright shadow, isolated possible debris	
70418	Magnetic	451919	5843240	A2	-	-	-	7	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70419	Debris field	450816	5843285	A2	19.9	17.2	0.3	-	Possible group of debris made up of distinct dark reflectors with shadows, some small circular (1 m x 0.4 m) and larger linear (5 m x 0.4 m) anomalies, approximately 15 in total over a large area. Nothing visible in bathymetry data.	
70420	Dark reflector	450806	5842974	A2	5.3	1.7	0.2	-	An oval shaped dark reflector/circular group of small dark reflectors with shadows, may be a gravel patch or rocks	
70421	Debris	450787	5842981	A2	4.4	0.3	0.2	-	A long and thin linear dark reflector with a bright shadow, located in between sandwaves, possibly linear debris	
70422	Dark reflector	450781	5842606	A2	3.3	1.4	0.1	-	Very distinctive dark reflector with a bright shadow located in between sandwaves, possibly broken in two parts or partially buried in its centre.  Rectangular shaped feature	
70423	Dark reflector	450781	5842981	A2	1.8	1.3	0.3	-	A disjointed or partially broken up distinct dark reflector with a bright shadow. Located in between sandwaves, may be natural	
70424	Magnetic	450644	5842687	A2	-	-	-	79	Medium anomaly identified on more than one survey line. Indicative of possible buried ferrous debris.	
70425	Magnetic	450469	5843104	A2	-	-	-	30	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70426	Magnetic	450459	5842806	A2	-	-	-	19	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70427	Magnetic	450457	5843861	A2	-	-	-	365	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70428	Magnetic	450450	5843838	A2	-	-	-	11	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70429	Magnetic	450445	5844334	A2	-	-	-	9	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70430	Dark reflector	450175	5844259	A2	2.8	0.3	0.2	-	A long and thin linear dark reflector with a dull shadow, situated at the edge of a sandwave but does not look part of them	
70431	Magnetic	450129	5843224	A2	-	-	-	108	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70432	Magnetic	450096	5843177	A2	-	-	-	45	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70433	Magnetic	450066	5843086	A2	-	-	-	58	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70434	Dark reflector	450064	5842559	A2	3.0	0.9	0.2	-	A long and thick rectangular dark reflector with a bright shadow, located in between sandwaves, very distinct feature	
70435	Dark reflector	450060	5843704	A2	3.5	0.8	0.3	-	A long and thin linear dark reflector with a bright shadow, distinct feature located in between sandwaves, tagged mainly due to length, lots of similar but smaller features on this area of the seabed	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70436	Magnetic	449995	5843028	A2	-	-	-	37	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70437	Dark reflector	449882	5844269	A2	4.5	1.0	0.4	-	A very thin slightly curvilinear dark reflector with a right angled end. Feature has a very bright shadow and is distinct within an area of sandwaves	
70438	Dark reflector	449840	5844210	A2	3.8	0.5	1.3	-	A large curvilinear shaped dark reflector with a bright shadow. Distinct anomaly located within sandwaves - does not look to be part of them	
70439	Dark reflector	449615	5843736	A2	8.2	1.9	0.1	-	An indistinct curvilinear dark reflector with a shadow in parts. Feature looks disjointed or partially buried between sandwaves	
70440	Magnetic	449571	5842924	A2	-	-	-	79	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70441	Magnetic	449427	5842568	A2	-	-	-	28	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70442	Magnetic	449401	5842568	A2	-	-	-	35	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70443	Magnetic	449391	5843836	A2	-	-	-	16	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70444	Magnetic	449156	5843838	A2	-	-	-	30	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70445	Magnetic	448908	5842930	A2	-	-	-	145	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70446	Dark reflector	448792	5843781	A2	4.0	0.8	0	-	A long and thin linear dark reflector with no shadow, possibly in a slight depression. Looks more anthropogenic than surrounding seabed features.	
70447	Magnetic	448669	5844394	A2	-	-	-	14	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70448	Magnetic	448632	5844142	A2	-	-	-	17	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70449	Debris	448556	5843957	A2	7.4	1.0	0.3	-	Possible object with rope or chain attached. An indistinct dark reflector measuring 1m x 0.6 m with a dull shadow and possible rope orientated to the north visible as a very indistinct curvilinear thin dark reflector	
70450	Magnetic	447837	5842659	A2	-	-	-	20	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70451	Dark reflector	447615	5844361	A2	3.4	0.4	0.2	-	A distinctive irregular shaped linear dark reflector with a dull shadow, located in between sandwaves and looks to be an object rather than part of them	
70452	Magnetic	447578	5843824	A2	-	-	-	20	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70453	Magnetic	447236	5844040	A2	-	-	-	48	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70454	Magnetic	447062	5844336	A2	-	-	-	49	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70455	Debris	446424	5843694	A2	4.9	2.8	0.2	277	A distinct but thin right angled linear dark reflector with a bright shadow. Has a large magnetic anomaly associated indicating ferrous debris	
70456	Debris field	446339	5844375	A2	25.8	18.1	0.9	-	A large spread of possible debris, 250 m from wreck 70459. Approximately nine small irregularly shaped dark reflectors, some with shadows, some without. The debris field is located on an area of sandwaves and the full extent may be buried. Largest feature measures 2.7 m x 1.8 m	
70457	Magnetic	446199	5843670	A2	-	-	-	287	Large symmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70458	Magnetic	446154	5843670	A2	-	-	-	299	Large symmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70459	Wreck	446041	5844450	A1	88.0	40.0	10.0	775	A wreck broken in two. In the sidescan data a large spread of highly dispersed wreck debris is visible, with some structure and possible deck planking discernible as parallel dark reflectors with shadows. The stern and hull are not clear and the full extent of the wreck is likely buried by the large sandwaves in the area. In the bathymetry data the wreck is clearly lying in two parts 17m from one another with both sections orientated north-west to south-east. There is a large amount of scouring visible orientated north-west to southeast and measuring over 100m. The individual dimensions of the northern section are 41m x 23m x 10m and the southern section are 44m x 19m x 8m. The wreck has a large magnetic anomaly associated indicating a ferrous composition. In the UKHO database this is recorded as Phillipp M, a steam ship with dimensions of 80.5m x 11.9m x 7m which was torpedoed and sunk in 1944. The wreck is described as lying in two parts on the seabed, probably inverted, with measurements of 55m x 30m x 7.7m last observed in 1999.	11092 (UKHO)





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70460	Debris	446039	5844401	A1	1.6	0.2	0.2	-	Small piece of possible wreck debris, a thin curvilinear dark reflector with a shadow located within sandwaves and situated 27 m south-west of wreck 70459	
70461	Bright reflector	445715	5844227	A2	7.3	1.1	0	-	A large and thick curvilinear bright reflector, one end appears to fork, very distinct anomaly on a rough and uneven area of the seabed, situated within sandwaves.	
70462	Magnetic	445598	5844152	A2	-	-	-	208	Large positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70463	Magnetic	445231	5843920	A2	-	-	-	40	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70464	Magnetic	445145	5843920	A2	-	-	-	140	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70465	Magnetic	444825	5844171	A2	-	-	-	125	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70466	Magnetic	444242	5843639	A2	-	-	-	66	Medium dipole identified on more than one survey line. Indicative of possible buried ferrous debris.	
70467	Magnetic	444149	5843070	A2	-	-	-	61	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70468	Magnetic	443703	5844186	A2	-	-	-	42	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70469	Magnetic	443609	5843618	A2	-	-	-	26	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70470	Debris	443566	5844007	A2	2.5	1.0	0	-	Possible rounded dark reflector object with no shadow (0.9 x 0.7 m) with a rope or chain attached, again with no shadow. Located within an area of large sandwaves.	
70471	Magnetic	443536	5843665	A2	-	-	-	45	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70472	Magnetic	443387	5843746	A2	-	-	-	146	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70473	Dark reflector	443201	5842896	A2	3.8	0.7	0	-	A long and thin dark reflector with no shadow. Isolated and distinct feature on a sandy area of the seabed.	
70474	Debris	442829	5844132	A2	5.7	0.6	0.0	126	A distinct horseshoe shaped curvilinear dark reflector with no shadow, located within sandwaves. Looks slightly broken up or buried in parts. Has a medium magnetic anomaly associated indicating ferrous debris	
70475	Magnetic	442811	5844082	A2	-	-	-	40	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70476	Magnetic	442688	5844458	A2	-	-	-	16	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70477	Magnetic	442487	5844254	A2	-	-	-	21	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70478	Magnetic	442445	5842572	A2	-	-	-	17	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70479	Magnetic	441841	5842994	A2	-	-	-	180	Medium anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70480	Magnetic	441531	5842566	A2	-	-	-	107	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70481	Magnetic	441178	5844460	A2	-	-	-	50	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70482	Magnetic	439306	5842926	A2	-	-	-	17	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70483	Magnetic	438749	5842360	A2	-	-	-	23	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70484	Magnetic	438624	5842364	A2	-	-	-	22	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70485	Magnetic	438618	5843790	A2	-	-	-	14	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70486	Magnetic	438489	5844374	A2	-	-	-	10	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70487	Magnetic	438324	5844140	A2	-	-	-	65	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70488	Magnetic	438199	5842052	A2	-	-	-	26	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70489	Magnetic	437503	5844509	A2	-	-	-	58	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70490	Magnetic	437457	5844446	A2	-	-	-	45	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70491	Dark reflector	436891	5843933	A2	2.4	0.6	0.1	-	An irregularly shaped dark reflector with a bright shadow. It appears to be a thin linear feature with a rounded dark reflector at one end. Located within sandwaves, possibly natural.	
70492	Rope/chain	436750	5841279	A2	14.2	0.3	1.0	-	Short, curvilinear dark reflector possibly with a slight shadow. Feature is not particularly distinct, possibly short length of rope or chain.	
70493	Rope/chain	436598	5841819	A2	42.7	0.4	0	-	A long length of rope or chain, visible as a slightly curvilinear dark reflector with no shadow, possibly in a slight depression, the feature is located perpendicular to sandwaves.	
70494	Bright reflector	436386	5841067	A2	7.3	5.3	0	-	Rounded bright reflector with a slightly darker reflector in the centre. Identified in an area of textured seafloor.	
70495	Bright reflector	436136	5841143	A2	4.9	0.9	0	-	Straight, elongated bright reflector that appears to be quite isolated.	
70496	Magnetic	436117	5841464	A2	-	-	-	45	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70497	Magnetic	435895	5841784	A2	-	-	-	48	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70498	Magnetic	435847	5841261	A2	-	-	-	64	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70499	Magnetic	435847	5841877	A2	-	-	-	61	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70500	Magnetic	435826	5841150	A2	-	-	-	253	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70501	Magnetic	435764	5842595	A2	-	-	-	73	Medium symmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70502	Magnetic	435704	5842886	A2	-	-	-	241	Large anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70503	Rope/chain	435606	5842596	A2	7.2	0.5	0	-	Bright curvilinear item of debris in a 'C' shape. Possible disturbance to surrounding sediment. Not particularly distinct, possible short length of rope or chain.	
70504	Magnetic	435552	5843199	A2	-	-	-	63	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70505	Magnetic	435469	5843891	A2	-	-	-	69	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70506	Magnetic	435186	5843596	A2	-	-	-	263	Large positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70507	Magnetic	434933	5842138	A2	-	-	-	249	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70508	Magnetic	434576	5843899	A2	-	-	-	255	Large distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70509	Magnetic	434464	5840546	A2	-	-	-	111	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70510	Magnetic	434448	5843370	A2	-	-	-	70	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70511	Magnetic	434424	5844278	A2	-	-	-	156	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70512	Magnetic	434420	5843727	A2	-	-	-	294	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70513	Magnetic	434410	5840860	A2	-	-	-	36	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70514	Magnetic	434405	5841204	A2	-	-	-	44	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70515	Magnetic	434324	5844467	A2	-	-	-	446	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70516	Magnetic	434307	5844495	A2	-	-	-	132	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70517	Dark reflector	434300	5844354	A2	3.2	0.4	0.3	-	Elongated dark reflector with slight shadow	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70518	Magnetic	434221	5840653	A2	-	-	-	20	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70519	Dark reflector	434155	5843628	A2	2.9	0.7	1.7	-	Relatively indistinct dark reflector with a triangular shadow. Close to similar anomaly 70520	
70520	Bright reflector	434147	5843636	A2	8.0	3.7	0	-	Slightly rectangular bright reflector with indistinct thin linear dark reflectors within this. Possibly shadows. Not particularly distinct but looks relatively anomalous. Similar contact nearby (70519).	
70521	Magnetic	433962	5841796	A2	-	-	-	33	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70522	Magnetic	433853	5843190	A2	-	-	-	71	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70523	Magnetic	433852	5841313	A2	-	-	-	37	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70524	Magnetic	433829	5840434	A2	-	-	-	43	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70525	Debris	433768	5841827	A2	11.8	3.8	1.0	-	Large, irregular dark reflector, not particularly well defined but with a distinct shadow, possibly debris identified in an area of megaripples.	
70527	Magnetic	433658	5845726	A2	-	-	-	501	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External
WAID	Classification	Lasting	Northing	Discrimination	Length (III)	wiath (iii)	neight (iii)	(nT)	Description	References
70528	Magnetic	433425	5846588	A2	-	-	-	38	Small dipole only identified on one survey line. Indicative of possible buried	
									ferrous debris.	
									Medium dipole only identified on one	
70529	Magnetic	433375	5844958	A2	-	-	-	98	survey line. Indicative of possible buried	
									ferrous debris.	
									Small dipole only identified on one	
70530	Magnetic	433316	5842340	A2	-	-	-	17	survey line. Indicative of possible buried	
									ferrous debris.	
				_					Large asymmetric dipole only identified	
70531	Magnetic	433261	5845178	A2	-	-	-	224	on one survey line. Indicative of possible	
									buried ferrous debris.	
		422406	5040004					22	Small dipole only identified on one	
70532	Magnetic	433196	5843381	A2	-	-	-	32	survey line. Indicative of possible buried	
									ferrous debris.	
70522	N.A aki	422040	E04402E	4.2				4.4	Small negative monopole only identified	
70533	Magnetic	433049	5841825	A2	-	-	-	14	on one survey line. Indicative of possible buried ferrous debris.	
									Small dipole only identified on one	
70534	Magnetic	433032	5842317	A2				19	survey line. Indicative of possible buried	
70554	Magnetic	455052	3042317	AZ	_	-	-	19	ferrous debris.	
									Small, elongated dark reflector with a	
70535	Dark reflector	432926	5845457	A2	3.4	0.4	0.4	-	broad bright reflector. Quite distinct.	
									Small negative monopole only identified	
70536	Magnetic	432891	5845147	A2	_	_	_	37	on one survey line. Indicative of possible	
70330	Magnetic	432031	3043147	Λ2				3,	buried ferrous debris.	
									Small dipole only identified on one	
70537	Magnetic	432838	5845047	A2	_	-	-	33	survey line. Indicative of possible buried	
	. 0			- ·- <u>-</u>					ferrous debris.	
									Medium dipole only identified on one	
70538	Magnetic	432787	5847169	A2	-	-	-	86	survey line. Indicative of possible buried	
	<b>0</b>								ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70539	Magnetic	432560	5846510	A2	-	-	-	136	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70540	Magnetic	432506	5842643	A2	-	-	-	57	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70541	Magnetic	432504	5840940	A2	-	-	-	62	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70542	Magnetic	432142	5846243	A2	-	-	-	79	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70543	Dark reflector	432002	5847855	A2	19.0	2.1	0	-	Curvilinear dark reflector with no discernible height, in an elongated 'c' shape.	
70544	Magnetic	431993	5847927	A2	-	-	-	94	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70545	Magnetic	431965	5848728	A2	-	-	-	38	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70546	Magnetic	431910	5848089	A2	-	-	-	105	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70547	Bright reflector	431845	5847684	A2	2.8	1.6	0	-	Small bright reflector, with darker reflector around rim. Possibly a natural feature.	
70548	Magnetic	431842	5844213	A2	-	-	-	31	Small distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70549	Magnetic	431708	5848772	A2	-	-	-	121	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70550	Magnetic	431696	5844740	A2	-	-	-	78	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70551	Magnetic	431658	5842024	A2	-	-	-	44	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70552	Dark reflector	431645	5846233	A2	7.2	0.5	0.5	-	Long, straight and narrow dark reflector with a broad, distinct shadow. Identified in an area of textured seafloor.	
70553	Magnetic	431620	5845127	A2	-	-	-	68	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70554	Magnetic	431616	5844790	A2	-	-	-	79	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70555	Dark reflector	431549	5847373	A2	4.4	0.4	0.3	-	Curved elongated dark reflector with an irregular shadow identified in an area of megaripples.	
70556	Dark reflector	431534	5846342	A2	6.3	2.0	0.4	-	Straight elongated dark reflector with a larger dark contact at the front. Slight shadow and some possible disturbance to surrounding sediment.	
70557	Bright reflector	431519	5847683	A2	4.6	1.3	0	-	Distinct, curved bright reflector. Possibly a shadow but with no discernible contact. Identified in an area of textured seafloor, may be part of a natural formation.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70558	Magnetic	431504	5842911	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70559	Magnetic	431484	5841571	A2	-	-	-	59	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70560	Dark reflector	431458	5848228	A2	2.3	0.6	0.2	-	Small dark reflector with a slightly angular shadow. Identified in an area of ripples.	
70561	Dark reflector	431428	5844360	A2	4.0	0.5	0.2	-	Straight, short dark reflector with a very slight shadow. Feature is not particularly distinct.	
70562	Dark reflector	431412	5846495	A2	3.4	0.3	0.2	-	Short, straight dark reflector with a slightly rounded shadow.	
70563	Dark reflector	431386	5848806	A2	3.5	0.3	0.2	-	Small, slightly elongated dark reflector with a slight shadow.	
70564	Magnetic	431261	5848896	A2	-	-	-	122	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70565	Wreck	431217	5841986	A1	70.0	31.0	6.3	200	A possible area of dispersed wreck, visible in the sidescan data as several dark reflectors that are not always distinct, with broad shadows. An elongated dark reflector with some possible associated scour and a distinct, rounded shadow is also visible which may be part of some vessel structure. In the bathymetry data this is visible as a large wreck situated within sandwaves and partially buried by sediments. The wreck appears to be broken up with large sections disjointed from the main structure of the wreck. There is some scouring coming from the wreck orientated south-east and measuring approximately 50m. A large magnetic anomaly is associated indicating some ferrous content. In the UKHO record this is an unknown wreck described as being broken up and almost buried by sandwaves with debris in the wrecks vicinity, likely boilers and engine.	10722 (UKHO); 892268 (NRHE)
70566	Magnetic	431129	5844010	A2	-	-	-	40	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70567	Magnetic	431088	5843109	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70568	Bright reflector	431067	5848781	A2	2.6	1.0	0	-	Two short, straight bright reflectors close to each other. Image possibly distorted by movement of the sonar fish.	
70569	Magnetic	431048	5843905	A2	-	-	-	58	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70570	Magnetic	431035	5848341	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70571	Magnetic	431007	5847422	A2	-	-	-	305	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70572	Magnetic	430952	5842480	A2	-	-	-	225	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70573	Dark reflector	430914	5845897	A2	4.1	0.2	0.2	-	Slightly curved elongated dark reflector with a very slight shadow.	
70574	Debris field	430902	5848141	A2	31.0	13.0	1.3	106	Large area of possible debris, some slightly darker reflectors and bright reflectors, some of which appear to be relatively straight. Not particularly distinct. In the bathymetry data this is visible as a large oval mound, located on a rough and sandwave rich area of the seabed. Has a medium magnetic anomaly associated indicating ferrous debris	
70575	Dark reflector	430895	5845895	A2	6.0	0.3	0.3	-	Small, relatively straight dark reflector with a slight shadow. In line with another similar contact, possibly part of the same, partially buried feature.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70576	Debris	430895	5848188	A2	4.8	1.9	0.9	158	A distinct but poorly defined dark reflector with height identified in an area of megaripples. Some disturbance to surrounding sediment. Has a medium magnetic anomaly associated indicating ferrous debris	
70577	Magnetic	430893	5843903	A2	-	-	-	58	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70578	Magnetic	430888	5847340	A2	-	-	-	55	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70579	Dark reflector	430872	5843755	A2	2.5	0.2	0.2	-	Straight, narrow dark reflector with a very slight shadow. Not particularly distinct	
70580	Magnetic	430872	5847034	A2	-	-	-	99	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70581	Dark reflector	430804	5848049	A2	3.0	0.6	0.2	-	Small, distinct dark reflector with a very slight shadow. Identified in an area of megarippples.	
70582	Dark reflector	430756	5846123	A2	3.0	0.2	0.1	-	Short, straight distinct dark reflector with a very slight shadow	
70583	Dark reflector	430721	5844754	A2	6.9	0.8	0.6	-	Straight, narrow dark reflector with a distinct but irregular shadow. Feature is identified in an area of, and perpendicular to, megaripples.	
70584	Magnetic	430668	5843112	A2	-	-	-	61	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70585	Magnetic	430619	5843102	A2	-	-	-	31	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70586	Magnetic	430610	5848511	A2	-	-	-	92	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70587	Magnetic	430609	5844209	A2	-	-	-	364	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70588	Magnetic	430606	5848846	A2	-	-	-	94	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70589	Magnetic	430520	5848897	A2	-	-	-	45	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70590	Magnetic	430503	5847230	A2	-	-	-	151	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70591	Magnetic	430494	5848400	A2	-	-	-	39	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70592	Magnetic	430456	5847097	A2	-	-	-	39	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70593	Magnetic	430444	5845598	A2	-	-	-	67	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70594	Magnetic	430412	5848557	A2	-	-	-	23	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70595	Magnetic	430409	5848055	A2	-	-	-	594	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70596	Magnetic	430362	5847371	A2	-	-	-	663	Large anomaly monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70597	Dark reflector	430308	5845494	A2	6.9	2.0	1.7	-	Two dark reflectors or one broken up dark reflector with a distinct, irregular shadow. Feature identified in an area of textured seafloor.	
70598	Bright reflector	430297	5848546	A2	5.4	3.3	0	-	Triangular bright reflector with a small dark reflector at front. In an area of textured seafloor, looks anomalous.	
70599	Magnetic	430290	5845592	A2	-	-	-	92	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70600	Magnetic	430260	5845299	A2	-	-	-	79	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70601	Seafloor disturbance	430166	5847846	A2	10.7	6.3	0.3	-	Possible 'X' shaped seafloor disturbance, comprised of some bright reflectors and some dark reflectors, possibly with height.	
70602	Magnetic	430144	5845429	A2	-	-	-	841	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70603	Magnetic	430137	5849410	A2	-	-	-	428	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70604	Magnetic	430137	5848871	A2	-	-	-	44	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70605	Magnetic	430128	5849097	A2	-	-	-	428	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70606	Magnetic	430106	5846681	A2	-	-	-	28	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70607	Magnetic	430095	5848288	A2	-	-	-	225	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70608	Magnetic	430033	5847568	A2	-	-	-	294	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70609	Magnetic	429987	5846807	A2	-	-	-	60	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70610	Dark reflector	429842	5849672	A2	1.4	0.6	0.8	-	Small dark reflector with a distinct but tapered shadow. Identified in an area of megaripples, appears quite distinct.	
70611	Magnetic	429816	5845514	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70612	Magnetic	429794	5848360	A2	-	-	-	99	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70613	Magnetic	429783	5849881	A2	-	-	-	130	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70614	Magnetic	429772	5847316	A2	-	-	-	52	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70615	Magnetic	429652	5846468	A1	-	-	-	1697	Very large negative monopole only identified on one survey line. Indicative of possible substantial buried ferrous debris.	
70616	Debris	429625	5848286	A2	3.0	1.6	0.4	-	Slightly square object, not particularly distinct. Comprises four, short, straight, parallel dark reflectors with a slight shadow, possibly debris	
70617	Wreck	429617	5846348	A1	56.7	47.0	6.4	6367	Large wreck possibly in two parts, lying perpendicular to one another. Identified as distinct dark reflectors with broad shadows. The wreck appears to be intact in its two parts, with the majority of the hull intact and with deck structure visible as some straight, slatted features. In the bathymetry data the wreck is clearly broken in two parts with some standing structure visible. The two parts measure 77m in length when added together in the bathymetry data, close to the original recorded dimensions (73.2m). There is a very large magnetic anomaly associated indicating a ferrous construction. The UKHO records this as the Rye, a steamship lying in two parts at right angles, sunk in 1941 by torpedo fire. Original dimensions were 73.2m x 10.4m x 4.6m. Last observed in 2014 with dimensions 40m x 40m x 6m.	10544 (UKHO); 907459 (NRHE)





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
		_						(nT)		Hererendes
									Distinct dark reflector with a broad	
									shadow. Feature identified in an area of	
70618	Debris	429562	5846957	A1	3.1	2.5	2.0	1182	textured seafloor. Has a very large	
									magnetic anomaly associated indicating	
									ferrous debris	
									Irregularly shaped dark reflector with a	
70619	Dark reflector	429554	5848941	A2	7.0	2.4	1.0	-	broad, slightly irregular shadow.	
									Identified as two rounded dark	
									reflectors connected in the centre	
									Distinct dark reflector with a broad	
				_	_	_		_	shadow. Feature identified in an area of	
70620	Debris	429512	5846995	A2	3.4	1.9	2.0	67	textured seafloor. Has a medium	
									magnetic anomaly associated indicating	
									ferrous debris	
				_					Medium asymmetric dipole only	
70621	Magnetic	429501	5845892	A2	-	-	-	129	identified on one survey line. Indicative	
									of possible buried ferrous debris.	
									Small dipole only identified on one	
70622	Magnetic	429492	5846128	A2	-	-	-	45	survey line. Indicative of possible buried	
									ferrous debris.	
									Large dipole only identified on one	
70623	Magnetic	429458	5847054	A2	-	-	-	515	survey line. Indicative of possible buried	
									ferrous debris.	
									Distinct dark reflector with a broad	
									shadow. Feature identified in an area of	
70624	Debris	429364	5847229	A2	4.1	2.2	1.4	202	textured seafloor. Has a large magnetic	
									anomaly associated indicating ferrous	
									debris	
									Medium dipole only identified on one	
70625	Magnetic	429359	5848209	A2	-	-	-	133	survey line. Indicative of possible buried	
									ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External
				Discrimination		(,		(nT)		References
70626	Magnetic	429316	5847322	A2	-	-	-	270	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70627	Magnetic	429254	5847128	A2	-	-	-	72	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70628	Magnetic	429137	5849801	A2	-	-	-	43	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70629	Magnetic	429095	5848900	A2	-	-	-	212	Large positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70630	Magnetic	429074	5845972	A2	-	-	-	66	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70631	Magnetic	429062	5847041	A2	-	-	-	27	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70632	Magnetic	429055	5846006	A2	-	-	-	51	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70633	Dark reflector	429036	5846962	A2	4.4	0.4	0.3	-	Very narrow, straight dark reflector with a slight shadow. Not particularly distinct.	
70634	Magnetic	429030	5848829	A2	-	-	-	81	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70635	Magnetic	429026	5849810	A2	-	-	-	48	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70636	Magnetic	428994	5847172	A2	-	-	-	55	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70637	Magnetic	428946	5849408	A2	-	-	-	113	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70638	Magnetic	428889	5849291	A2	-	-	-	58	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70639	Wreck	428802	5847632	A1	146.4	46.6	11.7	818	Large dispersed wreck. Possibly two sections of wreck visible. A thick slightly curvilinear dark reflector, possibly the hull edge, is discernible in the sidescan sonar data. The wreck is comprised of numerous straight dark reflectors with shadows. The wreck is orientated northwest to south-east and lies perpendicular to the large sandwaves. The full extent and detail is likely covered by sands. The wreck has a possible associated piece of debris at its northern end (70640) which is a long, thin and indistinct linear dark reflector with a broad shadow and dimensions of 20.5m x 1.1m x 3.3m. In the bathymetry data the wreck appears upright and with some structure visible. There is a large magnetic anomaly associated with the wreck indicating a ferrous construction. The UKHO records this wreck as the Trevethoe, a motor vessel built in 1940 and sunk in 1941, with original dimensions of 131.8m x 17.1m x 7.5m. Last observed in 2014 as upright but collapsed and in two parts with dimensions 140m x 25m x 5m.	10546 (UKHO); 907460 (NRHE)
70640	Debris	428758	5847714	A1	20.5	1.1	3.3	-	A long, thin and indistinct linear dark reflector, with a long, broad shadow. Possible wreck debris located 9 m to the north-west of wreck 70639	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70641	Magnetic	428647	5848054	A2	-	-	-	45	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70642	Dark reflector	428588	5848570	A2	11.3	0.4	0.1	-	Long and thin curvilinear dark reflector with a slight but distinct shadow.	
70643	Magnetic	428505	5849281	A2	-	-	-	676	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70644	Magnetic	428419	5849889	A2	-	-	-	28	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70645	Wreck	428283	5848091	A1	24.0	8.5	5.4	52	Medium sized wreck, visible as a distinct dark reflector outline that is likely the hull, with some dark reflectors in its centre. The wreck has a broad, irregular and distinct shadow and has been identified in an area of megaripples. There is a possible broken off linear piece of debris extending from the wreck in one of the sidescan sonar images. The wreck is orientated northeast to south-west. In the bathymetry data this is visible as a large and distinct wreck lying in between large sandwaves. The wreck is intact and upright with some slight scouring orientated northeast to south-west and measuring 16m either side. There is a medium magnetic anomaly associated with this wreck indicating some ferrous debris, though the nearest line of data is 25m from the wrecks location. In the UKHO record this is an unknown wreck that is largely intact and partially buried, previously observed in 2016 with dimensions of 24m x 10m x 4m.	82114 (UKHO)
70646	Dark reflector	428180	5849375	A2	2.6	0.3	0.1	-	Short, straight narrow dark reflector with a slight but distinct shadow.	
70647	Dark reflector	428169	5849394	A2	5.4	0.4	0.1	-	Short, straight narrow dark reflector with a slight but distinct shadow. Feature is not particularly distinct.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70648	Magnetic	428107	5849613	A2	-	-	-	93	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70649	Magnetic	428061	5848208	A2	-	-	-	56	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70650	Magnetic	428002	5849599	A2	-	-	-	78	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70651	Debris field	427880	5849577	A2	16.4	6.9	0.6	-	A medium sized spread of possible debris comprising approximately eight dark reflectors with height. Possibly natural however looks a little anomalous. Possible debris field.	
70652	Dark reflector	427831	5848600	A2	2.9	0.4	0.2	-	Short, straight dark reflector with slight height.	
70653	Magnetic	427682	5849792	A2	-	-	-	17	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70654	Dark reflector	427667	5848061	A2	2.6	0.3	0.6	-	Straight, narrow dark reflector with a broad shadow. Numerous similar but smaller contacts identified nearby	
70655	Magnetic	427658	5850018	A2	-	-	-	29	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70656	Magnetic	427425	5849416	A2	-	-	-	136	Medium and distinctive dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70657	Magnetic	427326	5848829	A2	-	-	-	38	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70658	Dark reflector	427033	5850434	A2	4.6	0.4	0.3	-	Small, short, straight dark reflector with a slight shadow.	
70659	Wreck	426967	5850445	A1	56.0	22.0	6.7	9466	Large wreck that appears to be intact though possibly partially buried by sandwaves. It is possibly listing slightly to the starboard side and has a broad shadow. Some elongated straight dark reflectors are visible. The wreck is orientated east to west with a large amount of scouring orientated northwest to south-east. In the bathymetry data the wreck appears to cut through a megaripple. There is a very large magnetic anomaly associated indicating a ferrous construction. The UKHO record (10849) gives this as an unknown wreck lying in two parts, last observed in 2014 with dimensions of 50m x 10m x 5.1m.	10849 (UKHO)
70660	Magnetic	426880	5849236	A2	-	-	-	21	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70661	Dark reflector	426817	5850012	A2	6.9	0.9	0.3	-	Narrow dark reflector with a broad shadow. A distinct 's' shaped dark reflector identified in front of the contact. Feature looks a little anomalous.	
70662	Magnetic	426787	5848935	A2	-	-	-	18	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70663	Magnetic	426760	5850126	A2	-	-	-	340	Large anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70665	Debris field	426553	5849978	A2	24.7	14.0	3.2	194	An indistinct possible debris field comprising an area of numerous small dark reflectors, some of which appear to be slightly slatted, with distinct, irregular shadows. Located on a very rough and uneven area of the seabed with sandwaves. The full extent is possibly buried by sands. In the bathymetry data this is visible as an indistinct medium sized triangular mound that appears to be largely covered by sediment. The orientation is unclear, possibly north-east to southwest. Has a medium magnetic anomaly associated indicating ferrous debris	
70666	Magnetic	426493	5850084	A2	-	-	-	26	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70667	Magnetic	426488	5849307	A2	-	-	-	16	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70668	Magnetic	426435	5849675	A2	-	-	-	57	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70669	Magnetic	426319	5848674	A2	-	-	-	27	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70670	Rope/chain	426220	5849495	A2	55.0	0.2	0.2	-	Straight, narrow linear item with a very slight shadow. Identified in an area od megaripples. Feature appears to be slightly intermittent suggesting partial burial by mobile sediments. Possible rope or chain.	
70671	Magnetic	426213	5850327	A2	-	-	-	15	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70672	Dark reflector	426185	5850409	A2	2.8	0.9	0.4	-	Short, straight dark reflector in an patch of disturbed seafloor in an area of megaripples, looks distinct	
70673	Magnetic	426145	5849832	A2	-	-	-	34	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70674	Magnetic	426063	5850154	A2	-	-	-	40	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70675	Magnetic	426015	5849775	A2	-	-	-	19	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70676	Magnetic	425970	5850552	A2	-	-	-	54	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70677	Magnetic	425963	5849551	A2	-	-	-	15	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70678	Magnetic	425937	5850353	A2	-	-	-	24	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70679	Magnetic	425884	5850357	A2	-	-	-	61	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70680	Magnetic	425702	5850101	A2	-	-	-	41	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70681	Magnetic	425643	5849614	A2	-	-	-	14	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70682	Magnetic	425500	5849633	A2	-	-	-	11	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70683	Magnetic	425489	5850285	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70684	Magnetic	425148	5850043	A2	-	-	-	20	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70685	Magnetic	425089	5850228	A2	-	-	-	42	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70686	Magnetic	424644	5850275	A2	-	-	-	55	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70687	Magnetic	424444	5848813	A2	-	-	-	33	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70688	Magnetic	424071	5848790	A2	-	-	-	42	Small irregular anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70689	Magnetic	424052	5849094	A2	-	-	-	33	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70690	Magnetic	423728	5850769	A2	-	-	-	47	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70691	Magnetic	423713	5849164	A2	-	-	-	139	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70692	Bright reflector	423667	5849174	A2	4.4	3.0	0	-	Circular bright reflector with a dark reflector in the centre. Identified within an area of megaripples, possibly a natural feature.	
70693	Magnetic	423262	5850476	A2	-	-	-	17	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70694	Magnetic	423235	5849551	A2	-	-	-	21	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70695	Magnetic	423207	5849185	A2	-	-	-	85	Medium anomaly identified on more than one survey line. Indicative of possible buried ferrous debris.	
70696	Magnetic	423104	5850773	A2	-	-	-	16	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70697	Magnetic	422908	5850623	A2	-	-	-	31	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70698	Magnetic	422890	5849463	A2	-	-	-	15	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70699	Magnetic	422784	5849039	A2	-	-	-	109	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70700	Magnetic	422571	5849429	A2	-	-	-	224	Large and distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70701	Magnetic	422490	5849054	A2	-	-	-	28	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70702	Magnetic	422435	5849009	A2	-	-	-	19	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70703	Magnetic	422290	5849776	A2	-	-	-	22	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70704	Wreck	422267	5849082	A1	26.0	7.0	2.0	117	Wreckage of an unknown sailing vessel. Appears on the sonar data to be relatively intact though partially buried. Numerous short, straight dark reflectors with height. A medium sized wreck that is located within large sandwaves and thus difficult to distinguish in the bathymetry data. Appears to be aligned north-east to south-west and very little detail is visible - the wreck is mostly buried by sediments and the hull edge is difficult to see. Has a medium magnetic anomaly associated indicating a ferrous construction. This is an unknown wreck in the UKHO record which was last observed in 2014 as intact, mainly covered by a sandwave and measuring 46m x 8m x 2m.	10545 (UKHO)
70705	Magnetic	422091	5849938	A2	-	-	-	42	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70706	Magnetic	422088	5849332	A2	-	-	-	43	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70707	Magnetic	421931	5849407	A2	-	-	-	40	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70708	Magnetic	421831	5849489	A2	-	-	-	58	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
				Discrimination				(nT)	Wreckage of steamship Montferlan.  Identified on the bathymetry data as a	References
70709	Wreck	421671	5849182	A1	153.0	38.0	10.2	10244	distinct mound aligned north-east to south-west with scour to the south-west of the wreck. Bathymetry detail suggests that the wreck is upright with some debris to the north-east. Appears on the sonar data to be partially disintegrated, possibly broken up into sections, with a long distinct shadow. Numerous straight, sometimes slatted, sometimes square, dark reflectors identified. Feature has a very large associated magnetic anomaly. UKHO record states the original length was 128m. Last	10549 (UKHO); 907461 (NRHE)
									observed in 2014 with measurements of 160m x 34m x 7.7m.	
70710	Magnetic	421494	5850694	A2	-	-	-	59	Medium anomaly identified on more than one survey line. Indicative of possible buried ferrous debris.	
70711	Magnetic	421409	5849573	A2	-	-	-	44	Small symmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70712	Magnetic	421381	5850683	A2	-	-	-	49	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70713	Magnetic	421210	5850816	A2	-	-	-	77	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70714	Magnetic	421207	5849111	A2	-	-	-	64	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External
				Discrimination				(nT)		References
70715	Debris field	421173	5849391	A2	20.0	17.0	2.9	178	A broad, elongated dark reflector with several straight dark reflectors jutting out from its edge. Feature appears to be partially buried. In the bathymetry data this is visible as a large and distinct mound that has a slight circular profile with one side steeper than the other. Identified on the magnetometer data as a medium asymmetric dipole indicating ferrous material. Possibly a debris field or a small, partially buried wreck.	
70716	Mound	420995	5849159	A2	18.5	7.0	0.6	-	A medium sized mound within a depression, the depression measures 16m x 7m x -0.5m in the bathymetry data. In the sidescan data the feature is visible as a broad, slightly rounded dark reflector with a distinct, tapered shadow, with possible associated scour. Contact possibly sits within a slight depression.	
70717	Magnetic	420991	5850668	A2	-	-	-	41	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70718	Magnetic	420969	5850103	A2	-	-	-	146	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70719	Dark reflector	420943	5849672	A2	2.4	0.5	0.4	-	Distinct but irregular dark reflector with height, appears to be in a slight zigzag. Object identified in an area of megaripples.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70720	Magnetic	420940	5850715	A2	-	-	-	87	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70721	Magnetic	420927	5850593	A2	-	-	-	51	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70722	Magnetic	420807	5849404	A2	-	-	-	495	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70723	Magnetic	420768	5850761	A2	-	-	-	100	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70724	Magnetic	420764	5850468	A2	-	-	-	287	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70725	Magnetic	420754	5849207	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70726	Magnetic	420737	5850735	A2	-	-	-	24	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70727	Dark reflector	420735	5850102	A2	0.7	0.2	0.1	-	Short, straight dark reflector with a very slight shadow. Identified in an area of megaripples.	
70728	Magnetic	420530	5849111	A2	-	-	-	112	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70729	Magnetic	420396	5849951	A2	-	-	-	55	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70730	Magnetic	420316	5850327	A2	-	-	-	56	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70731	Magnetic	420224	5849195	A2	-	-	-	185	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70732	Magnetic	420032	5849147	A2	-	-	-	41	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70733	Magnetic	419991	5850091	A2	-	-	-	83	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70734	Magnetic	419974	5849184	A2	-	-	-	238	Large dipole identified on more than one survey line. Indicative of possible buried ferrous debris.	
70735	Debris field	419825	5849775	A2	26.0	12.0	2.5	-	A large group of small dark reflectors with a distinct, jagged shadow. Identified in an area of megaripples and the full extent may be buried. In the bathymetry data this is visible as a large and distinct mound with scour to the east and north-east of the target. Possible debris field.	
70736	Magnetic	419809	5849809	A2	-	-	-	95	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70737	Magnetic	419665	5850149	A2	-	-	-	72	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70738	Magnetic	419647	5850360	A2	-	-	-	76	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70739	Magnetic	419573	5850705	A2	-	-	-	23	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70740	Magnetic	419534	5850533	A2	-	-	-	21	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70741	Magnetic	419329	5850307	A2	-	-	-	775	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70742	Dark reflector	419321	5849324	A2	0.8	0.7	0.2	-	Small round dark reflector with a short but distinct shadow. Possibly natural however looks anomalously round.	
70743	Magnetic	419320	5850103	A2	-	-	-	331	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70744	Wreck	419288	5849507	A1	68.0	11.3	6.0	10181	Large wreck that appears in the sonar data to be partially broken up with numerous straight dark reflectors and some slatted items. In the bathymetry data the wreck is visible as intact and lying upright on the edge of a large sandwave. The wreck is orientated north-east to south-west with scouring measuring 30m and orientated to the south-east. Associated wreck debris may be buried by sands. Wreck is identified on the magnetometer data as a very large magnetic anomaly indicating ferrous material. Associated UKHO record of an unknown wreck, last observed in 2014 measuring 60m x 10m x 4.1m.	10548 (UKHO); 892271 (NRHE)





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70745	Magnetic	419265	5849383	A2	-	-	-	25	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70746	Magnetic	419150	5849325	A2	-	-	-	138	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70747	Magnetic	419125	5851125	A2	-	-	-	24	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70748	Magnetic	419071	5850689	A2	-	-	-	84	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70749	Magnetic	419066	5851187	A2	-	-	-	37	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70750	Dark reflector	419064	5850541	A2	1.8	0.3	0.2	-	Elongated dark reflector with a distinct shadow.	
70751	Magnetic	419015	5849935	A2	-	-	-	75	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70752	Magnetic	419009	5849664	A2	-	-	-	146	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70753	Dark reflector	418931	5849803	A2	0.9	0.2	0.2	-	Small, dark reflector with a distinct shadow which appears to extend out beyond the contact. Some possible associated scour.	
70754	Dark reflector	418930	5849791	A2	2.0	0.4	0.4	-	Small dark reflector with a distinct, rounded, relatively broad shadow. Some possible associated scour.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70755	Magnetic	418916	5850637	A2	-	-	-	63	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70756	Magnetic	418884	5849422	A2	-	-	-	24	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70757	Magnetic	418523	5850069	A2	-	-	-	41	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70758	Magnetic	418379	5850671	A2	-	-	-	250	Large positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70759	Magnetic	418305	5850967	A2	-	-	-	382	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70760	Magnetic	418276	5850891	A2	-	-	-	38	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70761	Magnetic	418101	5850986	A2	-	-	-	184	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70762	Magnetic	418059	5850991	A2	-	-	-	236	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70763	Magnetic	417939	5849439	A2	-	-	-	49	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70764	Magnetic	417769	5849397	A2	-	-	-	32	Small anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
70765	Magnetic	417414	5851081	A2	-	-	-	(nT) 105	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70766	Magnetic	417339	5850021	A2	-	-	-	55	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70767	Magnetic	416973	5850755	A2	-	-	-	91	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70768	Magnetic	416881	5849985	A2	-	-	-	11	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70769	Magnetic	416815	5849811	A2	-	-	-	71	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70770	Magnetic	416536	5851027	A2	-	-	-	143	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70771	Magnetic	416273	5849462	A2	-	-	-	26	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70772	Magnetic	416270	5849491	A2	-	-	-	30	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70773	Magnetic	416231	5851312	A2	-	-	-	799	Large dipole anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70774	Magnetic	416223	5849757	A2	-	-	-	96	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70775	Magnetic	416096	5851067	A2	-	-	-	35	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70776	Magnetic	416077	5851249	A2	-	-	-	21	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70777	Magnetic	415948	5851087	A2	-	-	-	15	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70778	Magnetic	415790	5851270	A2	-	-	-	29	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70779	Magnetic	415763	5849825	A2	-	-	-	48	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70780	Dark reflector	415670	5850820	A2	1.2	0.3	0.2	-	Elongated dark reflector with a distinct, slightly irregular shadow.	
70781	Magnetic	415655	5850729	A2	-	-	-	36	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70782	Debris field	415394	5849528	A2	9.9	0.4	1.1	260	Small patch of disturbed seafloor. Possibly several small objects with height piled up. Interpreted as being a small debris field. Associated large magnetic anomaly suggests ferrous debris.	
70783	Magnetic	415373	5851454	A2	-	-	-	60	Medium negative monopole identified on more than one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70784	Debris	415366	5849564	A1	0.8	0.6	0.8	1113	Distinct dark reflector with an irregular shadow. Other similar but smaller contacts identified nearby. Possibly part of nearby debris field (70785). Has a very large magnetic contact associated indicating ferrous debris	
70785	Debris field	415354	5849572	A1	10.8	2.4	1.3	1113	Small patch of disturbed seafloor comprised numerous dark reflectors with height. Very large monopole identified on the magnetometer data indicating ferrous material. Possible small debris field.	
70786	Magnetic	415318	5850961	A2	-	-	-	71	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70787	Magnetic	415303	5851388	A2	-	-	-	78	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70788	Magnetic	415281	5851195	A2	-	-	-	36	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70789	Magnetic	415184	5849952	A2	-	-	-	184	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70790	Magnetic	415045	5850663	A2	-	-	-	34	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70791	Mound	415020	5849973	A2	9.1	1.1	1.2	-	Small patch of dark reflector, not particularly distinct, but with a clear shadow and some possible scour.  Possibly natural however looks a little anomalous. Identified as a small mound on the bathymetry data.	
70792	Magnetic	414893	5850619	A2	-	-	-	40	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70793	Magnetic	414871	5850387	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70794	Dark reflector	414866	5849913	A2	1.8	1.6	0.7	-	Broad, slightly irregular dark reflector with a distinct shadow. Possibly several objects close together. May be a natural feature.	
70795	Magnetic	414746	5850304	A2	-	-	-	35	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70796	Magnetic	414654	5850537	A2	-	-	-	58	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70797	Magnetic	414371	5850803	A2	-	-	-	76	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70798	Dark reflector	414339	5850340	A2	1.0	0.1	0.3	-	Small dark reflector with a distinct shadow. Bright reflector at the front of the contact, possibly related.	
70799	Magnetic	414289	5850975	A2	-	-	-	53	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70800	Magnetic	414188	5850981	A2	-	-	-	20	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70801	Magnetic	414181	5849933	A2	-	-	-	172	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70802	Magnetic	414007	5851075	A2	-	-	-	217	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70803	Magnetic	413984	5851304	A2	-	-	-	97	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70804	Magnetic	413882	5851313	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70805	Magnetic	413875	5851575	A2	-	-	-	15	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70806	Magnetic	413857	5849835	A2	-	-	-	51	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70807	Magnetic	413733	5851587	A2	-	-	-	11	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70808	Magnetic	413700	5851069	A2	-	-	-	79	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
70809	Wreck	413550	5850143	A1	47.0	18.0	7.6	(nT)	Wreck of steam paddle schooner Seagull. The wreck is orientated in a NW - SE direction. Wreck appears to be partially disintegrated on the sonar data with numerous straight dark reflectors and a broad, irregular shadow. In the bathymetry data the wreck appears intact and upright on a sandwave rich area of the seabed, again some superstructure is discernible in the data. Wreck is identified on the magnetometer data as a large asymmetrical dipole. The UKHO record states that the original dimensions were 52.1m x 7m. This wreck was last observed in 1994 by divers, who measured the length as 40m and the height as 8.6m.	10550 (UKHO); 892272 (NRHE)
70810	Debris field	413518	5850156	A1	8.0	3.3	0.4	-	Small patch of disturbed seafloor with some possible straight features with height, however nothing is clearly discernible. Possible debris associated with the wreck 70809	
70811	Magnetic	413517	5850235	A2	-	-	-	81	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70812	Magnetic	413491	5851668	A2	-	-	-	110	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70813	Magnetic	413294	5851181	A2	-	-	-	74	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70814	Magnetic	413256	5849895	A2	-	-	-	69	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70815	Magnetic	413243	5849961	A2	-	-	-	75	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70816	Debris	413210	5850774	A2	8.3	0.4	0.1	-	Short curvilinear dark reflector with a slight shadow. Possible item of debris however not particularly distinct.	
70817	Magnetic	413169	5849901	A2	-	-	-	67	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70818	Dark reflector	412926	5850034	A2	0.8	0.7	0.5	-	Relatively indistinct, straight dark reflector with a relatively broad shadow. Possibly a natural feature.	
70819	Magnetic	412731	5850815	A2	-	-	-	36	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70820	Magnetic	412715	5851475	A2	-	-	-	301	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70821	Magnetic	412714	5851035	A2	-	-	-	30	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70822	Magnetic	412605	5849769	A2	-	-	-	69	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70823	Debris	412557	5850455	A2	82.7	0.9	0.4	110	Long, straight linear item of debris with height identified on the sonar data. Feature correlates with a medium asymmetric dipole identified on the magnetometer data indicating ferrous debris.	
70824	Magnetic	412502	5850689	A2	-	-	-	34	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70825	Magnetic	412445	5851504	A2	-	-	-	158	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70826	Magnetic	412413	5849863	A2	-	-	-	36	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70827	Magnetic	412322	5850037	A2	-	-	-	53	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70828	Magnetic	412261	5850645	A2	-	-	-	52	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70829	Dark reflector	412242	5849928	A2	2.7	0.1	0.2	-	Faint, straight, elongated dark reflector with a slight shadow.	
70830	Magnetic	412230	5850469	A2	-	-	-	88	Medium distinct negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70831	Dark reflector	412223	5849946	A2	2.3	0.8	0.3	-	Distinct, straight elongated dark reflector with a broad shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70832	Debris	412148	5850351	A1	1.6	0.3	0.5	-	Small dark reflector, not particularly distinct, identified towards the bow of wreck 70834. Likely to be items of debris associated with wreck.	
70833	Debris	412143	5850353	A1	0.9	0.6	0.6	-	Small dark reflector identified at the bow of a wreck. Partially obscured by the wreck shadow. Possible similar debris identified nearby (70832). Likely to be items of debris associated to wreck 70834.	
70834	Wreck	412105	5850354	A1	66.0	12.8	6.4	147	Wreck of the steam screw barque Xanthe (UKHO) sunk in 1869. Identified on the sonar data as a distinct, upright wreck. Wreck appears to be relatively intact, with some possible straight deck features and some associated items of debris. In the bathymetry data the wreck consists of one distinct target aligned east to west, lying on the seabed at a depth of 29m. Wreck is identified on the magnetometer data as a medium magnetic anomaly. UKHO record states that the original dimensions were 62.2m x 8.5m x 4.9m and that the wreck was last observed in 2002, with dimensions of 55m x 10m x 7m.	10660 (UKHO); 892273 (NRHE)
70835	Magnetic	411891	5850871	A2	-	-	-	66	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70836	Magnetic	411629	5850952	A2	-	-	-	49	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70837	Rope/chain	411622	5850101	A2	67.1	1.1	0.3	64	Long and reasonably straight linear dark reflector with slight height. Possible rope or chain. Has a medium magnetic anomaly associated indicating ferrous debris.	
70838	Rope/chain	411607	5850260	A2	128.2	0.4	0.4	-	Long and thin curvilinear dark reflector with slight height. Possible rope/chain, feature curves round in a loop at one end.	
70839	Rope/chain	411475	5850313	A2	105.3	0.5	0.5	35	A long, thin and curvilinear dark reflector with a slight shadow, likely long length of rope or chain. Has a small magnetic anomaly associated indicating ferrous debris.	
70840	Magnetic	411359	5850463	A2	-	-	-	308	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70841	Magnetic	411189	5850739	A2	-	-	-	327	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70842	Magnetic	411177	5850603	A2	-	-	-	662	Large negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70843	Magnetic	411154	5850789	A2	-	-	-	40	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70844	Debris	411081	5851344	A2	7.1	0.4	0	-	Short, narrow curvilinear bright reflector identified in an area of rippled seabed.	
70845	Magnetic	410999	5851831	A2	-	-	-	44	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70846	Magnetic	410993	5850260	A2	-	-	-	39	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70847	Debris	410940	5851086	A2	35.3	0.4	0.4	-	Relatively straight linear item of debris, orientated east - west, with an irregular, intermittent shadow. Identified in an area of textured seafloor.	
70848	Magnetic	410900	5850242	A2	-	-	-	63	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70849	Magnetic	410851	5851515	A2	-	-	-	33	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70850	Magnetic	410795	5851571	A2	-	-	-	38	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70851	Magnetic	410762	5850475	A2	-	-	-	95	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70852	Magnetic	410694	5849930	A2	-	-	-	40	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70853	Magnetic	410575	5851709	A2	-	-	-	48	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70854	Magnetic	410573	5851587	A2	-	-	-	61	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70855	Magnetic	410464	5851920	A2	-	-	-	67	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
70856	Rope/chain	410452	5851174	A2	43.4	0.3	0.2	(nT) 94	Long length of a slightly curvilinear dark reflector with a slight shadow. Possible rope or chain. Has a medium magnetic anomaly associated indicating ferrous debris.	
70857	Magnetic	410399	5851420	A2	-	-	-	46	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70858	Magnetic	410367	5850127	A2	-	-	-	206	Large dipolar anomaly only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
70859	Magnetic	410341	5851681	A2	-	-	-	43	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70860	Magnetic	410327	5849961	A2	-	-	-	134	Medium anomaly identified on more than one survey line. Indicative of possible buried ferrous debris with no surface expression.	
70861	Magnetic	410266	5850427	A2	-	-	-	26	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
70862	Magnetic	410254	5851569	A2	-	-	-	62	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70863	Debris field	410221	5851797	A2	29.9	12.8	0.9	40	Small patch of disturbed seafloor. Appears to be slightly darker reflector with some objects with height. Has a small magnetic anomaly associated indicating ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70864	Magnetic	410145	5850132	A2	-	-	-	84	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70865	Magnetic	410080	5850090	A2	-	-	-	79	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70866	Magnetic	410048	5851912	A2	-	-	-	70	Medium anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70867	Magnetic	409983	5851893	A2	-	-	-	34	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70868	Magnetic	409858	5851319	A2	-	-	-	170	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70869	Magnetic	409809	5850446	A2	-	-	-	198	Medium asymmetric dipole Identified on more than one survey line. Indicative of possible buried ferrous debris.	
70870	Magnetic	409231	5851189	A2	-	-	-	415	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70871	Rope/chain	409224	5851490	A2	27.9	0.3	0.2	-	Short, relatively straight linear item of debris possibly with a slight shadow. Not particularly distinct.	
70872	Magnetic	409102	5850383	A2	-	-	-	81	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70873	Magnetic	408920	5850554	A2	-	-	-	21	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70874	Rope/chain	408842	5850853	A2	71.8	0.2	0.2	-	Curvilinear item of debris with a slight shadow. Possible rope or chain.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70875	Dark reflector	408818	5851046	A2	3.7	1.5	0.4	-	Small round dark reflector with a brighter reflector in the centre and a distinct, irregular shadow.	
70876	Magnetic	408780	5850544	A2	-	-	-	48	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70877	Magnetic	408775	5851203	A2	-	-	-	154	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70878	Magnetic	408658	5852225	A2	-	-	-	25	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70879	Magnetic	408520	5852354	A2	-	-	-	37	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70880	Magnetic	408487	5852290	A2	-	-	-	114	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
70881	Debris	408481	5850795	A2	2.5	1.9	0.5	241	Small, circular dark reflector with a bright reflector in the centre with a broad distinct shadow. Has a large magnetic anomaly associated indicating ferrous debris	
70882	Magnetic	408463	5852212	A2	-	-	-	29	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70883	Debris	408450	5850815	A2	8.1	0.2	0.2	-	Short, straight linear item of debris curved round in a 'v', or possibly two objects close together.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70884	Dark reflector	408420	5850627	A2	3.1	2.4	0.6	-	Dark circular dark reflector with a bright reflector in the centre and a distinct shadow. Some slight disturbance to surrounding sediment.	
70885	Magnetic	408400	5850489	A2	-	-	-	39	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70886	Magnetic	408392	5851348	A2	-	-	-	33	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70887	Magnetic	408380	5851461	A2	-	-	-	87	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70888	Debris	408377	5851568	A2	1.8	1.7	0.5	54	Small, round dark reflector with a bright reflector in the centre in a depression.  Has a medium magnetic anomaly associated indicating ferrous debris	
70889	Magnetic	408357	5850798	A2	-	-	-	53	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70890	Magnetic	408348	5851600	A2	-	-	-	77	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70891	Magnetic	408329	5852368	A2	-	-	-	90	Medium distinctive dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70892	Dark reflector	408288	5851095	A2	7.8	1.2	0.5	-	Narrow dark reflector in a 'V' shape with a slight shadow. Looks a little irregular, may also be a slightly triangular object.	
70893	Dark reflector	408269	5850876	A2	5.8	0.9	0.8	-	Straight dark reflector with a broad, distinct shadow. Object appears to be slightly rectangular	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70894	Magnetic	408265	5852699	A2	-	-	-	692	Large dipole anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70895	Magnetic	408253	5850701	A2	-	-	-	46	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70896	Magnetic	408216	5850658	A2	-	-	-	238	Large asymmetric dipole identified on more than one survey line. Indicative of possible buried ferrous debris.	
70897	Mound	408208	5851780	A2	5.0	3.4	1.4	-	Distinct dark reflector within a slight depression with a relatively broad shadow. Visible in the bathymetry as a distinct mound in the centre of a slight depression or scour measuring 17 m x 14 m x 0.6 m.	
70898	Magnetic	408186	5850687	A2	-	-	-	313	Large asymmetric dipole identified on more than one survey line. Indicative of possible buried ferrous debris.	
70899	Dark reflector	408170	5850847	A2	4.4	1.9	1.1	-	Distinct, 'v' shape dark reflector with a distinct, tapered shadow. Some disturbance to surrounding seabed.	
70901	Dark reflector	408137	5851136	A2	3.3	0.9	0.7	-	Distinct dark reflector with a broad, slightly angular shadow.	
70902	Magnetic	408094	5852138	A2	-	-	-	34	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70903	Magnetic	408061	5851869	A2	-	-	-	103	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70904	Magnetic	408025	5851490	A2	-	-	-	220	Large positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70905	Dark reflector	408005	5851031	A2	1.6	1.5	0.3	-	Small, circular dark reflector with a bright reflector in the centre with a distinct curved shadow.	
70906	Magnetic	407965	5852058	A2	-	-	-	26	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70907	Magnetic	407771	5851284	A2	-	-	-	42	Small distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70908	Magnetic	407756	5852353	A2	-	-	-	54	Medium distinctive dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70910	Magnetic	407667	5852948	A2	-	-	-	57	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70911	Magnetic	407640	5853077	A2	-	-	-	92	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70912	Magnetic	407639	5851465	A2	-	-	-	41	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70913	Rope/chain	407630	5853193	A2	92.7	0.8	0.4	305	Curvilinear dark reflector with slight height possibly split apart or partially buried across its extent. Possible rope or chain orientated north-west to southeast on a relatively flat and even area of the seabed. Has a large magnetic anomaly associated indicating ferrous debris.	
70914	Magnetic	407630	5852981	A2	-	-	-	117	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External
		J	Ŭ	Discrimination	, , , , , , , , , , , , , , , , , , ,		J . ,	(nT)		References
70915	Mound	407613	5852594	A2	16.0	15.0	1.9	128	Large, rounded, poorly defined dark reflector with a broad, long shadow. In the bathymetry data this is visible as a large circular mound. Has a large medium magnetic anomaly associated indicating ferrous debris is contained	
70916	Dark reflector	407518	5851012	A2	2.6	0.7	0.6	-	An irregularly shaped thin dark reflector, relatively straight and with a fairly broad shadow.	
70917	Magnetic	407474	5853234	A2	-	-	-	54	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70918	Magnetic	407469	5852212	A2	-	-	-	154	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70919	Dark reflector	407440	5851807	A2	4.1	0.5	0.5	-	Dark reflector with a broad, distinct shadow. Looks quite large however image likely distorted by movement of sonar fish.	
70921	Rope/chain	407326	5851962	A2	69.9	0.5	0.1	31	Faint linear dark reflector, curved into a 'v' shape with a rounded joint, with a slight shadow, possibly rope or chain. Has a small magnetic anomaly associated indicating ferrous debris.	
70922	Magnetic	407291	5851104	A2	-	-	-	193	Medium dipole identified on more than one survey line. Indicative of possible buried ferrous debris.	
70923	Dark reflector	407269	5851868	A2	1.8	1.5	0.4	-	Small, circular dark reflector with a bright reflector in the centre with a distinct shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70924	Magnetic	407269	5851069	A2	-	-	-	43	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70925	Dark reflector	407266	5851035	A2	2.4	0.9	0.6	-	Faint dark reflector with a distinct, broad shadow.	
70926	Magnetic	407211	5853274	A2	-	-	-	25	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70928	Dark reflector	407187	5851658	A2	6.4	1.5	0.4	-	Narrow elongated dark reflector with a broad distinct shadow. Object extends out with a very slight shadow.	
70930	Magnetic	407157	5851175	A2	-	-	-	22	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70931	Magnetic	407156	5851314	A2	-	-	-	26	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70932	Rope/chain	407100	5851063	A2	9.3	0.5	0.2	-	Relatively short linear dark reflector with a slight shadow. Possible rope or chain identified in a relatively featureless area of seafloor.	
70933	Magnetic	407047	5852501	A2	-	-	-	161	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70934	Wreck	406929	5852021	A1	105.0	46.4	1.9	1056	Large wreck visible as numerous small objects with height, some of which are quite straight. No distinguishable structural elements are visible and it appears badly degraded, though still with some height. The wreck is orientated north to south on a relatively flat and even area of the seabed. In the bathymetry data this wreck is visible as mostly buried and broken up and situated in a depression. Has a very large magnetic anomaly associated indicating a ferrous construction. UKHO record 10554 states this is the Sheaf Water, a steamship torpedoed by a German E-Boat in 1942 with original dimensions of 97.5m x 13.1m.  Previously identified in 2002 with dimensions as 110m x 25m x 2m.	10554 (UKHO); 907463 (NRHE)
70935	Debris	406866	5852138	A2	4.3	3.3	1.4	-	A triangular dark reflector with a distinct dark reflector at the front with a distinct, narrow shadow. Possible debris, located 80 m from dispersed wreck (70934)	
70936	Bright reflector	406791	5851618	A2	7.1	0.1	0	-	Straight, elongated bright reflector.  Possibly a shadow with no discernible contact.	
70937	Dark reflector	406764	5852637	A2	4.7	0.5	0.3	-	Short straight distinct dark reflector with a broad shadow.	
70938	Magnetic	406737	5852583	A2	-	-	-	39	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70939	Dark reflector	406699	5852290	A2	4.2	0.9	0.4	-	Straight, distinct dark reflector, which bends round slightly at one end, with a broad shadow. Object possibly distorted by movement of the sonar fish.	
70940	Magnetic	406685	5851341	A2	-	-	-	86	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70941	Bright reflector	406611	5852664	A2	6.5	0.7	0	-	Short, straight narrow bright reflector identified in an isolated area of seafloor.	
70942	Magnetic	406605	5852642	A2	-	-	-	358	Large anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70943	Dark reflector	406587	5852212	A2	4.3	1.4	0.3	-	Small, circular dark reflector with a bright reflector in the centre and a distinct shadow.	
70945	Magnetic	406516	5851497	A2	-	-	-	37	Small distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70946	Rope/chain	406463	5853677	A2	65.1	0.4	0.3	-	Relatively straight linear dark reflector with a shadow on a flat and even area of the seabed, possible rope or chain.	
70947	Magnetic	406445	5851623	A2	-	-	-	59	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70948	Debris field	406424	5852262	A2	31.0	31.0	-0.7	386	Slightly diamond shaped debris field comprising bright reflectors with a dark reflector running through the centre. Possible scour. In the bathymetry data this is visible as a large depression with slight mound in the centre. Has a large magnetic anomaly associated indicating ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70951	Magnetic	406216	5852461	A2	-	-	-	51	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70952	Rope/chain	406176	5852858	A2	98.2	0.6	0.3	-	A long straight and narrow linear dark reflector with a slight shadow, possible rope or chain associated or caught on wreck (70962).	
70953	Magnetic	406141	5851570	A2	-	-	-	65	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70954	Wreck	406125	5853694	A1	73.2	29.6	5.1	12104	Large wreck that appears to be mostly intact. It has numerous dark reflectors, some of which are quite straight and have long, distinct shadows. These may be deck structure visible in the sidescan sonar data. The vessel has a large height measurement and is orientated northeast to south-west on a relatively flat and even area of the seabed. In the bathymetry data this wreck appears upright with a distinct area of scour orientated south-east and a depth of 1m below the seabed. There does not appear to be any outlying debris visible. There is a very large magnetic anomaly associated indicating a ferrous construction. Associated with UKHO record 10680 of unknown wreck. Last observed with dimensions 80m x 20m x 4m in 1983.	10680 (UKHO); 892279 (NRHE)





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70955	Rope/chain	406125	5852888	A2	14.2	0.6	0.1	-	Short and straight curvilinear item of debris with slight height, possibly a rope or chain. Identified close to similar linear feature and wreck (70962).	
70956	Rope/chain	406096	5852907	A2	82.9	1.1	0.2	-	Very long, relatively straight and narrow dark reflector with slight height. Possibly fishing gear attached to wreck 70962.	
70957	Magnetic	406089	5853496	A2	-	-	-	12	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70958	Debris field	406085	5852987	A1	44.4	19.2	0.2	-	Large patch of a dispersed dark reflectors with height. Approximately four anomalies, one thin linear dark reflector and smaller anomalies. Located directly next to wreck 70962 and likely associated debris	
70959	Rope/chain	406077	5853046	A2	33.1	0.4	0.3	-	Faint curvilinear dark reflector with slight height, possible rope or chain associated with nearby wreck (70962).	
70960	Rope/chain	406070	5853720	A2	70.1	0.4	0.1	-	Long and thin linear dark reflector identified close to wreck. Possibly related rope or chain or modern material snagged on the wreck (70954).	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70962	Wreck	406058	5852977	A1	107.0	43.5	4.0	30656	A large area of dispersed wreck, visible as numerous dark reflectors, some of which are quite straight, with distinct broad shadows which may be deck structure. Parts of the hull outer edge appear intact. The wreck has a debris field (70958) and possible rope or chain features in close proximity (70952, 70955, 70956 and 70959). The wreck is orientated north to south. In the bathymetry data this wreck is recorded with a general seabed depth of 14m and is visible as one distinct target with one high point at the northern end. Has a large magnetic anomaly associated indicating a ferrous construction. In the UKHO database this is recorded as Fulgens, a steamship built in 1912 with dimensions of 93.1m x 12.9m and sunk in 1915 by torpedo.	10556 (UKHO); 907465 (NRHE)
70963	Magnetic	406046	5851855	A2	-	-	-	109	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70964	Magnetic	406037	5852080	A2	-	-	-	29	Small positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70965	Debris field	405986	5853162	A2	29.0	15.0	0.7	345	Small patch of objects with height with distinct shadows, possible debris field. In the bathymetry data this is visible as a depression (-0.8 m) with slight mound in the centre on a slope. Has a large magnetic anomaly associated indicating ferrous debris	
70966	Magnetic	405904	5854081	A2	-	-	-	56	Medium symmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70968	Magnetic	405841	5852185	A2	-	-	-	58	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70969	Rope/chain	405828	5852225	A2	67.2	0.4	0.2	-	A long, thin and faint linear dark reflector with associated dark reflector. Feature appears to be in a relatively broad 'v' shape. Object on end of possible rope or chain measures 2.3m x 1.8m x 0.8m.	
70970	Magnetic	405824	5851595	A2	-	-	-	131	Medium distinctive dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70972	Rope/chain	405726	5851715	A2	56.7	0.3	0.4	-	Linear dark reflector with a very slight shadow, possibly rope or chain although may just be a scar. Has a UKHO record (10553 - British fishing vessel Nikki) 13m to the north-east but no visible remains.	10553 (UKHO)
70973	Magnetic	405678	5852003	A2	-	-	-	28	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70974	Rope/chain	405662	5853148	A2	46.0	0.7	0.3	-	Straight, linear item of debris with a slight shadow identified in a relatively featureless area of seafloor, possible rope or chain.	
70975	Magnetic	405458	5852406	A2	-	-	-	615	Large anomaly only identified on one survey line. Indicative of possible buried ferrous debris.	
70977	Magnetic	405438	5852011	A2	-	-	-	107	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70978	Debris	405427	5851976	A2	4.8	2.5	1.6	34	Straight, but relatively indistinct dark reflector but with a clearly defined shadow. Shadow appears to be slightly square with a dark reflector in the centre. Has a small magnetic anomaly associated indicating ferrous debris	
70979	Dark reflector	405401	5852664	A2	4.1	0.9	0.7	-	Distinct long and slightly curvilinear dark reflector with a distinct jagged shadow. Other, smaller objects identified in the surrounding area.	
70981	Debris field	405293	5852497	A2	22.7	11.9	1.0	-	Distinct slightly rounded dark reflector with a broad shadow within a small debris field or seafloor disturbance with some large objects with height. In the bathymetry data this is visible as three slightly distinct mounds in a circular arrangement on a relatively flat and even area of the seabed, slightly more distinct than surrounding features	
70982	Magnetic	405215	5853665	A2	-	-	-	25	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70983	Magnetic	405183	5851919	A2	-	-	-	64	Medium negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70987	Bright reflector	405062	5852152	A2	5.7	0.5	0	-	Straight and narrow bright reflector. Not particularly distinct feature.	
70988	Rope/chain	405057	5853805	A2	31.9	0.3	0.2	-	Short, slightly angular linear item of debris with height. Similar linear feature identified nearby. Possibly joined and partially buried, or split in two parts, may be rope or chain. Individually features measure 13.6m x 5.5m.	
70989	Rope/chain	405000	5852448	A2	38.0	0.3	0.2	-	Dark, linear feature with a slight shadow. Possible rope or chain.	
70991	Magnetic	404900	5852184	A2	-	-	-	27	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70992	Magnetic	404887	5853971	A2	-	-	-	42	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
70994	Magnetic	404787	5853518	A2	-	-	-	39	Small distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70996	Magnetic	404661	5854180	A2	-	-	-	75	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
70997	Dark reflector	404657	5852481	A2	6.8	0.4	0.3	-	Straight dark reflector with a distinct shadow.	
70998	Dark reflector	404649	5852896	A2	6.1	0.4	0.2	-	Straight narrow dark reflector with a distinct, relatively broad shadow. Similar feature identified nearly, possibly part of a longer, partially buried, linear feature (70999).	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
70999	Dark reflector	404635	5852909	A2	9.9	0.2	0.2	-	Straight narrow dark reflector with a distinct, relatively broad shadow. Similar feature identified nearly, possibly a longer, partially buried, linear feature (70998).	
71000	Dark reflector	404575	5853973	A2	3.6	3.1	1.7	-	Slightly triangular dark reflector, not particularly distinct, with a long, narrow and bright shadow.	
71001	Seafloor disturbance	404559	5852372	A2	22.0	5.0	1.1	-	Elongated seafloor disturbance with irregular shadows or numerous objects with height close together in a line. In the bathymetry data this is visible as a linear alignment of small mounds, slightly more distinct than surrounding seabed features, aligned east to west.	
71002	Dark reflector	404548	5853642	A2	0.4	0.3	0.4	-	Distinct, relatively straight dark reflector with a broad shadow.	
71004	Magnetic	404512	5852601	A2	-	-	-	191	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71005	Magnetic	404498	5853434	A2	-	-	-	83	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71006	Magnetic	404490	5853306	A2	-	-	-	28	Small distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71008	Debris	404365	5852692	A2	5.0	2.5	1.1	77	Dark reflector with a broad, slightly jagged shadow, distinct feature with a medium magnetic anomaly associated indicating ferrous debris	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71009	Debris	404352	5852638	A2	7.0	5.2	3.0	-	A large dark reflector with a distinct, broad shadow, appears to be broken up or partially buried and looks particularly distinct. Possibly debris. Visible in the bathymetry data as a pointed mound with a circular profile. Close to a debris field 71011	
71010	Dark reflector	404340	5852252	A2	2.6	0.5	0.4	-	Two dark reflector objects with a broad shadow with other bright reflectors surrounding them	
71011	Debris field	404337	5852642	A2	23.2	5.1	1.8	-	A large patch of dark reflectors with a long, distinct jagged shadow. Possibly debris field, feature looks particularly distinct compared to surrounding sediment. Visible in the bathymetry data as an irregular shaped large oval mound close to another smaller mound, More distinct than surrounding seabed features. Is close to a piece of debris 71009.	
71013	Magnetic	404296	5854168	A2	-	-	-	38	Small negative monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
71015	Dark reflector	404182	5853087	A2	10.6	0.5	0.3	-	Elongated, slightly curved dark reflector with a distinct shadow.	
71016	Dark reflector	404136	5852961	A2	8.0	0.3	0.3	-	Straight, slight, dark reflector with a distinct shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71017	Debris	404133	5852674	A2	3.5	1.7	1.1	55	Dark reflector with a distinct, slightly irregular shadow. Shadow appears to extend beyond the limits of dark reflector, has a medium magnetic anomaly associated indicating ferrous debris	
71018	Magnetic	404133	5853090	A2	-	-	-	130	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71019	Rope/chain	404118	5853471	A2	20.9	0.3	0.3	-	Slight linear item, not particularly distinct, with a faint shadow. Very long and thin possible rope or chain feature.	
71022	Dark reflector	404029	5853119	A2	9.0	0.3	0.3	-	Long, thin and straight dark reflector with a distinct shadow.	
71024	Rope/chain	404024	5854631	A2	22.6	0.1	0.1	-	Faint, curvilinear dark reflector identified with slight shadow, possible length of rope or chain.	
71025	Magnetic	404022	5854153	A2	-	-	-	56	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71027	Debris field	404000	5852417	A2	54.0	16.0	0.8	-	Possible debris field comprising over ten dark and bright reflectors, some long thin and distinct linear dark reflectors with shadows visible (8.2m x 0.8m x 0.7m maximum).	
71029	Debris	403994	5854060	A2	1.9	0.2	1.6	32	Dark reflector with a long, narrow shadow. Has a small magnetic anomaly associated indicating ferrous debris	
71030	Dark reflector	403954	5852726	A2	4.4	1.0	0.4	-	Straight dark reflector with a broad shadow. Feature looks fairly straight however may just be distorted by movement of sonar fish.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71031	Debris	403929	5853910	A2	2.1	0.5	0.9	226	Indistinct slightly irregular dark reflector with a long shadow. Full extent is possibly covered by sandy sediments. Has a large magnetic anomaly associated indicating ferrous debris.	
71032	Magnetic	403915	5854331	A2	-	-	-	73	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
71034	Rope/chain	403849	5854418	A2	13.6	0.3	0.1	-	Faint, slightly curved linear dark reflector with a slight shadow, possibly rope or chain.	
71035	Magnetic	403849	5853353	A2	-	-	-	31	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71036	Rope/chain	403842	5854306	A2	24.8	0.2	0.4	37	Distinct, relatively straight linear dark reflector with height. Feature bends round at an angle at one end. Possible rope or chain on an otherwise featureless area of the seabed. Has a small negative monopole associated indicating some ferrous content.	
71037	Rope/chain	403840	5853945	A2	25.5	0.8	0.3	-	Long and thin linear item of debris with a slight shadow. Identified in a relatively featureless area of seafloor, possible rope or chain feature.	
71038	Dark reflector	403837	5853230	A2	8.8	0.2	0.3	-	A long and straight, slight, dark reflector with a distinct shadow. Identified in an area of megaripples however appears to be perpendicular to the orientation of the natural features.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71040	Magnetic	403822	5852844	A2	-	-	-	54	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71044	Magnetic	403709	5853753	A2	-	-	-	253	Large asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71045	Dark reflector	403707	5853319	A2	6.6	0.6	0.2	-	Straight, slight, dark reflector with a distinct shadow in an area of relatively featureless seabed.	
71048	Magnetic	403647	5853542	A2	-	-	-	362	Large dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71049	Magnetic	403611	5852965	A2	-	-	-	79	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71052	Rope/chain	403563	5854315	A2	92.5	0.3	0.1	-	A long and thin linear dark reflector in a broad 'v' shape with a slight shadow, or a linear split in two/partially buried in its centre. Very long and distinct possible rope or chain, appears to be covered by sediment in parts.	
71057	Magnetic	403467	5853573	A2	-	-	-	54	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71058	Dark reflector	403457	5852745	A2	3.7	1.7	1.5	-	Irregular series of dark reflectors, possibly with a faint, long, narrow shadow. Possibly natural however looks a little anomalous to surroundings.	
71059	Dark reflector	403457	5853696	A2	2.1	0.6	0.7	-	Short, straight dark reflector with a relatively broad shadow.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71061	Magnetic	403426	5852756	A2	-	-	-	41	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71063	Magnetic	403407	5852958	A2	-	-	-	539	Large asymmetric dipole identified on more than one survey line. Indicative of possible buried ferrous debris.	
71064	Debris	403387	5852775	A2	35.2	4.0	0.4	70	Elongated, large dark reflector with an irregular shadow. In the bathymetry data this is visible as a long and thick linear item of debris orientated northwest to south-east and possibly broken up or partially buried in parts. Has a medium dipole associated indicating ferrous debris	
71070	Dark reflector	403224	5853126	A2	5.4	1.2	0.3	-	Straight dark reflector, possibly with a taller section at one end, and a distinct shadow.	
71075	Magnetic	403157	5852804	A2	-	-	-	66	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71076	Dark reflector	403156	5853066	A2	7.9	0.2	0.3	-	Distinct, narrow elongated dark reflector with a broad shadow.	
71077	Bright reflector	403155	5853210	A2	6.2	1.0	0	-	Short, narrow, rectangular bright reflector. Possibly a shadow but with no discernible contact.	
71078	Magnetic	403087	5852984	A2	-	-	-	179	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
71079	Magnetic	403051	5853039	A2	-	-	-	121	Medium dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude	Description	External References
		T	ı		I	I		(nT)		
									Slightly triangular dark reflector with a	
74.000	Delevie	402040	5052062	4.2	4.0	2.5	4 7	4.44	stronger response at the front of the	
71080	Debris	403019	5853862	A2	4.9	3.5	1.7	141	feature, with a long, narrow shadow.	
									Has a medium magnetic anomaly	
									associated indicating ferrous debris	
71.001	N.A. a. a. a.t.i. a	402007	5853157	4.2				74	Medium asymmetric dipole only	
71081	Magnetic	402897	5853157	A2	-	-	-	/4	identified on one survey line. Indicative	
									of possible buried ferrous debris.	
71084	Dark reflector	402874	5852852	A2	3.3	2.6	0.2	-	A small angular object with some scour	
									and corresponding shadow  Medium dipole only identified on one	
71086	Magnetic	402827	5854036	A2				132	survey line. Indicative of possible buried	
11090	Magnetic	402827	3834030	AZ	-	-	-	132	ferrous debris.	
									Small dipole only identified on one	
71007	Magnetic	402702	E0E2002	۸.2				12		
71087	Magnetic	402782	5852993	A2	-	-	-	12	survey line. Indicative of possible buried ferrous debris.	
									Straight, distinct dark reflector with a	
									broad shadow. Possibly two linear	
71088	Debris	402774	5853831	A2	6.7	0.3	0.5	-	contacts close together with a third in	
									its shadow.	
									Small asymmetric dipole only identified	
71089	Magnetic	402761	5853242	A2	_	_		25	on one survey line. Indicative of possible	
/1009	iviagnetic	402761	3633242	AZ	_	-	-	25	buried ferrous debris.	
									Angular object with angular scour and	
71091	Dark reflector	402636	5853108	A2	2.0	1.1	0.4		angular bright shadow, located in	
71031	Dark reflector	402030	3033100	AZ	2.0	1.1	0.4	-	sandwaves	
									Medium dipole only identified on one	
71092	Magnetic	402568	5853189	A2				61	survey line. Indicative of possible buried	
71032	iviagnetic	402308	3633163	AZ	_	-	-	01	ferrous debris.	
									Small dipole only identified on one	
71093	Magnetic	402567	5853091	A2	_	_	_	16	survey line. Indicative of possible buried	
/1093	iviagnetit	402307	2022031	HZ	_	_	-	10	ferrous debris.	
									Terrous debris.	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71094	Magnetic	402562	5853209	A2	-	-	-	53	Medium positive monopole only identified on one survey line. Indicative of possible buried ferrous debris.	
71095	Dark reflector	402526	5853432	A2	6.7	0.2	0.2	-	Straight dark reflector with a slightly rounded shadow	
71099	Magnetic	402443	5853664	A2	-	-	-	49	Small distinct negative monopole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71100	Magnetic	402425	5853407	A2	-	-	-	19	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71101	Magnetic	402414	5853236	A2	-	-	-	162	Medium anomaly identified on more than one survey line. Indicative of possible buried ferrous debris.	
71102	Seafloor disturbance	402391	5853488	A2	10.2	5.2	0.7	-	Large irregular area of dark reflector objects with some angular bright shadows.	
71103	Magnetic	402386	5853657	A2	-	-	-	204	Large distinct dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71105	Magnetic	402357	5853620	A2	-	-	-	100	Medium irregular dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71106	Dark reflector	402355	5853542	A2	8.3	1.4	0.6	-	Irregular object, possibly several adjacent objects, with irregular bright shadow	





WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External References
71107	Magnetic	402341	5853745	A2	-	-	-	35	Small asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris with no surface expression.	
71108	Magnetic	402332	5853707	A2	-	-	-	40	Small dipole only identified on one survey line. Indicative of possible buried ferrous debris.	
71111	Dark reflector	402228	5853594	A2	4.1	0.2	0.2	-	Straight, narrow dark reflector with a broad shadow	
71113	Magnetic	402137	5853592	A2	-	-	-	91	Medium asymmetric dipole only identified on one survey line. Indicative of possible buried ferrous debris.	





## **APPENDIX 3: GAZETTEER OF INTERTIDAL FEATURES**

WA ID	Site Type	Description	Period	NRHE / NHER	Easting	Northing
1001	Findspot	Prehistoric flint flake.	Prehistoric	NHER MNF46197	401797	5853261
1002	Findspot	Prehistoric flint flake.	Prehistoric	NHER MNF46198	401845	5853227
1003	Findspot	Prehistoric flint core.	Prehistoric	NHER MNF46202	401868	5853208
1004	Findspot	Prehistoric flint flake.	Prehistoric	NHER MNF46203	401897	5853192
1005	Findspot	Prehistoric flint scraper.	Prehistoric	NHER MNF46207	401825	5853256
1007	Findspot	Flint flake.	Prehistoric	NHER MNF46200	402166	5853026
1008	Findspot	Two prehistoric flint artefacts.	Prehistoric	NHER MNF18837	401802	5853345
1009	Findspot	Lower Palaeolithic flint hand axe.	Palaeolithic	NHER MNF44878	402101	5853111
1010	Findspot	Lower Palaeolithic lithic working and butchery site, comprising over 200 worked flints, environmental evidence.	Palaeolithic	NHER MNF39512	401935	5853311
1018	Findspot	Primary Palaeolithic flint flake.	Palaeolithic	NHER MNF28062	402030	5853253
1025	Findspot	A Palaeolithic flint implement found in the parish of Happisburgh.	Palaeolithic	NRHE 619088	401993	5853228
1033	Findspot	Multi-period finds.	Prehistoric - post-medieval	NHER MNF44734	402020	5853226
1034	Findspot	Blade fragment of a leaf shaped sword.	Bronze Age	NHER MNF18519	402009	5853150
1035	Findspot	Copper alloy flanged axehead found on Happisburgh beach.	Bronze Age	NHER MNF38613	401923	5853347
1037	Findspot	Early Saxon silver pyramid mount with garnet.	Medieval	NHER MNF56876	401923	5853347
1038	Findspot	Medieval gold ring dating to the late 12th or 13th century.	Medieval	NHER MNF50467	401847	5853310
1045	Lighthouse	Happisburgh Low Lighthouse was one of two lighthouses erected in Happisburgh in 1791. By 1886 the lighthouse had fallen, probably as a result of coastal erosion. In 1980, when recorded by the RCHME, remains of part of the foundations still survived <i>in situ</i> but the majority of the remains lay on the beach or had been covered by sand.	Post-medieval	NRHE 524226; NHER MNF15435	402104	5853068





This page is intentionally blank.