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Humber Gateway Offshore Wind Farm

Ground Truthing Surveys (2011 and 2013)
Archaeological Assessment

Ref: 85771.02
May 2014

coastal&marine

Humber Gateway Offshore Wind Farm

Ground-truthing Surveys (2011 and 2013)
Archaeological Assessment

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Summary

This report outlines the results of the review by Wessex Archaeology of data obtained in 2013 during the Unexploded Ordnance (UXO) survey which was undertaken in advance of the construction of the Humber Gateway Offshore Wind Farm. This report also includes a review of the buffer zones proposed in 2012, following the archaeological review of the results of the previous ground-truthing survey carried out in 2011 (Wessex Archaeology 2012).

The 2013 UXO survey comprised diver and Remote Operated Vehicle (ROV) investigations within the development area to assess UXO suspected anomalies identified from geophysical and magnetic survey data assessment.

Of the 950 UXO anomalies investigated, 219 targets were found to correlate to suspect archaeology targets identified by Wessex Archaeology in a review of geophysical data (Wessex Archaeology 2013a, Wessex Archaeology 2013b).

In summary, of the 219 targets (**Appendix I** and **Appendix II**):

- *49 targets were of sufficient archaeological interest to report through the Offshore Renewables Protocol for Archaeological Discoveries (ORPAD);*
- *94 targets are non-archaeological or have been identified as being of low archaeological interest; and*
- *76 targets remain uncertain and cannot be conclusively defined as being either archaeological, non-archaeological or of low archaeological value.*

Targets of Archaeological Interest
Forty nine targets were of identified as being of archaeological interest and were reported through ORPAD (**Appendix III**).

One of the targets was identified as an aircraft propeller (F-G M12421). A 50m Temporary Exclusion Zone (TEZ) was placed around the target in autumn 2013 and further assessment took place (Wessex Archaeology 2014). English Heritage has subsequently confirmed that the propeller can be relocated, and the TEZ removed, and the new co-ordinates reported through ORPAD.

Three of the targets were confirmed as UXO (F_M08092, E_S0700 and EC_M13876) for which UXO requirements take precedence and no further action is required.

Two of the targets were identified as lengths of chain and were considered to be of sufficient archaeological interest to warrant reporting through ORPAD but of low archaeological value. Consequently, no further actions are required.

For the remaining 43 of these 49 targets, Wessex Archaeology recommends that:

- *if these objects are moved as part of clearance operations their new position should be provided to Wessex Archaeology in order to update archaeological records; and*
- *if any of these objects are brought to the surface then initial recording should take place (photographs and dimensions, for example) and archaeological advice should be sought under the terms of ORPAD.*

For objects brought to the surface, Wessex Archaeology will provide initial conservation advice, further interpretation and advice on dealing with the object in the longer term. If these objects are returned to the seabed their new position should be provided to Wessex Archaeology in order to update archaeological records. Non-archaeological Targets and Targets with Low Archaeological Interest

Ninety four of the targets are non-archaeological or have been identified as being of low archaeological interest. Of these 94 targets:

- *88 have been identified with sufficient confidence that no further action is required:*
  - *71 for which it is considered that the most likely conclusion is that archaeological material is either absent or of low or no archaeological value and that there is a **low risk** of encountering material of medium or high archaeological value. In the event that additional, unexpected archaeological material is encountered at any of the recorded positions, discoveries should be reported through the retained archaeologist; and*
  - *17 identified as boulders although, following comparison with the Wessex Archaeology assessment of geophysical data, it is suspected that there may be additional material present, possibly buried, and there is a **medium risk** of encountering material of medium or high archaeological value. Particular attention should be paid to these positions during the installation of wind farm infrastructure and all discoveries should be reported through the retained archaeologist or addressed through ORPAD, dependent upon significance.*
- *six have been positively identified by the UXO survey contractor as boulders or objects of low archaeological interest although the image provided to Wessex Archaeology was unclear and the precautionary conclusion is that there may be a **high risk** of encountering material of medium or high archaeological value. The recommended action for high risk targets is summarised below.*

Inconclusive Targets
Seventy six of the targets could not be conclusively defined as being either archaeological, non-archaeological or of low archaeological value from the images provided. Of these 76 targets:

- *six had no image for review or the image was unclear. However, each of these 6 has been described in sufficient detail by the UXO survey contractor for Wessex Archaeology to consider that no further action is required and that there is a **low risk** of encountering material of medium or high archaeological value. In the event that additional, unexpected archaeological material is encountered at any of the recorded positions, discoveries should be reported through the retained archaeologist; and*
- *70 have been identified as potentially requiring further review as the ground-truthing proved inconclusive and the precautionary conclusion is to assume that there is a **high risk** of encountering material of medium or high archaeological value.*

For the 76 targets associated with a **high risk** of encountering archaeological material of medium or high archaeological value (70 inconclusive targets and 6 positively identified by the UXO survey contractor as boulders or objects of low archaeological interest), specific actions may be required.

If any of these targets are revisited or, in the case of objects, recovered, then all additional data should be made available to Wessex Archaeology for review.

If the above sites are not revisited for engineering or other reasons but **will** be at risk of direct impacts during clearance operations or wind farm installation, reassessment for archaeological purposes should take place. Particular attention should be paid to these positions and all discoveries of material should be reported to the retained archaeologist or addressed through ORPAD, depending on their significance.

If the above sites are not revisited for engineering or other reasons but **will not** be at risk of direct impacts during clearance operations or wind farm installation no further action is necessary.

Buffer Zone Review
Following review of the buffer zones, proposed in 2012 on the basis of the results of the 2011 ground-truthing survey (Wessex Archaeology 2012), it is recommended that:

- *buffer zone WA7026 to be retained but reduced in size to 15m radius, if this is within the tolerance of the construction activities anticipated;*
- *anchor WA7041 should be moved to another location where it will not be impacted by the installation of the inter-array cable or turbine. It should be reported through ORPAD when this is done. Until then, the buffer zone should remain in place but the radius can be reduced to 15m if this is within the tolerance of the construction activities anticipated. Following relocation of the anchor the buffer zone should be moved and centred on the new anchor position; and*
- *buffer zone WA7105 can be reduced at the position of the relocated anchor to 15m, if this is within the tolerance of the construction activities anticipated.*

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Ground-truthing Surveys (2011 and 2013) Archaeological Assessment

Acknowledgements

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The assessment and review of data was undertaken by Victoria Cooper, Stephanie Arnott and Toby Gane. Additional work was carried out by Paolo Croce. Illustrations were prepared by Ken Lymer and the project was managed for Wessex Archaeology by Toby Gane.

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Ground-truthing Surveys (2011 and 2013) Archaeological Assessment

1 INTRODUCTION

1.1.1 Wessex Archaeology is the Retained Archaeologist for E.ON Climate and Renewables UK Humber Wind Limited (E.ON). In this capacity and in accordance with the requirements set out in the Project Written Scheme of Investigation (WSI), Wessex Archaeology has undertaken a review of data obtained during the Unexploded Ordnance (UXO) Survey in advance of the construction of the Humber Gateway Offshore Wind Farm.

1.1.2 The UXO survey comprised diver and Remote Operated Vehicle (ROV) investigations within the development area to assess UXO suspected anomalies identified from geophysical and magnetic survey data assessment. The development area is defined as illustrated in Figure 1.

1.1.3 Red7Marine Offshore Ltd (Red7) carried out the investigations using ROV and Surface Supplied Dive (SSD) teams equipped with video camera equipment between February and May 2013. The UXO assessment was carried out by 6 Alpha Associates (6Alpha) and subsequently by Ordtek Ltd (Ordtek).

1.1.4 Wessex Archaeology has previously undertaken a series of assessments on behalf of E.ON for the Humber Gateway development including desk-based assessment, archaeological interpretation of geophysical datasets and the production of the Project Written Scheme of Investigation (WSI). The assessments and related surveys include:

- *Technical report of November 2005 (WA report ref 60280) with assessment of sidescan sonar data provided by Titan Environmental Surveys Ltd. acquired between September and November 2004;*
- *Assessment of Magnetic Data and Exclusion Zones of 2007 (WA report ref 60281) reviewing all of the magnetic data acquired by Titan Environmental Survey Ltd;*
- *Archaeological Assessment of Geophysical Data of March 2009 (WA report ref 60288.03) covering magnetometer and sidescan sonar acquired by Osiris Projects between August and November 2008;*
- *Archaeological monitoring and mitigation WSI in February 2011 (WA report ref 60289.01). (WSI updated and resubmitted to English Heritage in March 2014);*
- *Geophysical review of the turbine locations in August 2011 (WA report ref 60289.05) assessing the magnetometer, sidescan sonar and multibeam data acquired by Osiris Projects during May and June 2011;*
- *Archaeological review of ground-truthing survey for seabed features at turbine locations in May 2012 (WA report ref 60289.06) on data acquired by Red7Marine and 6 Alpha Associates during September to November 2011. Report updated in January 2014;*

- *Geoarchaeological assessment in April 2013 of 21 borehole logs and 60 Cone Penetrometry Testing logs from 62 locations (WA report ref 85771.01) from geotechnical investigations carried out by G-Tec between 10th March 2011 and 2nd June 2012 and Canyon Offshore Ltd between 19th February 2012 and 8th March 2012;*
- *2012-2013 Archaeological Geophysical Assessment in January 2014 (Wessex Archaeology report ref 85770.02, 85770.02A) interpreting geophysical data acquired in 2012 and 2013 by Osiris Projects; and*
- *In January 2014 archaeological review of ground-truthing survey undertaken by Red7Marine in December 2013 in relation to aircraft propeller F-G_M12421 (Wessex Archaeology report ref 85771.03).*

1.1.5 This report also includes a review of the buffer zones proposed in 2012, following the archaeological review of the results of the previous ground-truthing survey carried out in 2011 (Wessex Archaeology 2012). This ground-truthing survey investigated 10 sites of potential archaeological interest that had been interpreted during the 2011 review of geophysical data at the turbine locations. The 10 sites were selected for ground-truthing based on their location within the anticipated areas of direct impact during the positioning of a drilling rig to drill boreholes for geotechnical survey.

2 AIMS AND OBJECTIVES

2.1.1 A Method Statement setting out the aims and objectives and methodology for carrying out the archaeological ground-truthing review (UXO Survey) was produced by Wessex Archaeology in February 2013 as an addendum to the Project WSI (Wessex Archaeology 2011a).

2.1.2 As per the Method Statement, the aim of this review is to ascertain the archaeological potential of anomalies flagged as being of potential archaeological interest and to characterise the archaeology at Humber Offshore Wind Farm by reviewing a representative sample of anomalies investigated as part of the UXO survey. The objectives are as follows:

- *to flag potential archaeology or cultural heritage targets*
- *to interpret finds of artefactual material and to give an assessment of archaeological importance;*
- *where multiple finds are encountered, to characterise the find location/site and to develop conclusions on the extent, state of preservation, period and form of material of archaeological interest*
- *to make recommendations to address archaeologically significant sites or finds that may be subject to removal as part of the proposed clearance activities.*

3 METHODOLOGY

3.1.1 The criteria chosen by Wessex Archaeology to select targets for dive / ROV survey was based on previous experience of interpreting geophysical data for this site and the results of the ground-truthing of targets of archaeological potential at wind turbine locations that were dived during 2011 (Wessex Archaeology 2012). Of 2215 anomalies tagged during archaeological assessment of the geophysical data in 2012-2013 (Wessex Archaeology 2013a), 860 suspect archaeology targets were identified across the whole of the development area.

3.1.2 In order to characterise the archaeology, a representative sample size of 10% of the 860 suspect archaeology targets was recommended for ground-truthing (Wessex Archaeology 2013a).

3.1.3 Data for 950 anomalies examined as part of the UXO survey in 2013 were sent to Wessex Archaeology by Ordtek. The available data comprised:

- *Red7 UXO target reports (.pdf);*
- *Ordtek UXO target reports (.pdf/.doc);*
- *ROV trackplots (.jpg/.csv);*
- *ROV dive logs (.pdf);*
- *ROV stills (.jpg/.png);*
- *ROV video footage (11 clips in total)(.mpg);*
- *Diver dive logs (.pdf);*
- *Diver stills (.jpg/.png); and*
- *Diver video footage (5 clips in total (.mp4).*

3.1.4 Not all of the above data types were available for each anomaly. Where a diver survey was carried out subsequent to an inconclusive ROV survey, only the diver survey results were included for assessment. The data for each target was assessed for quality, primarily associated with the clarity of images and video footage and the extent to which details of the target could be observed, and assigned a data quality rating of poor, moderate or high. Where no image was available a rating of N/A was used.

3.1.5 The data was made available in batches, uploaded by Ordtek to an ftp site from which Wessex Archaeology staff were able to download files. The ID numbers for each data set were compared to the list of suspect archaeology targets and data relating to anomalies previously identified as being of potential archaeological interest were reviewed.

3.1.6 For each target, the anomaly was identified, where possible, and assessed with regard to the following categories:

- *A - Archaeological Interest;*
- *P - Possible Archaeological Interest;*
- *M - Modern/Non-archaeological;*
- *N - Natural; and*

- *U - Uncertain.*

3.1.7 Each target was also assessed for archaeological value. A value rating from none to high was assigned to each identified anomaly based upon professional judgement and in accordance with the definitions in **Table 1**.

Table 1: Definitions of Archaeological Value

Value	Definition
H - High	Above average example and/or high potential to contribute to knowledge and understanding and/or outreach. Receptors with a demonstrable international or national dimension to their value are likely to fall within this category.
M - Medium	Average example and/or moderate potential to contribute to knowledge and understanding and/or outreach.
L - Low	Below average example and/or low potential to contribute to knowledge and understanding and/or outreach.
N - None	Anomaly identified as being non-archaeological.
U - Uncertain	Insufficient data to assess archaeological value.

3.1.8 A confidence rating from low to high was assigned to each anomaly based upon the quality of the data provided and professional judgement. The confidence rating takes into account both the quality of the images and the nature of the description provided by Ordtek and Red7 and draws upon professional judgement in assessing the certainty of the interpretation.

3.1.9 Details of the initial assessment were provided to E.ON and those targets requiring immediate action were flagged via direct communication with E.ON.

3.1.10 Following the initial assessment, each target was compared to previous geophysical assessments carried out by Wessex Archaeology for the Humber Gateway Offshore Wind Farm (see **Appendix II**) (Wessex Archaeology 2013a; 2013b). Relevant conclusions from this comparison are included in the discussion below.

4 RESULTS

4.1 Summary

4.1.1 In total, 219 of the 950 anomalies examined as part of the UXO survey in 2013 were found to correlate to suspect archaeology targets identified by Wessex Archaeology in the review of geophysical data and classified as set out in **Table 2**.

4.1.2 Data for each of these 219 targets were reviewed by a specialist marine archaeologist.

Table 2: Wessex Archaeology Classification of Anomalies

Archaeological Discrimination	Total	Geophysical Classification	Total
A1 (Anthropogenic origin of archaeological interest)	18	Dark Reflector	1
		Debris	12
		Magnetic	5
A2 (Uncertain origin of possible archaeological interest)	201	Bright Reflector	1
		Dark Reflector	7
		Debris	12
		Magnetic	172
		Rope/Chain	7
		Seafloor Disturbance	2
Total	219	**Total**	219

4.1.3 Full details of the reviewed targets are provided in **Appendix I** and **Appendix II** and the locations are shown on **Figure 1**.

4.1.4 The 219 targets are summarised in **Table 3** according to the Reported Finds description provided in the Ordtek and Red7 target reports and to the object type assigned by Wessex Archaeology.

4.1.5 In all, a greater sample than the recommended 10% of target anomalies were investigated, giving a reasonable understanding of the character of seabed archaeology present across the development site.

Table 3: Summary of Object Types

Reported Finds	Number of targets	Object Type	Number of targets
Boulder	37	Boulder	36
		Boulder/Fishing Gear	1
Boulder-like Object	1	Boulder-like Object	1
Cable	1	Cable	1
Debris (Metallic)	105	Aircraft Propeller	1
		Anchor	17
		Boulder/Fishing Pot	1
		Cable Reel	1
		Capstan	2
		Chain	5
		Concrete	1
		Deck Plate	1
		Fishing Gear	3
		Fishing Pot	3
		Ladder	1
		Metal Debris	41
		Not seen	4
		Pipe	14
		Pole	3
		Rope	2
		Tyre	2
		Winch	2
		Wooden Beam	1
Debris (Non-metallic)	1	Rope	1
Other	44	Chain	2
		Concrete	1
		Fishing Pot	1
		Metal debris	1
		Not seen	38
		Uncertain	1
Suspect UXO	3	UXO	3
UXO Investigation	2	Not seen	2
UXO Removal	4	Anchor	1
		Boulder	2
		Metal debris	1
-	21	Metal debris	1
		Not seen	20
Total	219	**Total**	219

4.1.6 In **Table 4** the targets are summarised according to the archaeological assessment and the assigned measure of archaeological value:

Table 4: Archaeological Assessment and Value of Targets

Archaeological Assessment	Number of targets	Archaeological Value	Number of targets	ORPAD Report?
Archaeological Interest	24	High	1	Y
		Medium	20	
		Low/Medium (UXO identified)	1	
		Low (UXO identified)	2	
Archaeological Interest /Possible Archaeological Interest	5	Medium	2	Y
		Uncertain	3	
Possible Archaeological Interest	3	Uncertain	3	Y (2)
				N (1)
Possible Archaeological Interest/Modern	72	Medium/Low	12	Y
		Low	43	Y (4)
				N (39)
		Uncertain	17	N
Natural/ Archaeological Interest	1	Medium	1	Y
Natural/ Possible Archaeological Interest	2	Low	1	N
		None/Low	1	N
Modern/Non-archaeological	11	None	11	N
Natural	37	None	37	N
Natural/Modern	1	None	1	N
Uncertain	63	Low	1	Y
		Uncertain	62	N
Total	219	**Total**	219	Y (49)
				N (170)

4.1.7 Targets considered to be of sufficient archaeological interest to warrant reporting through ORPAD (49 in total), and are discussed in **Section 4.2**. Data sheets for each target are provided in **Appendix III**.

4.1.8 Targets considered to be of no archaeological interest, or judged to be of insufficient archaeological value to warrant further action, are discussed in **Section 4.3**.

4.1.9 For 33 targets, no images were available for assessment, 25 of which were not found during either ROV or diver survey and may be buried or erroneous targets. These are discussed in greater details **Section 4.4**.

4.1.10 Proposed actions and recommendations are summarised below and outlined in greater detail in **Section 5**.

4.2 Targets of Archaeological Interest

Summary

4.2.1 The review of the supplied data indicated that 49 of the 219 targets were of sufficient archaeological interest to report through ORPAD. Details of these 49 objects are provided in **Appendix II** and **Appendix III** and are summarised in **Table 5**.

Table 5: Summary of Targets of Archaeological Interest

Object Type	Number of targets	Archaeological Assessment	Archaeological Value	Number of targets
Aircraft Propeller	1	Archaeological Interest	High	1
Anchor	19	Archaeological Interest	Medium	17
		Archaeological Interest/Possible Archaeological Interest	Uncertain	2
Capstan/Winch	2	Archaeological Interest	Medium	1
		Archaeological Interest/Possible Archaeological Interest	Medium	1
Chain	7	Possible Archaeological Interest	Uncertain	2
		Possible Archaeological Interest/Modern	Low	4
		Uncertain	Low	1
Deck Plate	1	Archaeological Interest/Possible Archaeological Interest	Uncertain	1
Metal Debris	13	Archaeological Interest/Possible Archaeological Interest	Medium	1
		Possible Archaeological Interest/Modern	Medium/Low	12
UXO	3	Archaeological Interest	Low/Medium	1
			Low	2
Winch	2	Archaeological Interest	Medium	2
Wooden Beam	1	Archaeological Interest	Medium	1
Total	49		**Total**	49

4.2.2 Data sheets for each of these 49 objects are included in **Appendix III**.

4.2.3 Each of these finds was reported through the ORPAD implementation service. The ORPAD report numbers are included in **Appendix I**.

Potential Aircraft Propeller Discovery

4.2.4 Aircraft propeller (F-G_M12421) was not seen in the sidescan sonar data but was recorded by Wessex Archaeology as a very large magnetic anomaly.

4.2.5 The target was surveyed by Red7 using an ROV on 19th April 2013 (Dive No. 151). The discovery was described as: aircraft propeller, one blade missing, one partially buried, one fully exposed. Blade approx 1m long - gearing attached.

4.2.6 The reviewed ROV footage presents what is thought to be a WW2 airplane aircraft propeller hub which is located on the proposed array cable route located in the north east of the site. On positive identification of the propeller by Wessex Archaeology, a 50m radius Temporary Exclusion Zone (TEZ) was placed around the target, until further assessment had been completed.

4.2.7 The propeller is a 'Hamilton Standard' type from a radial engined British aircraft, evident from the epi-cyclic gearing observed. This identification discounts in-line engined aircraft (such as Spitfires or Mosquitos) and is likely to have come from either: an Armstrong Whitworth A.W.38 Whitley; a Handley Page H.P.52 Hampden; or a Vickers Wellington.

4.2.8 From review of the geophysical and magnetic results, the anomaly appears to be a stray/isolated item rather than part of a wider crash site. Further diver/ROV survey and review by Wessex Archaeology confirmed this (Wessex Archaeology 2014).

4.2.9 Written confirmation has been obtained by, English Heritage, to move the propeller to a suitable location on the seabed beyond the development footprint, and in accordance with ORPAD.

4.2.10 Further assessment of the aircraft propeller is presented in Wessex Archaeology report 85771.03 (January 2014).

Anchors

4.2.11 Nineteen anchors have been identified and reported through ORPAD.

4.2.12 The images for site ID WA71859 suggest that this is a grapnel anchor with four tines and chain link. This is probably of modern date (19th or 20th century) and it may have been used as an anchor or more likely to recover material lost on the seabed.

4.2.13 Two of the anchors (G-H_M12687 and J_M11198) have been identified from the images as being possible longshank anchors of 18th century date.

4.2.14 Six of the anchors (A_M00606, C-D_M15094, E_M6149, EC_M12834, F_S0781 and H_M10203) appear to be admiralty patterns, of likely 19th century date.

4.2.15 Four are possibly anchors (EC_M16181, G_M08847, G_M09318, EC_M13155) although it is not possible to provide more details from the images.

4.2.16 The remaining six are described as anchors in the UXO assessment reports although the images may indicate alternative interpretations. Target A_M00253 is possibly an anchor but may also be debris as the 'shank' appears similar to an angle iron. Target B_M02177 may be modern debris but may also represent buried material of maritime origin. Similarly, target B_S0358 may be modern debris but may also be of historic aviation or maritime origin. The images associated with target F_S0794 show what may be a mine base although 'anchor' wire is reported around the target area. Target EC_M13927 may also be a possible mine base, although the images may equally show rocks with the associated magnetometer hit representing a magnetic natural anomaly (boulder) or possibly an anchor or debris not seen in the photos which are buried. Finally, target G_M09356 looks anchor-like in shape although the object may comprise tubular framing.

4.2.17 A further anchor was reported outside the target area for B-C_M14633 and the images appear to show an admiralty pattern anchor of probable 19th century date.

Capstan/Winch

4.2.18 Two objects identified as 'capstans' or winches (D_M05204 and D-E_M15244) have been identified and reported through ORPAD.

4.2.19 Target D_M05204 appears as a winch drum or roller from a vessel and is possibly wreck related.

4.2.20 Target D-E_M15244 appears as a possible roller or cable drum but may also be part of a WWI mine base.

Chain

4.2.21 Seven targets were positively identified as lengths of chain or chain links and reported through ORPAD. The archaeological assessment of the images supports this identification but it is not possible to provide further details regarding the origin of the chain/chain links. These chains may be associated with anchors and be of historic maritime origin.

Deck Plate

4.2.22 A possible deck plate (G_M08735) was identified offshore and reported through ORPAD although the object is unclear in the images provided.

Metal Debris

4.2.23 Thirteen items of metal debris with possible archaeological interest have been identified and reported through ORPAD.

4.2.24 Nothing was found at the position for target B-C_M14633 although an anchor was seen outside the target area as discussed above.

4.2.25 Targets A_M01426, A-B_M11420, C_M04524, D_M05853, E-F_M15529, G_M09326, G-H_M12601, H_M09977 and H-I_M16000) have been identified as possibly wreck related or of maritime origin. Target A_M00688 may be a mine base or a large amount of ferrous material buried. Target A_M01478 may be modern debris but may represent a larger buried feature. Target A-B_M11433 may be modern debris or a partially buried anchor. All of these targets are outside of the TEZ imposed around the aircraft propeller.

UXO

4.2.26 Three of the objects have been positively identified as UXO. All three have been reported through ORPAD although any requirements for dealing with UXO take precedence over any archaeological considerations in recommended actions.

4.2.27 These UXOs comprise a WWII airdropped German mine (E_S0700), an unknown but possibly historic UXO (EC_M13876) and an artillery shell (F_M08092).

Winch

4.2.28 Two objects identified as a possible winch drum (C_M03976_B1) and an 'old deck winch' (C_M04230_B1) have been reported through ORPAD. Alternatively, these may both represent constituent parts of WWI or II mine bases[1].

[1] Note: Mine bases contain no explosive parts and may remain on the seabed following clearance operations.

Wooden Beam

4.2.29 A possible piece of wooden beam with bolts (F_M07944) was observed offshore and reported through ORPAD although the timber is not clear in the images provided. This is possibly wreck material.

4.3 Non-archaeological Targets and Targets with Low Archaeological Interest

4.3.1 The 94 targets that were identified as being non-archaeological or of insufficient archaeological interest to warrant reporting through ORPAD are summarised in **Table 6**.

Table 6: Summary of Non-archaeological Targets and Targets of Low Archaeological Interest

Object Type	Number of targets	Archaeological Assessment	Archaeological Value	Number of targets
Boulder	32	Modern/Non-archaeological	None	32
Boulder with Metal Debris	1	Modern/Non-archaeological/ Possible Archaeological Interest	Low	1
Boulder with Fishing Pot	1	Non-archaeological/ Modern	None	1
Boulder with Fishing Gear	1	Modern/Non-archaeological/ Possible Archaeological Interest	None/Low	1
Cable	1	Modern/Non-archaeological/ Possible Archaeological Interest	Low	1
Cable Reel	1	Modern/Non-archaeological/ Possible Archaeological Interest	Low	1
Concrete	2	Modern/Non-archaeological/ Possible Archaeological Interest	Low	2
Fishing Gear	3	Non-archaeological/ Modern	None	3
Fishing Pot	4	Non-archaeological/ Modern	None	4
Ladder	1	Modern/Non-archaeological/ Possible Archaeological Interest	Low	1
Metal Debris	15	Non-archaeological/ Modern	None	1
		Modern/Non-archaeological/ Possible Archaeological Interest	Low	14
Not Seen	13	Uncertain	Uncertain	13
Pipe	14	Modern/Non-archaeological/ Possible Archaeological Interest	Low	14
Pole	3	Modern/Non-archaeological/ Possible Archaeological Interest	Low	3
Rope	2	Modern/Non-archaeological/ Possible Archaeological Interest	Low	2
Total	94		**Total**	94

4.3.2 Of the 35 targets with the main identification as 'boulder':

- *31 require no further action. Of these:*
    - *24 are associated with a magnetic signature indicating additional, possibly buried, ferrous material (17 of these measure over 80nT in amplitude; and*

- *seven correspond to sidescan sonar anomalies without associated magnetic anomalies.*

- *Four with potential further actions.*

4.3.3 Twenty four of the 31 boulders were associated with a magnetic signature identified by Wessex Archaeology in the assessment of geophysical data for Humber Gateway. During the UXO survey, a number of the boulders were found to be the source of a magnetic signal. For example, target J_M11108_B1 is described as, '2 football size rocks giving out a magnetic signal'. The presence of magnetic rocks in this area is accounted for but in some cases the size of the magnetic anomaly may indicate that buried ferrous material may be present in addition to the identified boulders. There are four examples of boulders in this group of 30 that were identified with associated material during the UXO survey:

- *A_M00151 - possible metal bar observed on southern side of boulder;*
- *B_M02053 - boulder centre of target area… fishing equipment next to boulder;*
- *EC_M13213 - large rock with fishing pot trapped underneath; and*
- *F_M08182 – boulder… length of pipe located outside target area.*

4.3.4 Furthermore, during the survey of EC_M14030, three 'targets' were identified comprising two boulders and a third TSS hit suspected to be a buried object.

4.3.5 It should be borne in mind, therefore, that for these 24 targets, where the primary identification is 'boulder' there may be additional ferrous material indicated by an unidentified magnetic signal. During the installation of Humber Gateway infrastructure, and associated clearance works, particular attention should be paid to positions at which boulders have been identified with magnetic anomalies over 80nT (totalling 17 of the targets, see paragraph 4.3.12) so that any discoveries of archaeological interest can be reported and addressed through ORPAD.

4.3.6 Similarly, six of the seven targets identified as boulders during the UXO survey and seen by Wessex Archaeology in the sidescan data without associated magnetic anomalies, do not appear to match the correspondent acoustic images (Wessex Archaeology 2013B):

- *C_S0496 - dark reflector 3.9 x 0.7 x 0.5 m;*
- *F-G_S2797 - v shaped debris 4.8 x 0.6 x 0.2 m;*
- *E_S0682 - rope/chain 5.3 x 0.3 x 0.5 m;*
- *WA71512 - small debris field 5.6 x 4 x 0 m;*
- *C_71303 - curved bright reflector 12.8 x 1.9 x 0 m; and*
- *WA72150 - seafloor disturbance, linear alignment of a number of dark reflectors with shadows 41.9 x 2.8 x 0 m.*

4.3.7 It is possible that these features are no longer present, represent natural features only or that they have become buried since the data was obtained. While no further action is recommended, particular attention should be paid to these positions during development works so that any discoveries of archaeological interest can be reported and addressed through ORPAD.

4.3.8 For four of the 35 targets identified as 'boulders' (EC_M12844, D_S0550, EC_M13559 and EC_M13633) a boulder cannot be clearly identified in the available images and Wessex Archaeology is unable to confirm the identification, although each has been positively identified as a boulder during the UXO survey by the relevant contractor. However, each has associated magnetic anomalies identified by Wessex Archaeology in the geophysical data and D_S0550 has an associated sidescan sonar anomaly that does not match the description from the UXO survey. Due to this uncertainty, the precautionary conclusion is that there may be a high risk of encountering material of medium or high archaeological value. Potential further actions to address this uncertainty are discussed in **Section 6.5**.

4.3.9 Of the remaining 59 of the 94 targets:

- *57 require no further action. Of these:*
  - *15 have been positively identified as metal debris of low archaeological value;*
  - *13 were not seen during the survey (10 no longer considered of archaeological interest on accordance with refined criteria, described below, and three for which no material is expected to be present); and*
  - *29 positively identified and assessed to be of low archaeological value.*
- *two with potential further actions.*

4.3.10 Fifteen of the 94 targets have been identified as metal debris and the available data for these is considered sufficient to confirm that the archaeological value is low and no further action is required. These were all recorded as magnetic only anomalies by Wessex Archaeology.

4.3.11 Two of the 94 targets have been identified but, as the images are unclear, the interpretation is uncertain ('pipe' G_M09324 and 'pole' C-D_M11940). Potential further actions to address this uncertainty are discussed in **Section 6.5**.

4.3.12 Thirteen of the 94 targets were not seen by either ROV or divers during the UXO survey.

4.3.13 As part of the recent 2012-13 Archaeological Geophysical Assessment (Wessex Archaeology 2013a), the criteria for selecting archaeological suspect targets for further investigation were refined, based on previous experience of interpreting geophysical data for this area and the results of the ground-truthing of targets of archaeological potential that were dived during 2011 (Wessex Archaeology 2012). The selected criteria are:

- *sidescan sonar anomalies larger than 3m or with an associated magnetic anomaly will be classed as suspect; and*
- *magnetic only anomalies with an amplitude greater than 80nT will also be classed as suspect.*
- *those targets with a lower than 80nT amplitude or less than 3m SSS anomaly and without a magnetic anomaly are therefore not considered suitable for further assessment within the scope of this assessment.*

4.3.14 Nine of the 13 targets that were not seen in the UXO survey are magnetic only anomalies recorded by Wessex Archaeology with a magnitude of less than 80nT (A-B_M14208, A-B_M14211, B_M14291, B_M14505, B-C_M14613, B-C_M14696, C_M14867, D-

E_M15198 and H-I_S2917). With regard to the refined criteria, these are no longer considered suspect archaeology and no further action is required.

4.3.15 Target F_S0828 was classified as debris by Wessex Archaeology but, as the sidescan dimensions are less than 3m and the magnetic amplitude is less than 80nT, this anomaly is no longer considered to be suspect archaeology and no further action is required.

4.3.16 Three of the 13 targets are classified by Wessex Archaeology as dark reflectors. Target 71868 is described as an irregular, elongate dark reflector with shadows, or a series of adjacent dark reflectors, which may be a piece of non-ferrous debris or natural in origin. During the UXO survey this target was described as four small rocks, not large enough to warrant taking a fix on. Target 72078 is described as a possible piece of non-ferrous debris although it is suggested that this could also be noise within the data. Nothing was found at this position during the UXO survey. Target 70018 is described as a possible section of rope or chain but it is noted that its form is quite indistinct and it may be a regular looking natural feature. Nothing was found at this position during the UXO survey. As all three of these have originally been noted as possibly non-archaeological, an interpretation supported by the results of the UXO survey, it has been concluded with a medium level of confidence that no archaeological features or artefacts are present at these positions and no further action is required.

4.3.17 The remaining 29 of the 94 targets have been positively identified and assessed to be of low archaeological value. No further action is required.

4.4 Inconclusive Targets

4.4.1 In total, 76 of the targets cannot be conclusively defined as being either archaeological, non-archaeological or of low archaeological value. Of these:

- *six require no further action. Of these:*
  - *two no longer considered of archaeological interest on accordance with refined criteria; and*
  - *four no longer considered of archaeological interest following review of geophysical assessment.*
- *70 with potential further actions. Of these:*
  - *51 were not seen by either ROV or divers during the UXO survey;*
  - *three described as boulders but for which no images were available for review;*
  - *14 described as 'metal debris' with insufficient data to conclusively assess archaeological value;*
  - *two that have not been positively identified in any assessment.*

4.4.2 The six targets that require no further action comprise two (H-I_M16003 and D_S0573) that are no longer considered to be of archaeological interest, in accordance with the refined criteria described above, and four that, following comparison with the Wessex Archaeology assessment of geophysical data, the descriptions from Red7, Ordtek and Wessex Archaeology tally with sufficient confidence to conclude that these are not of archaeological interest. All four are magnetic only anomalies associated with two car tyres (EC_M12875 and EC_M12919), a t-shaped bar (EC_M13223), possibly a shovel handle, and wire rope on the seabed throughout the target area (EC_M13271). Although the data

provided by Ordtek were missing image files, and the confidence is correspondingly low, the descriptions of those targets seen during the survey are clearly indicative of non-archaeological targets and no further action is required.

4.4.3 The remaining 70 targets have not been identified with sufficient certainty to confirm that archaeological material is absent at these locations. Due to this uncertainty, the precautionary conclusion is that there may be a **high risk** of encountering material of medium or high archaeological value. Potential further actions to address this uncertainty are discussed in **Section 6.5**.

4.4.4 Fifty one of the targets were not seen by either ROV or divers during the UXO survey.

4.4.5 Forty four of these 51 are magnetic only anomalies with magnitudes ranging from 80.6nT to 1560nT. As nothing was seen on the seabed at these locations it is considered likely that buried ferrous remains are present.

4.4.6 In general, the larger the size of the magnetic anomaly, the more likely it is for a substantial buried ferrous mass to be present. In particular, the very large magnetic signatures associated with C-D_M15024 (716nT), EC_M13324 (821.2nT), G_M09111 (905nT), A_M01392 (1148.20nT) and G_M09043 (1560nT) indicate that substantial ferrous remains were present at the time the data was obtained. It is possible that the material associated with these remains was no longer present at the time the UXO investigations were carried out but it is likely that buried remains are present. As the size of the anomaly may also reflect the depth of burial, targets with signatures of lower amplitude may also indicate the present of substantial material remains.

4.4.7 Two of the 51 targets were identified as debris in the sidescan sonar data with associated magnetic anomalies. Target G_M08862 is a rectangular bright reflector located close to an area of disturbed seabed and with a magnetic anomaly of 203nT. This has been classified as an A2 anomaly by Wessex Archaeology (uncertain origin of possible archaeological interest) described as a possible piece of ferrous debris. Target C_S0524 is a short, linear dark reflector with shadow and an associated magnetic anomaly of 239nT inconsistent with the identified object and possibly indicating the presence of a significant amount of buried ferrous debris in the vicinity. This has been classified as an A1 anomaly by Wessex Archaeology (anthropogenic origin of archaeological interest).

4.4.8 Five of the 51 targets were seen in the sidescan sonar data by Wessex Archaeology without associated magnetic anomalies. Four are possible ropes or chains (WA71697, WA73045, WA73083 and WA71253) and target WA72135 is an area of seabed scars, although the origin of this scarring is not clear. It is possible that the source of these anomalies have been removed since the geophysical survey data was carried out but the confidence rating for the assessment of these targets is low.

4.4.9 Three targets are described as boulders but no images were available for review (D_S0573, D_M04828, EC_M12871 and EC_M16174).

4.4.10 Fourteen targets are described as ‘metal debris’ but have insufficient data to conclusively assess archaeological value. For 13 of these 14 targets there is insufficient clarity in the images provided to assess the archaeological value. The remaining target is described as a metal bar (D-E_M15237) and is identifiable from the provided image, although the associated magnetic anomaly (493nT) suggests that more may be buried.

4.4.11 Two further targets were not positively identified during the UXO survey but have been identified within the geophysical assessment as being of potential archaeological interest (D_S0622 and A_M00011).

5 BUFFER ZONE REVIEW

5.1.1 In addition to the assessment of the ROV footage and diver reports presented above, a review of the buffer zones proposed in 2012 (Wessex Archaeology 2012) was carried out to determine whether any of the buffer zones could be removed or reduced in size following ground-truthing and diver and ROV assessment. The results of this review are presented below.

5.1.2 The Exclusion Zones and buffer zones current in 2013 are shown on **Figure 2**.

5.2 WA7026 (Corridor D) Borehole 48/Turbine D06

5.2.1 This target lies 16m from the inter-array cable plan and 32m from the turbine location.

2011 Geophysical Assessment

Table 7: WA7026 2011 Geophysical Assessment

WA ID	Class	E	N	L (M)	W (M)	H (M)	Mag Ampl (nT)	Description
7026	Magnetic	320471	5947510	-	-	-	79	Small, distinct magnetic anomaly.

2012 Review of 2011 Ground-truthing

Table 8: WA7026 Review of 2011 Ground-truthing

WA ID	Archaeological Assessment	E	N	L (M)	W (M)	H (M)	Magnetic Response
7026	Archaeological	320470	5947513	0.7	0.7	0.2	Yes
Investigation Description							
Object had what appeared to be steel chain links as well as an eyebolt and shackle attached to it, was heavily corroded and approximately 20% covered in marine growth. The object had a metallic signature and had a number of edges and features. It was buried in the seabed and only the above dimensions were visible. Possible WWI naval mine base unit.							

2013 Ground-truthing

5.2.2 Osiris ID for 2011 anomaly D_M05208. Categorised as suspect UXO by 6Alpha – 6Alpha ID UXO_D_M038. Target was dived in 2013 but nothing was seen although a hit was obtained on the TSS 440 pipe and cable survey system, indicating it may now be buried.

Recommendation

5.2.3 Retain buffer zone but reduce size to 15m radius, if this is within the tolerance of the construction activities anticipated. The buffer zone should not be removed as the object has not been recovered.

5.3 WA7041 (Corridor D) Borehole 71/Turbine D03

5.3.1 This target lies 6m from the inter-array cable plan and 9m from the turbine location.

2011 Geophysical Assessment

Table 9: WA7041 2011 Geophysical Assessment

WA ID	Class	E	N	L (M)	W (M)	H (M)	Mag Ampl (nT)	Description
7041	Magnetic	320073	5949323	-	-	-	58	Small magnetic anomaly identified on two survey lines, possible ferrous debris.

2012 Review of 2011 Ground-truthing

Table 10: WA7041 Review of 2011 Ground-truthing

WA ID	Archaeological Assessment	E	N	L (M)	W (M)	H (M)	Magnetic Response
7041	Archaeological	320071	5949327	0.6	0.1	0.1	Not given
Investigation Description							
Small anchor with spade flukes, no chain attached.							

2013 Ground-truthing

5.3.2 Osiris ID for 2011 anomaly D_M04761. Magnetic anomaly not deemed by Osiris to be consistent with item found. Categorised as suspect UXO by 6Alpha – 6Alpha ID UXO_D_M006 and dived in 2013.

Table 11: WA7041 Review of 2013 Ground-truthing

WA ID	Class	E	N	L (M)	W (M)	H (M)	Description
7041	Possibly Archaeological	320072	5949328	Not given	Not given	Not given	Square metallic object long in length (looks like small channel beam)

5.3.3 The target description is consistent with the shank of the anchor discovered in 2011 at this location.

Recommendation

5.3.4 The anchor should be moved to another location where it will not be impacted by the installation of the inter-array cable or turbine. It should be reported through ORPAD when this is done. E.ON states that it is intended that the anchor will be relocated during 2014. Until then, the buffer zone should remain in place but the radius can be reduced to 15m if this is within the tolerance of the construction activities anticipated. Following relocation of the anchor the buffer zone should be moved and centred on the new anchor position.

5.4 WA7105 (Corridor A) Borehole 75/Substation

5.4.1 The target lies at the substation location and hence within a few metres of the inter-array and export cable plans.

2011 Geophysical Assessment

Table 12: WA7105 2011 Geophysical Assessment

WA ID	Class	E	N	L (M)	W (M)	H (M)	Mag Ampl (nT)	Description
7105	Magnetic	318480	5949047	-	-	-	150	Medium anomaly, possibly related to other anomalies around BH75. May be debris.

2012 Review of 2011 Ground-truthing

Table 13: WA105 Review of 2011 Ground-truthing

WA ID	Archaeological Assessment	E	N	L (M)	W (M)	H (M)	Magnetic Response
7105	Archaeological	318425	5949059	2.6	0.2	0.1	Yes
Investigation Description							
Large anchor (possibly admiralty pattern ac14) with chain. Chain attached to cable approx. 0.12m diameter. Found at 318475E 5949046N. Subsequently moved to 318425.18E 5949059.34N.							

5.4.2 Osiris ID for 2011 anomalies A_M00067 and A_S0008. Both were dived in addition to WA7105. A_M00067 lies 5m west of WA7105 and A_S0008 lies 7m west of WA7105. The dive reports state that the anchor was found 1m east of the target A_M00067 and that nothing was found at the other two locations.

5.4.3 The anchor was subsequently moved to a new location where it will not be impacted by construction activities, as detailed in the table above. The buffer zone was implemented at the new anchor position.

2013 Ground-truthing

5.4.4 Neither A_M00067 nor A_S0008 were dived again in 2013 as they were dived in 2011 and proven to be the anchor, which was subsequently moved.

5.4.5 Osiris 2013 anomaly D_M00057 is 5m northwest of the new anchor location. Categorised as non-suspect UXO by 6Alpha. Not dived.

Recommendation

5.4.6 Reduce radius of buffer zone at position of relocated anchor to 15m, if this is within the tolerance of the construction activities anticipated.

6 SUMMARY OF ACTIONS AND RECOMMENDATIONS

6.1 Propeller

6.1.1 The propeller F-G_M12421 is subject to a TEZ, and specific investigative actions regarding this find were agreed between E.ON and Wessex Archaeology, including a ROV survey of the propeller and TEZ area and provision of the survey results and proposed mitigation to English Heritage as statutory consultee. English Heritage has confirmed that the propeller can be relocated away from direct impact of the construction works and reported through ORPAD.

6.1.2 In addition to the target IDs WA72624 and WA73065 associated with the propeller itself, there are nine sidescan sonar and 15 magnetic anomalies within the TEZ recorded by Osiris but not flagged as of potential archaeological interest by Wessex Archaeology (**Table 14**). The nine sidescan sonar anomalies are classified by Osiris as boulders with one suspect UXO. In order to confirm the low potential of the sidescan and magnetic anomalies, a survey specific to the TEZ was undertaken in December 2013 utilising the ROGE system, a load bearing ROV system on board the Atlantic Explorer. The propeller is lying directly on the location of proposed array cables between two foundations, and as such, it is essential that agreement from EH and MOD is obtained before July 2014 to relocate or retrieve the item, so that it does not impose a delay to the construction programme.

6.1.3 Further details of this survey and recommendations are presented in Wessex Archaeology report 85771.03 (Wessex Archaeology 2014).

Table 14: Sidescan Sonar and Magnetic Anomalies within the TEZ

ID	Classification	Easting	Northing	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description
F-G_M12421, F-G_S2768 (WA 72624, 73065)	Propeller	321384	5949186	-	-	-	-	Location as found from ground truthing
WA 72624	Magnetic	321383.5	5949185	-	-	-	1277.1	Very large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.
F-G_M12421	Magnetic	321383.7	5949185	-	-	-	1433.8	Asymmetric Dipole
WA 73065	Magnetic	321385	5949187	-	-	-	68	Distinct dipole, medium sized anomaly suggesting ferrous debris
F-G_S2768	Side Scan Sonar	321385.4	5949186	1	0.5	0.5	-	Boulder
F_M07406	Magnetic	321360.3	5949203	-	-	-	22.16	Dipole
F_M07421	Magnetic	321349.9	5949173	-	-	-	30.15	Positive Monopole
F_M07422	Magnetic	321371.8	5949170	-	-	-	12.58	Dipole
F_M07427	Magnetic	321365.5	5949165	-	-	-	13.55	Positive Monopole
F_M07435	Magnetic	321350.8	5949154	-	-	-	7.81	positive Monopole
F_M07446	Magnetic	321377.7	5949138	-	-	-	9.37	Positive Monopole
F-G_M12411	Magnetic	321411	5949220	-	-	-	9.6	Positive Monopole
F-G_M12413	Magnetic	321395.5	5949207	-	-	-	8.2	Positive Monopole
F-G_M12417	Magnetic	321426.3	5949200	-	-	-	25.0	Positive Monopole
F-G_M12419	Magnetic	321408.8	5949194	-	-	-	9.7	Positive Monopole
F-G_M12420	Magnetic	321431.5	5949193	-	-	-	10.7	Positive Monopole
F-G_M12422	Magnetic	321401.3	5949181	-	-	-	10.7	Positive Monopole
F-G_M12423	Magnetic	321407.3	5949174	-	-	-	6.0	Positive Monopole

ID	Classification	Easting	Northing	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description
F-G_M15642	Magnetic	321389	5949232	-	-	-	14.19	Asymmetric Dipole
F-G_M15652	Magnetic	321419.6	5949155	-	-	-	17.24	Asymmetric Dipole
F-G_S1487	Side Scan Sonar	321398.7	5949208	0.2	1.5	1	-	Boulder
F-G_S1489	Side Scan Sonar	321429.5	5949193	0.2	1.2	0.7	-	Boulder
F-G_S1491	Side Scan Sonar	321408.8	5949173	0.3	1	0.5	-	Boulder
F-G_S2766	Side Scan Sonar	321389.5	5949199	1.3	0.7	0.4	-	Boulder
F-G_S2767	Side Scan Sonar	321410	5949190	1	0.3	0.28	-	Boulder
F-G_S2769	Side Scan Sonar	321385.4	5949172	1.1	0.2	0.3	-	Boulder
F-G_S2770	Side Scan Sonar	321394.3	5949164	1.4	0.8	0.3	-	Boulder
F-G_S2771	Side Scan Sonar	321384.3	5949157	1.1	0.8	0.4	-	Boulder
F-G_S2772	Side Scan Sonar	321406.9	5949148	1.3	0.4	0.3	-	Boulder

6.2 Targets of Archaeological Interest with Recommendations under ORPAD

6.2.1 Forty eight of the 49 of the targets identified as being of archaeological interest have been reported through the ORPAD implementation service with propeller F-G_M12421 to be added as part of the agreed actions for clearance. Further recommendations are applicable to 43 of these targets (**Table 15**) under the terms of ORPAD.

6.2.2 If these objects are moved as part of clearance operations their new position should be provided to Wessex Archaeology in order to update archaeological records. If any of these objects are brought to the surface then initial recording should take place (photographs and dimensions for example) and archaeological advice should be sought under the terms of ORPAD. Wessex Archaeology will provide initial conservation advice, further interpretation and advice on dealing with the object in the longer term. If these objects are returned to the seabed their new position should be provided to Wessex Archaeology in order to update archaeological records.

Table 15: Targets with Recommendations under ORPAD

ID	Object	Description	ORPAD Report Number
WA71859	Anchor	Anchor found. Possible grapnel anchor of 19th/20th century date.	EON_10140
A_M00253	Anchor	Four pronged anchor *c.* 0.80 x 0.80 m caught under another anchor *c.* 1.2 x 0.8 m. Possibly debris as the 'shank' actually appears to be angle iron.	EON_10141
A_M00606	Anchor	Large Anchor *c.* 2.7m x 1m, orientation NW to SE. Probable Admiralty pattern anchor, it appears that one fluke is sheared off/missing.	EON_10142
A_M00688	Metal debris	Small piece of metal framework *c.*10 x 20cm exposed, appears to be attached to larger part *c.* 30 x 60cm and *c.* 60cm apart, structure appears partially buried. Probable debris or mine base or may be a large amount of ferrous material buried.	EON_10143
A_M01426	Metal debris	Angle iron *c.* 1.6m long and 40mm wide lying flush to seabed. Probable modern debris or may be wreck related.	EON_10144
A_M01478	Metal debris	Section of metal beam *c.* 2.5 x 0.1m. Possible modern debris or may represent a larger buried feature.	EON_10145
A-B_M11420	Metal debris	Section of beam, *c.* 1.8 long and 140mm wide, lying 50 mm high off the sea bed. Probable modern debris or may be wreck related.	EON_10146
A-B_M11433	Metal debris	Shaft with medium levels of corrosion. One end appears to have a shackle on it. Possible modern debris or partially buried anchor.	EON_10147
B_M02177	Anchor	Anchor *c.* 2.5 x 2.0 m. Unclear in images provided. Possible modern debris but may represent buried material of maritime origin.	EON_10148
B_M03072	Chain	No contact found although a small chain was found outside the target area. Probable large ferrous concretion.	EON_10149
B_S0358	Anchor	Anchor with rope and netting attached. Possible modern debris, but may be historic aviation or maritime in origin.	EON_10150
B-C_M14633	Metal debris	No contact found although metal debris and an anchor were found outside the target area during transit. Admiralty pattern anchor, probable 19th century.	EON_10151 and EON_10152

ID	Object	Description	ORPAD Report Number
C_M03490	Chain	Admiralty Chain. Probably from a boat or ship. Not seen in images provided. Probable buried debris. May be maritime in origin.	EON_10153
C_M03976	Winch	Scrap steel possibly a winch drum *c.* 810mm x 570mm x 230mm. Unclear in images provided. Probable debris but may be WWI mine base.	EON_10154
C_M04207	Chain	Chain link *c.* 0.96 x 0.16m lying flush with the seabed. Unclear in images provided. Possible buried anchor or chain deposit, or further ferrous debris or wreck material.	EON_10155
C_M04214	Chain	Magnetic chain. Unclear in images provided. Probable chain/debris.	EON_10157
C_M04230	Winch	Old deck winch *c.* 1m x 560mm x 370mm. Possible winch drum of 20th century origin. May be part of WWI mine base.	EON_10158
C_M04524	Metal debris	Angle iron or "C" channel section *c.* 1.5m x 70mm thickness. Height off sea bed 70mm. Probable ferrous debris may be maritime in origin.	EON_10159
C-D_M15094	Anchor	Anchor found *c.* 2 x 0.5m. Unclear in images provided. Probable admiralty pattern anchor, 19th century.	EON_10160
D_M05204	Capstan	Roller - Capstan found visually and a small piece of metal frame noted *c.* 0.5m in length. Winch drum or roller from a vessel. May be wreck related.	EON_10162
D_M05853	Metal debris	Large section of box shaped metal debris. Debris may be iron framing or struts of maritime origin.	EON_10163
D-E_M15244	Capstan (Possibly)	Possible capstan. Possible roller or cable drum may be part of WWI mine base.	EON_10164
E_M6149	Anchor	Large anchor *c.* 1900 x 1000 mm wide point to point. Admiralty pattern anchor. Probable 19th century date.	EON_10165
EC_M12834	Anchor	Anchor *c.* 2m x 2m x 250mm. Unclear in images provided. Possible admiralty pattern anchor.	EON_10167
EC_M13155	Anchor (Possibly)	Possible anchor *c.* 2 m long. Large shackle and chain links. Possible anchor and chain.	EON_10168
EC_M13927	Anchor (Possibly)	Unidentified metallic object, possibly an anchor. Unclear in images provided. Possible mine bases.	EON_10170
EC_M16181	Anchor	Large anchor, intact *c.* 2 x 2m. Unclear in images provided. Possible anchor or debris.	EON_10171
E-F_M15529	Metal debris	Hollow pyramid shaped metal debris *c.* 0.5 x 0.2 x 0.2 m. Possible wreck or aircraft structure. Unknown debris may be of maritime origin.	EON_10172
F_M07944	Wooden Beam	Possible piece of wooden beam with bolts. Unclear in images provided. Possible wreck material.	EON_10173
F_M08198	Chain	Small amount of chain.	EON_10175
F_S0781	Anchor	Large anchor *c.* 3.8 x 1.9 m found at the edge of target area. Probably admiralty pattern 19th century.	EON_10176
F_S0794	Anchor	Anchor wire all around the target area. Same wire as found and visually followed from F M076 85. Possible WWI mine base.	EON_10177
G_M08735	Deck Plate	Possible deck plate. Unclear in images provided. Ferrous material of unknown origin.	EON_10178

ID	Object	Description	ORPAD Report Number
G_M08847	Anchor	Anchor *c.* 2 x 1 m. Possible anchor.	EON_10179
G_M09318	Anchor	Possibly a homemade anchor *c.* 2m long. Possible anchor.	EON_10180
G_M09326	Metal debris	Metal Frame *c.* 1 x 1 x 1.2m. Debris, probable ferrous framing and possible wreck material.	EON_10181
G_M09356	Anchor	Anchor found *c.* 1 x 0.4m. Probable tubular framing may be wreck related.	EON_10182
G-H_M12601	Metal debris	Metallic debris with triangular base *c.* 1 x 1 x 0.5 m. May be wreck related.	EON_10183
G-H_M12687	Anchor	Anchor found *c.* 2 x 0.5m. Possible admiralty longshank anchor, 18th century.	EON_10184
H_M09977	Metal debris	Metal debris extending for 2-3m to outside of target area. Ferrous debris may be wreck related. Further material may be buried.	EON_10185
H_M10203	Anchor	Anchor *c.* 1.5 x 1 m located adjacent to boulder. Probable admiralty anchor, 19th century	EON_10186
H-I_M16000	Metal debris	Possibly a girder *c.*1.5 to 2 m long. Probable structural metalwork may be of maritime origin.	EON_10188
J_M11198	Anchor	Anchor/metal debris 2 x 1.5m. Anchor not clear in images provided. Possibly a longshank, 18th century.	EON_10189

6.3 Targets Requiring No Further Action (Low Risk)

6.3.1 Eighty two of the 219 targets have been identified with sufficient confidence that no further action is required (**Table 16**):

- *five of the 49 targets identified as being of archaeological interest;*
- *71 of the 94 targets identified as being non-archaeological or of low archaeological interest; and*
- *Six of the 76 targets identified as being inconclusive.*

6.3.2 Each of these targets has been identified as being non-archaeological, of low archaeological interest, as a target for which UXO requirements take precedence or is no longer considered suspect archaeology in accordance with the revised criteria.

Table 16: Targets Requiring No Further Action (Low Risk)

ID	Object	Reason for No Further Action	ORPAD Report Number
WA71868	Not seen	Non archaeological.	-
WA72078	Not seen	Non archaeological.	-
WA70018_B1	Not seen	Non archaeological.	-
A_M00151	Boulder (Metal Bar)	Non archaeological target with associated material of low archaeological interest.	-
A_M00484	Pipe	Object of low archaeological interest.	-
A_M01094	Pipe	Object of low archaeological interest.	-

ID	Object	Reason for No Further Action	ORPAD Report Number
A_M01313	Metal debris	Object of low archaeological interest.	-
A_M01340_B1	Pole	Object of low archaeological interest.	-
A_M01615	Pipe	Object of low archaeological interest.	-
A_M01658_B1	Pipe	Object of low archaeological interest.	-
A_M01668_B1	Metal debris	Object of low archaeological interest.	-
A-B_M11412	Pipe	Object of low archaeological interest.	-
A-B_M14208	Not seen	No longer considered suspect archaeology.	-
A-B_M14211	Not seen	No longer considered suspect archaeology.	-
A-B_M14264	Fishing Pot	Object of low archaeological interest.	-
B_M02006_B1	Metal debris	Object of low archaeological interest.	-
B_M02053	Boulder (Fishing Gear)	Non archaeological target with associated material of low archaeological interest.	-
B_M02128	Pipe	Object of low archaeological interest.	-
B_M02181	Pole	Object of low archaeological interest.	-
B_M02264_B1	Metal debris	Object of low archaeological interest.	-
B_M03112_B1	Metal debris	Object of low archaeological interest.	-
B_M14291	Not seen	No longer considered suspect archaeology.	-
B_M14505	Not seen	No longer considered suspect archaeology.	-
B_S0320	Boulder	Non archaeological.	-
B-C_M11740_B1	Metal debris	Object of low archaeological interest.	-
B-C_M14601	Boulder	Non archaeological.	-
B-C_M14611	Pipe	Object of low archaeological interest.	-
B-C_M14613	Not seen	No longer considered suspect archaeology.	-
B-C_M14696	Not seen	No longer considered suspect archaeology.	-
C_M03640	Ladder	Object of low archaeological interest.	-
C_M04178_B1	Metal debris	Object of low archaeological interest.	-
C_M14867	Not seen	No longer considered suspect archaeology.	-
C_S0378	Boulder	Non archaeological.	-
C_S0398_B1	Boulder	Non archaeological.	-
C-D_M15007_B1	Metal debris	Object of low archaeological interest.	-
D_M04694	Fishing Pot	Object of low archaeological interest.	-
D_M04814	Chain	Object of low archaeological interest.	EON_10161
D_M05356	Rope	Object of low archaeological interest.	-
D_M05455	Metal debris	Object of low archaeological interest.	-
D_S0563	Boulder	Non archaeological.	-
D_S0573	Boulder	No longer considered suspect archaeology.	-
D-E_M15198	Not seen	No longer considered suspect archaeology.	-
D-E_M15228	Boulder	Non archaeological.	-

ID	Object	Reason for No Further Action	ORPAD Report Number
D-E_M15336	Boulder	Non archaeological.	-
E_M6348_B1	Metal debris	Object of low archaeological interest.	-
E_S0700	UXO	UXO requirements take precedence.	EON_10166
EC_M12848	Metal debris	Object of low archaeological interest.	-
EC_M12875	Tyre	Object of low archaeological interest.	-
EC_M12919	Tyre	Object of low archaeological interest.	-
EC_M12989	Fishing Pot	Object of low archaeological interest.	-
EC_M13071_B1	Metal debris	Object of low archaeological interest.	-
EC_M13122	Metal debris	Object of low archaeological interest.	-
EC_M13213	Boulder (Fishing Pot)	Non archaeological target with associated material of low archaeological interest.	-
EC_M13223	Metal debris	Object of low archaeological interest.	-
EC_M13256	Pipe	Object of low archaeological interest.	-
EC_M13270	Metal debris	Object of low archaeological interest.	-
EC_M13271	Rope	Object of low archaeological interest.	-
EC_M13467_B1	Concrete	Object of low archaeological interest.	-
EC_M13600_B1	Fishing Pot	Object of low archaeological interest.	-
EC_M13876_B1	UXO	UXO requirements take precedence.	EON_10169
EC_S2019	Boulder	No longer considered suspect archaeology.	-
E-F_M12282	Pipe	Object of low archaeological interest.	-
E-F_M12288	Pipe	Object of low archaeological interest.	-
E-F_M15517	Fishing Gear	Object of low archaeological interest.	-
E-F_M15527	Fishing Gear (Possibly)	Object of low archaeological interest.	-
F_M07605	Metal debris	Object of low archaeological interest.	-
F_M07779	Cable Reel	Object of low archaeological interest.	-
F_M07814	Pipe	Object of low archaeological interest.	-
F_M08092	UXO	UXO requirements take precedence.	EON_10174
F_M08182	Boulder (Pipe)	Non archaeological target with associated material of low archaeological interest.	-
F_M08191	Pipe	Object of low archaeological interest.	-
F_S0828	Not seen	No longer considered suspect archaeology.	-
F-G_M12508	Rope	Object of low archaeological interest.	-
G_M08678	Cable	Object of low archaeological interest.	-
G_M09084	Concrete	Object of low archaeological interest.	-
H-I_M15954_B1	Chain	Object of low archaeological interest.	EON_10187
H-I_M16003	Metal debris	No longer considered suspect archaeology.	-
H-I_S2917	Not seen	No longer considered suspect archaeology.	-
I-J_S2977	Boulder	No longer considered suspect archaeology.	-

ID	Object	Reason for No Further Action	ORPAD Report Number
I_M10995	Pipe	Object of low archaeological interest.	-
I_S1119	Fishing Gear (Possibly)	Object of low archaeological interest.	-
J_S1147	Boulder	Non archaeological.	-

6.3.3 It should be noted, however, that the identification of these sites as requiring no further action is based on the data available and that for no single target is this assessment based upon 100% certainty. In each case it is considered the most likely conclusion that archaeological material is either absent or of low or no archaeological value and that there is a **low risk** of encountering material of medium or high archaeological value. In the event that additional, unexpected archaeological material is encountered at any of the recorded positions, discoveries should be reported through the retained archaeologist.

6.4 Targets Requiring No Further Action (Medium Risk)

6.4.1 Seventeen of the 94 targets identified as being non-archaeological or of low archaeological interest have been identified as boulders with sufficient confidence that no further action is required. However, following comparison with the Wessex Archaeology assessment of geophysical data, it is suspected that there may be additional material present, possibly buried, that may be of archaeological interest. These are listed in **Table 17**.

Table 17: Targets Requiring No Further Action (Medium Risk)

ID	Reason for Recommendations (ORPAD)
WA71512	Boulder position coincident with sidescan anomaly described as small debris field 5.6 x 4 x 0 m.
WA72150	Boulder position coincident with sidescan anomaly described as seafloor disturbance, linear alignment of a number of dark reflectors with shadows 41.9 x 2.8 x 0 m.
B_M02923	Boulder with associated magnetic anomaly (101nT) indicating possible buried material.
C_71303	Boulder position coincident with sidescan anomaly described as curved bright reflector 12.8 x 1.9 x 0 m.
C_S0496	Boulder position coincident with sidescan anomaly described as dark reflector 3.9 x 0.7 x 0.5 m.
D_M04739	Boulder with associated magnetic anomaly (129nT) indicating possible buried material.
E_S0682	Boulder position coincident with sidescan anomaly described as rope/chain 5.3 x 0.3 x 0.5 m.
E_S0684	Boulder with associated magnetic anomaly (246nT) indicating possible buried material.
EC_M12987 _B1	Boulder with associated magnetic anomaly (93.6nT) indicating possible buried material.
EC_M14030	Boulder with associated magnetic anomaly (113.3nT) indicating possible buried material.
F-G_S2797	Boulder position coincident with sidescan anomaly described as v shaped debris 4.8 x 0.6 x 0.2 m.
G_M08844	Boulder with associated magnetic anomaly (101nT) indicating possible buried material.
G_M08951	Boulder with associated magnetic anomaly (397nT) indicating possible buried material.
G_S0912	Boulder with associated magnetic anomaly (357nT) indicating possible buried material.
G-H_S1542	Boulder with associated magnetic anomaly (82.1nT) indicating possible buried material.

ID	Reason for Recommendations (ORPAD)
H_M09592	Boulder with associated magnetic anomaly (141nT) indicating possible buried material.
J_M11108_B1	Boulder with associated magnetic anomaly (530nT) indicating possible buried material.

6.4.2 As it is not possible to predict with accuracy the archaeological value of any buried material the risk of encountering material of medium or high archaeological value should be considered a **medium risk**. This is, however, a precautionary approach and it is recognised that the investigation of suspected buried material at these locations would be impractical and may be disproportionate to the suspected level of archaeological potential. It is therefore recommended that, while no further actions are required prior to construction, particular attention should be paid to these positions during the installation of wind farm infrastructure and that all discoveries of material are reported to the retained archaeologist or through ORPAD.

6.5 Targets with Further Recommendations

6.5.1 Further recommendations are applicable to 76 targets (**Table 18**):

- *six of the 94 targets identified as being non-archaeological or of low archaeological interest; and*
- *70 of the 76 targets identified as being inconclusive.*

Table 18: Targets Requiring Further Review

ID	Object	Reason for Review
WA71697	Not seen	Not seen during UXO survey.
WA72135	Not seen	Not seen during UXO survey.
WA73045	Not seen	Not seen during UXO survey.
WA73083	Not seen	Not seen during UXO survey.
A_M00011	Uncertain	Image of insufficient quality
A_M00027	Not seen	Not seen during UXO survey.
A_M01026_B1	Metal debris	Metallic object not identifiable in images.
A_M01032	Not seen	Not seen during UXO survey.
A_M01037	Metal debris	Image of insufficient quality.
A_M01392	Not seen	Not seen during UXO survey.
A_M01396	Not seen	Not seen during UXO survey.
A_M01564_B1	Not seen	Not seen during UXO survey.
B_M02523	Not seen	Not seen during UXO survey.
B_M02993	Not seen	Not seen during UXO survey.
B_M03084	Metal debris	Image of insufficient quality.
B_M14336	Not seen	Not seen during UXO survey.
C_71253	Not seen	Not seen during UXO survey.
C_M03641_B1	Not seen	Not seen during UXO survey.
C_M04057	Metal debris	Image of insufficient quality.

ID	Object	Reason for Review
C_M04519_B1	Not seen	Not seen during UXO survey.
C_M04591	Metal debris	Image of insufficient quality.
C_S0524	Not seen	Not seen during UXO survey.
C-D_M11940	Pole	Pole not clear in image.
C-D_M14995	Not seen	Not seen during UXO survey.
C-D_M15016	Not seen	Not seen during UXO survey.
C-D_M15024	Not seen	Not seen during UXO survey.
D_M04730	Not seen	Not seen during UXO survey.
D_M04828	Boulder	No image supplied.
D_S0550	Boulder	Boulder not clearly identifiable from image.
D_S0622	Uncertain	Image of insufficient quality.
D-E_M15237	Metal debris	Size of anomaly suggests more buried.
E_M6337	Metal debris	Image of insufficient quality.
E_M7026	Metal debris	Image of insufficient quality.
EC_M12844	Boulder	Boulder not clearly identifiable from image.
EC_M12847	Not seen	Not seen during UXO survey.
EC_M12859	Not seen	Not seen during UXO survey.
EC_M12871	Boulder	No image supplied.
EC_M12935	Not seen	Not seen during UXO survey.
EC_M13000	Not seen	Not seen during UXO survey.
EC_M13046	Not seen	Not seen during UXO survey.
EC_M13200	Not seen	Not seen during UXO survey.
EC_M13324	Not seen	Not seen during UXO survey.
EC_M13405	Not seen	Not seen during UXO survey.
EC_M13411	Metal debris	Object unclear in image.
EC_M13460	Not seen	Not seen during UXO survey.
EC_M13491_B1	Metal debris	Object unclear in image.
EC_M13506	Not seen	Not seen during UXO survey.
EC_M13559	Boulder	Boulder not clearly identifiable from image.
EC_M13589	Metal debris	Image of insufficient quality.
EC_M13633	Boulder	Boulder not clearly identifiable from image.
EC_M13796	Metal debris	Metallic debris not clearly identifiable from image.
EC_M13953_B2	Not seen	Not seen during UXO survey.
EC_M16174	Boulder	No image supplied.
F_M07228	Not seen	Not seen during UXO survey.
F_M07606	Not seen	Not seen during UXO survey.
F_M07617	Not seen	Not seen during UXO survey.
F_M07671	Not seen	Not seen during UXO survey.
F-G_M12456	Metal debris	Identity uncertain.

ID	Object	Reason for Review
G_M08845	Not seen	Not seen during UXO survey.
G_M08862	Not seen	Not seen during UXO survey.
G_M09043	Not seen	Not seen during UXO survey.
G_M09109	Not seen	Not seen during UXO survey.
G_M09111	Not seen	Not seen during UXO survey.
G_M09212	Not seen	Not seen during UXO survey.
G_M09276	Not seen	Not seen during UXO survey.
G_M09284	Not seen	Not seen during UXO survey.
G_M09285	Not seen	Not seen during UXO survey.
G_M09324	Pipe	Pipe not seen in image.
H_M09756_B1	Not seen	Not seen during UXO survey.
H_M09790	Not seen	Not seen during UXO survey.
H_M10041	Not seen	Not seen during UXO survey.
H-I_M12743	Not seen	Not seen during UXO survey.
I_M10500_B1	Not seen	Not seen during UXO survey.
I_M10647	Not seen	Not seen during UXO survey.
I_M10903	Metal debris	Image of insufficient quality.
J_M11160_B1	Not seen	Not seen during UXO survey.

6.5.2 As the assessment of the above targets proved inconclusive the risk of encountering material of medium or high archaeological value should be considered a **high risk**.

6.5.3 For the 76 targets associated with a **high risk** of encountering archaeological material of medium or high archaeological value (70 inconclusive targets and 6 positively identified by the UXO survey contractor as boulders or objects of low archaeological interest), specific actions may be required.

6.5.4 If any of these targets are revisited or, in the case of objects, recovered, then all additional data should be made available to Wessex Archaeology for review.

6.5.5 If the above sites are not revisited for engineering or other reasons but **will** be at risk of direct impacts during clearance operations or wind farm installation, reassessment for archaeological purposes should take place. Particular attention should be paid to these positions and all discoveries of material should be reported to the retained archaeologist or addressed through ORPAD, depending on their significance.

6.5.6 If the above sites are not revisited for engineering or other reasons but **will not** be at risk of direct impacts during clearance operations or wind farm installation no further action is necessary.

6.6 Buffer Zone Review

6.6.1 A summary of the recommendations following the buffer zone review are provided in **Table 19**.

Table 19: Summary of Buffer Zone Review

Buffer Zone	Osiris IDs	2011 Original			2013 Reviewed			
		E	N	Radius (m)	Modification	E	N	Radius (m)
7026	D_M05208	320471	5947510	50	Reduce size	320471	5947510	15
7041	D_M04761	320073	5949323	50	Reduce size now and move when anchor is relocated later in 2014	(320073)	(5949323)	15
7105	A_M00067 A_S0008 (original position) D_M00057 (new position)	318425	5949059	50	Reduce size	318425	5949059	15

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APPENDIX I: ARCHAEOLOGICAL ASSESSMENT OF REVIEWED TARGETS

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
71512	Boulder	Boulder Size Approx 1300mm x 400mm x 400mm	Boulder	ROV	M	N	N	M	No Action		71512	320619	5946581
71697	Other	High TSS reading, no visual. No ID	Not seen	ROV	P	U	U	L	Review if reinvestigated		71697	321561	5945247
71859	Debris (Metallic)	Anchor Found	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_1 0140	71859	321582.8	5948018
71868	Other	No TSS Contacts. 4 x small rocks not large enough to warrant taking a fix on.	Not seen	No Image	N/A	U	U	M	No Action		71868	321666.3	5947715
72078	Other	No Target Found - No ID	Not seen	ROV	M	U	U	M	No Action		72078	322128	5947969
72135	Debris (Metallic)	TSS Contact, No Visual - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72135	322256	5946559
72150	Boulder	2 x Adjacent boulders – L0.4m x W0.2m x H0.3m L0.2m x W0.2m x H0.2m	Boulder	ROV	M	N	N	M	No Action		72150	322599	5946123
73045		Nothing found in target area	Not seen	ROV	M	U	U	L	Review if reinvestigated		73045	321107	5945562
73083		Nothing found in target area	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		73083	322272	5947780

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
70018_B1	Other	Nothing found magnetic or visual at this location	Not seen	No Image	N/A	U	U	M	No Action		70018	318974	5947284
A_M00011	Boulder like object	Boulder like object L20cm W20cm H20cm, No clear definition, large hit on TSS, object is metallic	Uncertain	ROV	P	U	U	L	Review if reinvestigated or recovered		70046	318375.1	5949166
A_M00027	Other	Hit on TSS coils but unable to get a visual	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		70050	318388.9	5949117
A_M00151	Boulder	L30cm x W30cm x H15cm, TSS hit in area. Strongest reading occurred when the coils were directly over boulder. Possible metal bar observed on southern side of boulder.	Boulder	ROV	M	N/P	L	M	No Action - archaeological value expected to be Low		70061	318536.5	5948931
A_M00253	Debris (Metallic)	Anchor approx L 0.80m W 0.80 m, appears to be four pronged caught under another anchor 1.2 m W 0.8 m	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10141	70111	318585.8	5948511
A_M00484	Debris (Metallic)	Pipe 10cm diameter 1m long NO VIDEO TAKEN	Pipe	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		70244	318838.6	5947891
A_M00606	Debris (Metallic)	Large Anchor - Dimensions - 2.7m Long x 1m Wide - Orientation NW to SE	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10142	70210	318839	5947346

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
A_M00688	Debris (Metallic)	Small Piece of metal framework 10x20cm exposed, appears to be attached to larger part 30x60cm approx. 60cm Apart, structure appears partially buried	Metal debris	ROV	M	P/M	M/L	L	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10143	70189	318894.8	5947112
A_M01026_B1	Debris (Metallic)	Diver located a metallic object approx. 30-40% exposed above the seabed. Magnetic signature over an area of Ll.0m x W0.5m. Object thickness of 40-50mm. Confirmed as non UXO by Bactec	Metal debris	Diver	P	P/M	U	L	Metallic object not identifiable in images - review if recovered or reinvestigated		70334	319284.1	5946087
A_M01032	Other	Significant hit on TSS Coil, target buried as unable to get visual. No ID	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		70335	319247.6	5946074
A_M01037	Debris (Metallic)	Partially buried unable to distinguish, Strong hit on TSS Coils	Metal debris	ROV/ Diver	P	P/M	U	L	Review if reinvestigated or recovered		70336	319271.3	5946053
A_M01094	Debris (Metallic)	Tube/Pipe length 1.5m diameter 10cm, Orientation running NW to SE	Pipe	ROV	M	P/M	L	L	No Action - archaeological value expected to be Low		70354	319136.4	5945917
A_M01313	Debris (Metallic)	Found Target rope with steel rod.	Metal debris	ROV	M	M	N	M	No Action		70437	319506.8	5944971

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A_M01340_B1	Debris (Metallic)	Diver located a magnetic steel pole, heavily corroded. 2.5m in length, 40-50mm dia.	Pole	Diver	M	P/M	L	M	No Action - archaeological value expected to be Low		70442	319272.8	5944926
A_M01392	Other	Found magnetic target. Confirmed as in underlaying seabed and cannot be assessed - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		70448	319277.2	5944855
A_M01396	Other	Found magnetic target. Confirmed as in underlaying seabed and cannot be assessed - No ID	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		70450	319294.1	5944846
A_M01426_B1	Debris (Metallic)	Angle iron 1.6m long 40mm wide flush to seabed	Metal debris	Diver	M	P/M	M/L	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10144	70457	319355.4	5944797
A_M01478_B1	Debris (Metallic)	Diver located a metallic object. Appears to be a section of metal beam. L2.5m x W 0.1m. No other objects found in target area.	Metal debris	Diver	H	P/M	M/L	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10145	70473	319469.3	5944723
A_M01564_B1	Other	Diver found sporadic magnetic pickups in various locations across the target area including from rocks. No other objects were found on the seabed.	Not seen	Diver	M	U	U	L	Review if reinvestigated		70528	319601.3	5944364

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A_M01615	Debris (Metallic)	Metallic pipe. Possibly 2-3m L up to 50mm W. Partially Buried.	Pipe	ROV	M	P/M	L	L	No Action - archaeological value expected to be Low		70541	319607.3	5944265
A_M01658_B1	Debris (Metallic)	Diver located a metallic object L1.5m x 30mm dia. Identified as a section of pipe.	Pipe	Diver	P	P/M	L	M	No Action - archaeological value expected to be Low		70549	319543.4	5944184
A_M01668_B1	Debris (Metallic)	Diver located an object with a magnetic signature protruding 100mm from the seabed, 1m in length with a thickness of 50mm	Metal debris	Diver	P	P/M	L	L	No Action - archaeological value expected to be Low		70554	319543.4	5944184
A-B_M11412	Debris (Metallic)	TSS Target 0.6m Buried, Visual inspection showed a pipe 20mm diameter 1m long	Pipe	ROV	M	P/M	L	L	No Action - archaeological value expected to be Low		72644	318781.6	5948848
A-B_M11420_B1	Debris (Metallic)	Section of beam, 1.8m long 140mm wide 50mm high off sea bed	Metal debris	Diver	M	P/M	M/L	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10146	72643	318708.8	5948824
A-B_M11433	Debris (Metallic)	Shaft with medium levels of corrosion. One end appears to have a shackle on it.	Metal debris	ROV	M	P/M	M/L	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10147	72645	318904.7	5948764

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
A-B_M14208		No targets found on T55, No Visual of any soar targets.	Not seen	No Image	N/A	U	U	L	No Action		73005	318826.3	5948806
A-B_M14211		No TSS hits or other targets	Not seen	No Image	N/A	U	U	L	No Action		73008	318805.5	5948790
A-B_M14264	Debris (Metallic)	TSS Contact on Fishing Pot	Fishing Pot	ROV	M	M	N	M	No Action		73024	319781.9	5944071
B_M02006_B1	Debris (Metallic)	Scrap steel1m long x 170mm wide x 80 mm high	Metal debris	Diver	P	P/M	L	L	No Action - archaeological value expected to be Low		70674	319190.1	5948255
B_M02053	Boulder	Boulder Centre of target area H0.3m x W0.4m x L0.3m, TSS reading higher around boulder (Fishing equipment next to boulder)	Boulder/ Fishing Gear	ROV	M	N/P	N/L	M	No Action - archaeological value expected to be Low		70690	319209.5	5948055
B_M02128	Debris (Metallic)	Strong TSS Hit at 2 o'clock position, 40mm x 1.0m Tube	Pipe	ROV	P	P/M	L	L	No Action - archaeological value expected to be Low		70724	319465	5947772

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
B_M02177	Debris (Metallic)	Anchor - 2.5m Long x 2.0m Wide	Anchor	Diver	P	A	M	L	Anchor unclear in image - If recovered, retain for arch assessment	EON_10148	70730	319353.4	5947662
B_M02181	Debris (Metallic)	four metallic poles D60mm x L3000mm covered in loose bundle of rope	Pole	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		70734	319261	5947647
B_M02264_B1	Debris (Metallic)	Diver located scrap steel buried in sea bed. Exposed 750mm. Approx. size L1.8m x W0.7m x T0.14m	Metal debris	Diver	M	P/M	L	M	No Action - archaeological value expected to be Low		70776	319389.9	5947306
B_M02523	Other	TSS440 Contact - No Visual - No ID. Diver: Nothing Found	Not seen	ROV	M	U	U	L	Review if reinvestigated		70850	319576	5946466
B_M02923	Large Boulder	Dimensions - Length 1.0m, Width 1.5m, Height 0.4m	Boulder	ROV	M	N	N	M	No Action		70990	319934	5944887
B_M02993	Other	No Contact Found	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		70998	320054.7	5944780
B_M03072	Other	No Contact Found - No ID (small chain found outside target area)	Chain	Diver	M	U	L	M	If chain recovered, retain for arch assessment	EON_10149	71007	319970.8	5944666
B_M03084	Debris (Metallic)	TSS Hit. Metal Object 1m x 0.5m. Appears to be partially buried, possibly an anchor.	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		71012	320084.4	5944652

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
B_M03112_B1	Debris (Metallic)	Diver located a metal bar with a magnetic signature. L1.7m x dia. 30mm	Metal debris	Diver	H	P/M	L	M	No Action - archaeological value expected to be Low		71060	320079.5	5944275
B_M14291		No targets found, no TSS hit	Not seen	ROV	M	U	U	L	No Action		73023	319158.9	5949126
B_M14336		No targets found in area	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		73007	318944.4	5948774
B_M14505		No TSS Contact - Nothing Found - No ID	Not seen	No Image	N/A	U	U	L	No Action		73026	319966.4	5944560
B_S0320	Boulder	Large Boulder - 0.4m Wide x 0.5m Long x 0.4m High	Boulder	ROV	M	N	N	M	No Action		70991	319907.1	5944883
B_S0358	Debris (Metallic)	Anchor with rope and netting attached	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10150	71085	320105.6	5944096
B-C_M11740_B1	Debris (Metallic)	Piece of scrap steel 610mm long x 110mm Wide x 80mm High	Metal debris	Diver	P	P/M	L	L	No Action - archaeological value expected to be Low		72641	319325.1	5948830
B-C_M14601	Boulder	Boulder L80cm x W40cm x H40cm	Boulder	ROV	M	N	N	M	No Action		73021	319446.6	5948695
B-C_M14611	Debris (Metallic)	Pipe on Sea bed	Pipe	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		73009	319287.5	5948645

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
B-C_M14613		Nothing found	Not seen	ROV	M	U	U	L	No Action		73018	319377.1	5948639
B-C_M14633		Nothing found in target area (Fixes taken on metal debris and anchor outside of target area found during transit)	Metal debris	ROV	M	A/P	M	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10151 and EON_10152	73013	319310.3	5948588
B-C_M14696		Nothing found on location	Not seen	ROV	M	U	U	L	No Action		73027	320062.6	5946188
C_71253	Other	Nothing found	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		71253	320054	5947187
C_71303	Boulder	Several Boulders Found	Boulder	ROV	M	N	N	M	No Action		71303	320446	5945377
C_M03490	Other	Admiralty Chain	Chain	Diver	P	P/M	L	L	Not observed in image - If recovered, retain for arch assessment	EON_10153	71210	319720.3	5948835
C_M03640	Debris (Metallic)	Ladder	Ladder	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		71230	319771.8	5948373

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C_M03641_B1	Other	Diver located area of positive DX200 contact. Excavated 200mm but nothing found. Approx contact area 0.5m 0.4m	Not seen	Diver	P	U	U	L	Review if reinvestigated		71232	319884.7	5948373
C_M03976_B1	Debris (Metallic)	Scrap steel possibly a winch drum L810mm x W570mm x H230mm	Winch	Diver	M	A	M	M	Winch Drum unclear in image - If recovered, retain for arch assessment	EON_10154	71263	320083.1	5946643
C_M04057	Debris (Metallic)	TSS Hit, Visual on rectangular flat edged object. 10cm Wide x 50cm Long Exposed but partially buried	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		71269	320275	5946450
C_M04178_B1	Debris (Metallic)	Piece of scrap steel 180mm long x 25mm	Metal debris	Diver	M	P/M	L	M	No Action - archaeological value expected to be Low		71285	320440	5945855
C_M04207_A1	Debris (Metallic)	Chain Link 0.96m x 0.16m. Laying flush with seabed	Chain	Diver	P	P	U	L	Chain link unclear in image - If recovered, retain for arch assessment	EON_10155	71286	320375.1	5945780
C_M04214	Debris (Metallic)	Magnetic Chain	Chain	Diver	P	P	U	L	Chain link unclear in image - If recovered, retain for arch assessment	EON_10157	71287	320363.9	5945768

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
C_M04230_B1	Debris (Metallic)	Old deck winch 1m long 560mm x 370mm	Winch	Diver	M	A	M	M	If recovered, retain for arch assessment	EON_10158	71289	320255.4	5945705
C_M04519_B1	Other	Diver located nothing of significance - No magnetic hits in target area.	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		71336	320659.5	5944209
C_M04524_B1	Debris (Metallic)	Diver located metallic debris. Appears to be angle iron or "C" channel section. Ll.5m x 70mm thickness. Height off sea bed 70mm	Metal debris	Diver	M	P/M	M/L	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10159	71335	320618.4	5944199
C_M04591	Debris (Metallic)	Long inverted C Metallic object - 1-1.5m Long	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		71344	320611.4	5944082
C_M14867	Other	TSS hit, no visual, no ID	Not seen	ROV	M	U	U	L	No Action		73028	320111.5	5946068
C_S0378	Boulder	Dimensions - Length 2.0m, Width 1.0m, Height 1.2m	Boulder	ROV	M	N	N	M	No Action		71212	319753.1	5948825
C_S0398_B1	Boulder	60 x 40 x 40cm	Boulder	ROV	M	N	N	M	No Action		71234	319813	5948149
C_S0496	Boulder	Large Boulder Found	Boulder	ROV	M	N	N	M	No Action		71307	320396.8	5945131
C_S0524	Other	Nothing found other an metal at C_M04570	Not seen	ROV	M	U	U	L	Review if reinvestigated		71341	320573.1	5944112

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C-D_M11940	Debris (Metallic)	Metal Pole / Railing 1.5 - 2.0m Long x 0.3m Wide x 0.2m High	Pole	ROV	P	P/M	L	L	Pole not clear in image - If recovered, retain for arch assessment		72621	319871.3	5948555
C-D_M14995		Nothing found in target area	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		73036	320037	5948494
C-D_M15007_B1	Debris (Metallic)	Diver located piece of scrap steel buried approx 200mm. Object approx. L1.0m x W0.1m x T0.08m	Metal debris	Diver	H	P/M	L	M	No Action - archaeological value expected to be Low		73038	319937.1	5948324
C-D_M15016	Other	TSS hit, no visual, no ID (Adjacent Boulder - 30 x 20 x 20cm)	Not seen	ROV	M	U	U	L	Review if reinvestigated		73039	320091.7	5948209
C-D_M15024		Nothing found in target area	Not seen	ROV	M	U	U	L	Review if reinvestigated		73040	320105.4	5948182
C-D_M15094	Debris (Metallic)	Anchor found - L2m x W0.5m	Anchor	ROV	P	A	M	L	Anchor unclear in image - If recovered, retain for arch assessment	EON_10160	73046	320796.2	5944301

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
D_M04694	Other	TSS Hit No Visual ID Approx 1.5m from centre of target area within the 5m radius. Dive Carried out No: 49 which Confirmed that a rock was present with a Fishing pot wedged on the underside of it Approx Size 1600mm wide x 1200mm height	Fishing Pot	ROV	P	M	N	L	No Action		71401	320067.6	5949481
D_M04730	Other	Record states: No Target Found - No TSS Hits	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		71404	320159	5949380
D_M04739	Boulder	Approx Boulder Size 500mm x 300mm x 400mm	Boulder	ROV	M	N	N	M	No Action		71403	320146	5949365
D_M04814	Debris (Metallic)	Appears to be three links of chain. 250mm Long 120mm wide 60mm high	Chain	Diver	H	P/M	L	M	No Action - archaeological value expected to be Low	EON_10161	71408	320109.3	5949196
D_M04828	Boulder	Rock 1500mm x 800mm 300mm Rock 2: 750mm x500mm x300mm Rock 3: 750mm x 450mm x 400mm	Boulder	No Image	N/A	N	N	L	No Action		71425	320161	5948869
D_M05204	Debris (Metallic)	Roller - Capstan found visually and a small piece of metal frame noted approx 0.5m in length	Capstan	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10162	71482	320557.4	5947526

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D_M05356	Debris (Non-metallic)	Wire like rope chain object - Connected to same on D_M05364 (Possible Mooring Rope)	Rope	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		71504	320754.3	5946947
D_M05455	Debris (Metallic)	Metal strip Approx 3m in Length laying from East to West	Metal debris	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		71522	320751.4	5946461
D_M05853	Debris (Metallic)	Large section of Box shape metal debris	Metal debris	ROV	M	P/M	M/L	L	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10163	71570	321139.6	5944668
D_S0550	Boulder	Small Rock Approx size 200mm x 200mm x 100mm	Boulder	ROV	P	N	N	L	Boulder not clearly identifiable from image - review if reinvestigated		71426	320166.6	5948857
D_S0563	Boulder	Record says no target found but image shows boulder	Boulder	ROV	M	N	N	M	No Action		71452	320246.9	5948128
D_S0573	Boulder	Nothing Found - No Visual ID	Boulder	No Image	N/A	U	U	L	No Action		71471	320365.7	5947625
D_S0622	Other	High TSS Conductive readings, partial visual - No Positive ID	Uncertain	ROV	P	U	U	L	Review if reinvestigated		71539	320924.2	5945644

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
D-E_M15198	Other	T55 hit no visual on target, Images of site taken with camera and sonar. No ID	Not seen	ROV	M	U	U	L	No Action		73052	320292.5	5949392
D-E_M15228	Boulder	40cm x 40cm x 40cm	Boulder	ROV	M	N	N	M	No Action		73056	320629.3	5948122
D-E_M15237	Debris (Metallic)	Possible metal bar, appears to be twisted at end. 2m long approx	Metal debris	ROV	M	P/M	U	M	Size of anomaly suggests more buried? Review if reinvestigated or recovered		73057	320740.6	5948050
D-E_M15244	Debris (Metallic)	Possible capstan	Capstan (Possibly)	ROV	H	A/P	M	M	If recovered, retain for arch assessment	EON_10164	73058	320601.4	5947987
D-E_M15336	Boulder	80 x 40 x 40cm	Boulder	ROV	M	N	N	M	No Action		73051	321318.6	5944974
E_M6149	Debris (Metallic)	Large Anchor Approx size 1900mm in Length x 1000mm wide point to point	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10165	71614	320829.9	5948746
E_M6337	Debris (Metallic)	Metallic Debris noted similar to metal box shape approx size 1340mm x 1340 (Gemini sonar Measurements)	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		71630	321000.4	5947918

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E_M6348_B1	Debris (Metallic)	Diver found piece of scrap steel - identified as half of a flange face. Approx L0.6m x W0.4m x T0.02m	Metal debris	Diver	M	P/M	L	M	No Action - archaeological value expected to be Low		71643	320865.6	5947633
E_M7026	Debris (Metallic)	Bad Visibility. Metallic object possibly cable debris.	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		71704	321545.6	5945121
E_S0682	Boulder	Approx Size of Boulder 850mm x 620mm x 500mm	Boulder	ROV	M	N	N	M	No Action		71629	321026.8	5947949
E_S0684	Boulder	Approx Size of Boulder 300mm x 200mm x 100mm	Boulder	ROV	M	N	N	M	No Action		71630	320998.2	5947920
E_S0700	Suspect UXO	Target Suspect German GC Mine	UXO	ROV	M	A	L/M	H	UXO requirements take precedence	EON_10166	71666	321338.7	5946833
EC_M12834	UXO Removal	Anchor – 2m x 2m x 250mm	Anchor	Diver	P	A	M	L	Anchor unclear in image - If recovered, retain for arch assessment	EON_10167	72500	311571.8	5947878
EC_M12844	UXO Removal	Medium Rock 0.5 x 0.5 x 0.3m /Large Rock / Tyre	Boulder	Diver	P	N	N	L	Boulder not clearly identifiable from image - review if reinvestigated		72503	311615.9	5947823

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
EC_M12847	UXO Investigation	Not found	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72505	311675.3	5947805
EC_M12848	UXO Removal	Steel Rod	Metal debris	Diver	H	P/M	L	M	No Action - archaeological value expected to be Low		72504	311686.7	5947860
EC_M12859	UXO Investigation	Not found	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72506	311808.7	5947808
EC_M12871	UXO Removal	Large Rock Cluster	Boulder	No Image	N/A	U	U	L	Review if reinvestigated		72509	311881.3	5947835
EC_M12875	Debris (Metallic)	Car tyre approx 600x 160mm	Tyre	No Image	N/A	M	N	L	No Action		72508	311891.7	5947820
EC_M12919	Debris (Metallic)	Car tyre approx 560x 180mm	Tyre	No Image	N/A	M	N	L	No Action		72513	312071.5	5947780
EC_M12935		No metallic targets found. Visual on ring shaped object around rock, diameter 30cm thickness 3cm approx.	Not seen	ROV	P	U	U	L	Review if reinvestigated		72514	312140.9	5947847
EC_M12987 _B1	Boulder	Approx. 1.0m x l.5m x O.7m. As previously found. No Other Targets	Boulder	ROV	M	N	N	M	No Action		72516	312452.7	5947791
EC_M12989	Debris (Metallic)	Fishing pot with loose rope floating, ROV unable to get close due to risk of entanglement	Fishing Pot	ROV	P	M	N	L	No Action		72517	312462.3	5947806

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
EC_M13000	Other	TSS hit no visual on seabed, NO ID	Not seen	ROV	P	U	U	L	Review if reinvestigated		72518	312592.8	5947786
EC_M13046	Debris (Metallic)	TSS Contact - No Visual due to poor vis. No ID	Not seen	ROV	P	U	U	L	Review if reinvestigated		72519	312912.5	5947810
EC_M13071_B1	Debris (Metallic)	Diver Located 0.9m dia. flat circular steel section with a rim. No additional targets found.	Metal debris	Diver	P	P/M	L	M	No Action - archaeological value expected to be Low		72520	313105.1	5947805
EC_M13122	Debris (Metallic)	Metal debris -Possibly metal bar – TSS Hit	Metal debris	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72522	313430.7	5947833
EC_M13155	Debris (Metallic)	Possible anchor approximately 2 metres in length. Visual large shackle and chain links	Anchor (Possibly)	ROV	M	A/P	U	L	Review if reinvestigated or recovered	EON_10168	72523	313719	5947808
EC_M13200		No TSS, visual or sonar targets found	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72525	314096.6	5947883
EC_M13213	Debris (Metallic)	Large Rock with fishing pot trapped underneath rock 1000mm x 520mm x 600mm	Boulder (Fishing Pot)	ROV	M	N/M	N	M	No Action		72527	314217	5947953
EC_M13223	Debris (Metallic)	500mm Bar with T on one end. Possibly a shovel handle	Metal debris	No Image	N/A	P/M	U	L	No Action		72528	314325	5947911

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
EC_M13256	Debris (Metallic)	Possible Pipe - W 1.0 cm x L 70cm then becomes buried. BacTec Rep called to confirm non-EOD	Pipe	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72530	314487.9	5947962
EC_M13270	Debris (Metallic)	Metal rope throughout target area, extends outside of target area both to the north and south,	Metal debris	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72531	314554.1	5948049
EC_M13271	Debris (Metallic)	Wire· rope on sea bed throughout target area, leading both north and south	Rope	No Image	N/A	P/M	L	L	No Action - archaeological value expected to be Low		72532	314556.4	5948022
EC_M13324		No TSS hits, Gemini image of small stone.	Not seen	ROV	M	U	U	L	Review if reinvestigated		72534	314997.4	5948094
EC_M13405	Other	TSS hit no visual of target	Not seen	ROV	P	U	U	L	Review if reinvestigated		72536	315545.9	5948252
EC_M13411	Debris (Metallic)	V' shaped object diameter 10cm 'leg lengths' 50 cm & 70cm	Metal debris	ROV	M	P/M	U	L	Object unclear in image - review if reinvestigated or recovered		72537	315576.5	5948256
EC_M13460		Nothing found on sonar, poor visibility	Not seen	ROV	P	U	U	L	Review if reinvestigated		72539	315794.5	5948332

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
EC_M13467 _B1	Other	Contact buried - diver excavated and exposed apparent concrete with re-bar. Contact area approx. 1m x 1m. Exposed area 0.5mx 0.2m	Concrete	Diver	P	P/M	L	M	Object unclear in image - but no action - archaeological value expected to be Low		72540	315815.2	5948346
EC_M13491 _B1	Debris (Metallic)	Diver located area of positive DX200 contact. Excavated 400mm and located piece of scrap steel, nothing further found.	Metal debris	Diver	P	P/M	U	L	Object unclear in image - review if reinvestigated or recovered		72543	315927.6	5948411
EC_M13506		No TSS, sonar or visual targets found	Not seen	No Image	N/A	P/M	U	L	Review if reinvestigated		72546	315998.4	5948375
EC_M13559	Boulder	Approximate size 1000mmL x 600mmW	Boulder	ROV	P	N	N	L	Boulder not clearly identifiable from image - review if reinvestigated		72549	316240.5	5948454
EC_M13589	Debris (Metallic)	Magnetic hit 200mm wide x 1100mm long. 1/4" plate found under the surface, sample of scale recovered.	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		72551	316357.3	5948493
EC_M13600 _B1	Debris (Metallic)	Lobster pot wedged under rock. Rock 700(H) x 1000(W) x 700(L), Lobster pot 500(H) x 500(W) x 700(L)	Fishing Pot	Diver	P	M	N	L	No Action		72552	316403.8	5948515

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
EC_M13633	Boulder	Possible boulder Approximate size 750(L) x 750(W)	Boulder	ROV	P	N	N	L	Boulder not clearly identifiable from image - review if reinvestigated		72553	316551	5948493
EC_M13796	Debris (Metallic)	Probable small Metallic *debris*, possible visual on target object in area of TSS hit. No definition on video due to vis. Size of target 100x300x200mm	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered		72555	317213.7	5948691
EC_M13876_B1	Suspect UXO	Possible shell, length of taper 400-500mm, length OA 850mm diameter 250mm	UXO	Diver	P	A	L	L	UXO requirements take precedence	EON_10169	72558	317519.6	5948783
EC_M13927	Debris (Metallic)	TSS hit unidentified metallic object, possibly an anchor.	Anchor (Possibly)	ROV	P	A/P	U	L	Anchor unclear in image - If recovered, retain for arch assessment	EON_10170	72559	317814.6	5948890
EC_M13953_B2	Other	TSS hit nothing seen on surface of seabed	Not seen	ROV	M	U	U	L	Review if reinvestigated		72560	317932.1	5948884
EC_M14030	Boulder	Boulder dimensions L80 x W70 x H50 cm. Boulder 2 dimensions L50 x W50 x H20 cm. Target 3 TSS Hit no visual suspect buried object (geology low, target high)	Boulder	ROV	M	N	N	M	No Action		72562	318272.2	5948942

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
EC_M16174	Boulder	Area of magnetic cobbles, area covered 0.5m x 0.5	Boulder	No Image	N/A	U	U	L	Review if reinvestigated		73201	311151.8	5947878
EC_M16181	Debris (Metallic)	Large anchor, intact 2m x 2m	Anchor	Diver	P	A	M	L	Anchor unclear in image - If recovered, retain for arch assessment	EON_10171	73204	311188	5947908
EC_S2019	Boulder	Approx size 850(W) x 800(l) x 850(H)mm/Second Boulder 810(W) x 800(L)x 800(H)	Boulder	ROV	P	N	N	L	No Action		72557	317442.5	5948743
E-F_M12282	Debris (Metallic)	T-shaped pipework 1.5m Flange x 2m Web.	Pipe	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72623	321085.2	5948962
E-F_M12288	Debris (Metallic)	TSS Contact on Metal Pipe Debris as previously found	Pipe	ROV	P	P/M	L	L	No Action - archaeological value expected to be Low		72622	320979.1	5948811
E-F_M15517	Debris (Metallic)	Fishing Gear and Lines	Fishing Gear	ROV	M	M	N	M	No Action		73063	321637.3	5946472

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
E-F_M15527	Debris (Metallic)	Wire rope, nylon rope, debris and metallic debris located - Potentially fishing gear	Fishing Gear (Possibly)	ROV	M	M	N	M	No Action		73062	321585.7	5946331
E-F_M15529	Debris (Metallic)	TSS Contact on hollow pyramid shaped metal debris approx. 0.5mx 0.2mx 0.2m	Metal debris	ROV	M	P/M	M/L	L	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10172	73061	321540.7	5946314
F_M07228	Other	Nothing found - No ID	Not seen	ROV	P	U	U	L	Review if reinvestigated		71806	321210.6	5949784
F_M07605	Debris (Metallic)	TSS Contact - Metal Debris	Metal debris	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		71841	321276.8	5948469
F_M07606	Other	Nothing found - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		71843	321357.4	5948468
F_M07617	Other	Nothing found - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		71844	321383.3	5948455
F_M07671	Other	Nothing found - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		71857	321484.1	5948028

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
F_M07779	Debris (Metallic)	Initial TSS Contact: Diver investigation revealed cylindrical object 400mm dia. X 350mm long. Slight taper along main body. Ring of bolts on the top. Appears to be a cable reel.	Cable Reel	ROV/ Diver	M	P/M	L	M	No Action - archaeological value expected to be Low		71861	321433.1	5947858
F_M07814	Debris (Metallic)	Metallic pipe, partially buried. Iron exposed 50-100mm dia.	Pipe	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		71866	321463.4	5947749
F_M07944	Debris (Metallic)	Medium T55 Contact, possible piece of wooden beam with bolts.	Wooden Beam	ROV	P	A	M	L	Timber not clear in image - If recovered, retain for arch assessment	EON_1 0173	71876	321628.2	5947487
F_M08092	Suspect UXO	TSS Contact - Cylindrical *projectile* confirmed as UXO by Bactec. L0.5m x W0.15m sitting *proud* of seabed.	UXO	ROV	H	A	L	H	UXO requirements take precedence	EON_1 0174	71889	321564.7	5947217
F_M08182	Boulder	Boulder - Approx. 0.3m x 0.3m x 0.2m. Length of Pipe located Outside Target Area	Boulder	ROV	M	N	N	M	No Action		71899	321688.2	5946902

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
F_M08191	Debris (Metallic)	Diver located 2 sections of heavily corroded pipe. l.5m x 0.1m dia. 0.4m x 0.1m with flange	Pipe	Diver	H	P/M	L	M	No Action - archaeological value expected to be Low		71901	321776.9	5946873
F_M08198	Debris (Metallic)	Small amount of chain	Chain	ROV	P	P/M	L	L	If recovered, retain for arch assessment	EON_10175	71903	321761.5	5946845
F_S0781	Debris (Metallic)	Large Anchor L3.8m x W1.9m found at the edge of target area	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10176	71838	321388.3	5948646
F_S0794	Debris (Metallic)	Anchor wire all around target area. Same wire as found and visually followed from F M07685.	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10177	71858	321522.7	5948012
F_S0828	Other	Nothing found - No ID	Not seen	No Image	N/A	U	U	L	No Action		71902	321817.1	5946827
F-G_M12421	Debris (Metallic)	Aircraft propeller, one blade missing, one partially buried, one fully exposed. Blade approx 1m long - gearing attached.	Aircraft Propeller	ROV	H/M	A	H	M	Implications of PMRA - TEZ required	TBC	72624	321383.7	5949185

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
F-G_M12456	Debris (Metallic)	Spherical metallic object - 700mm diameter. Corrosion Hole. 50% Buried.	Metal debris	ROV	M	P/M	U	L	Identity uncertain - Review if reinvestigated or recovered		72632	321630.7	5948081
F-G_M12508	Debris (Metallic)	Large coil of possibly rope on sea bed. Low TSS contact detected.	Rope	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72628	322159.3	5946469
F-G_S2797	Boulder	Approx. L0.6mx W0.4m x H0.3m. No TS5Contacts	Boulder	ROV	M	N	N	M	No Action		73064	321685.1	5948128
G_M08678	Cable	Metallic Cable	Cable	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72019	321851.9	5949353
G_M08735	Debris (Metallic)	TSS hit, Possible deck plate	Deck Plate	ROV	M	A/P	U	L	Deck plate not clear in image - If recovered, retain for arch assessment	EON_10178	72030	321753.6	5949130
G_M08844	Boulder	L1.2 x W0.4 x H0.4m No TSS hits in target area	Boulder	ROV	M	N	N	M	No Action		72044	321900.4	5948565
G_M08845		TSS hit, no visual, no ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72046	321920.7	5948560
G_M08847	Debris (Metallic)	Anchor L2m x W1m	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10179	72043	321878.6	5948555

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
G_M08862	Other	No TSS Hits - Nothing Found - No Targets - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72045	321927.2	5948529
G_M08951	Boulder	Approx. H0.3m>< L0.6mx W0.4m	Boulder	ROV	M	N	N	M	No Action		72060	321970.7	5948337
G_M09043	Other	Nothing Found - No Target - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72084	322222.2	5947809
G_M09084	Debris (Metallic)	TSS Contact - Visual on piece of concrete. No visual on anything else on seabed.	Concrete	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72089	322078.5	5947695
G_M09109	Debris (Metallic)	Low TSS Contact - No Visual - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72108	322183	5947330
G_M09111	Debris (Metallic)	TSS Contact - No Visual - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72109	322235.4	5947328
G_M09212	Other	Nothing of significance found	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72130	322302.5	5946749
G_M09276	Other	Diver found a Low magnetic hit – L0.5mx W0.4m. Nothing significant found on seabed	Not seen	Diver	M	U	U	L	Review if reinvestigated		72133	322263.8	5946627
G_M09284	Other	Diver found a Low magneti9 hit – L0.6mx W0.3m. Nothing significant found on seabed	Not seen	Diver	M	U	U	L	Review if reinvestigated		72132	322269.5	5946614

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
G_M09285	Other	Diver found a Low magnetic hit - L2m x W2m. Nothing significant found on seabed	Not seen	Diver	M	U	U	L	Review if reinvestigated		72134	322250.9	5946613
G_M09318	Debris (Metallic)	TSS Contact - Possibly a homemade anchor approx. 2m long	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10180	72139	322393.9	5946524
G_M09324	Debris (Metallic)	TSS contact - suspected to be a length of pipe approx. 2m long	Pipe	ROV	P	P/M	L	L	Pipe not seen - review if reinvestigated or recovered		72140	322399.5	5946502
G_M09326	Debris (Metallic)	Metal Frame - L1m x W 1m x H1.2m	Metal debris	ROV	M	P/M	M/L	L	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10181	72141	322413.7	5946495
G_M09356	Debris (Metallic)	Anchor found approx. L1.0m x W0.4m	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10182	72151	322531.9	5946141
G_S0912	Boulder	Boulder found - Fix Taken	Boulder	ROV	M	N	N	M	No Action		72137	322430.5	5946660
G-H_M12601_B1	Debris (Metallic)	Metallic debris, triangular base - L 1m x W1m x H0.5m	Metal debris	Diver	M	P/M	M/L	L	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10183	72626	322414.7	5947225
G-H_M12687	Debris (Metallic)	Anchor found - approx. L2.0m x W0.5m	Anchor	ROV	M	A	M	M	If recovered, retain for arch assessment	EON_10184	72627	322643.7	5946219

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
G-H_S1542	Boulder	Approx. H0.5m x L1.0m x W0.5m	Boulder	ROV	M	N	N	M	No Action		72620	322619.5	5946203
H_M09592	Boulder	Approx. L1.0m x W0.5m x H0.4m	Boulder	ROV	H	N	N	M	No Action		72203	322140.3	5949981
H_M09756_B1	Other	Diver located an area of seabed with a magnetic signature approximately 1m x 1m. Nothing visual on seabed or after and excavation of approximately 250mm	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72229	322382.4	5949063
H_M09790		Nothing found in target area	Not seen	ROV	M	U	U	L	Review if reinvestigated		72232	322363.1	5948950
H_M09977	Other	TSS Contact ~No Visual - No ID. TSS Contact - Metal Debris. Extends for 2-3m to outside of target area	Metal debris	ROV	H	P/M	M/L	M	Image shows metal debris parially buried? Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10185	72253	322596.7	5948284
H_M10041	Other	Nothing Found - No Target - No ID	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72259	322779.9	5947717
H_M10203	Boulder	Approx. L0.7mx W0.5mx H0.7m (adjacent: TSS Contact on Anchor L1.5mx W1.0m)	Boulder	ROV	M	N/A	M	M	If anchor recovered, retain for arch assessment	EON_10186	72270	322815.3	5946636

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
H-I_M12743	Other	TSS Contact - No Visual - No ID Section of possible plastic pipe also found L1-1.5m	Not seen	ROV	H	U	U	L	Review once revisited		72630	322704.8	5948495
H-I_M15954_B1	Debris (Metallic)	Diver located chain links in four main locations throughout target location. In one location the chain was attached to a metal object 350mm x 400mm (possible anchor/clump weight)	Chain	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low	EON_10187	73088	322476.9	5949998
H-I_M16000	Debris (Metallic)	TSS Contact - Possibly a girder approx. l.5-2m long	Metal debris	ROV	M	P/M	M/L	M	Possibly wreck/aircraft - if recovered, retain for arch assessment	EON_10188	73089	322924.7	5948195
H-I_M16003	Debris (Metallic)	TSS Contact - Slightly tapered bar/metallic object L1.0m then buried.	Metal debris	ROV	P	P/M	U	L	Object unclear in image - review if reinvestigated or recovered		73087	322761.3	5948135
H-I_S2917	Other	Nothing found - No Target - No ID	Not seen	No Image	N/A	U	U	L	No Action		73085	322947.5	5947157
I_M10500_B1		No DX200 hits received by the diver during survey. Nothing found on location	Not seen	No Image	N/A	U	U	L	Review if reinvestigated		72317	322909.5	5948916
I_M10647	Other	Nothing Found - No Target - No ID	Not seen	ROV	M	U	U	L	Review if reinvestigated		72332	323177.6	5948249

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confidence	Actions	ORPAD Report ID	WA ID	Easting	Northing
I_M10903	Debris (Metallic)	Metal debris located - possibly coil of cable or pipe	Metal debris	ROV	P	P/M	U	L	Review if reinvestigated or recovered.		72360	323396.7	5947145
I_M10995	Debris (Metallic)	Metal pipe approx L2m x 0.1m	Pipe	ROV	M	P/M	L	M	No Action - archaeological value expected to be Low		72373	323479.5	5946930
I_S1119	Debris (Metallic)	TSS Contact on Metal Frame Structure - Possibly Fishing Gear	Fishing Gear (Possibly)	ROV	P	M	N	L	No Action		72365	323450.8	5947051
I-J_S2977	Boulder	Approx. L0.15m x W0.15m x H0.15m	Boulder	ROV	P	N	N	L	Boulder not clearly identifiable from image - review if reinvestigated		73090	323233	5948312
J_M11108_B1	Boulder	Diver Located 2 football size rocks giving out a magnetic signal. Nothing else found on location	Boulder	ROV	M	N	N	M	No action		72418	323464.8	5949428
J_M11160_B1		Diver found nothing of significance and found no significant readings with the DX200	Not seen	Diver	M	U	U	L	Review if reinvestigated		72423	323536.4	5949299

ID	Reported Finds	Offshore Comments	Object	Investigation	Data Qual	Arch Asses	Arch Imp	Confi dence	Actions	ORPA D Report ID	WA ID	Easting	Northing
J_M11198	Debris (Metallic)	Anchor / Metal Debris 2m x 1.5m	Anchor	ROV	M	A	M	L	Anchor not clear in image - If recovered, retain for arch assessment	EON_10189	72425	323454.8	5949222
J_S1147	Boulder	Approx. W1.0m x H0.6m x L1.5m	Boulder	ROV	M	N	N	M	No action		72424	323359.4	5949186

APPENDIX II: GEOPHYSICAL ASSESSMENT OF REVEIEWED TARGETS

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
B_M02923	Boulder	70990	Debris	319933	5944887	A1	Angular dark reflector with large shadow with an associated scour in an area of coarse sediment and boulder fields. Associated with a magnetic anomaly, possible ferrous debris. Located approx. 25m E of 70991 and possibly related.	1.4	1.8	0.8	101
B_S0320	Boulder	70991	Debris	319908	5944883	A1	Angular dark reflector with large shadow with an associated scour in an area of coarse sediment and boulder fields. Associated with a magnetic anomaly, possible ferrous debris. Located approx. 25m W of 70990 and possibly related.	1.1	1.4	0.4	64
C_M04207_A 1	Chain	71286	Magnetic	320375	5945779	A1	Very large magnetic anomaly identified on numerous survey lines, but with no associated sidescan sonar contact. Possibly represents a significant amount of buried ferrous debris or a buried wreck at this location. Located close to 61310, another large magnetic anomaly with very little evident on the seabed that could have caused it.	-	-	-	1379
C_M04214	Chain	71287	Debris	320366	5945767	A1	Curvilinear dark reflector without a shadow, associated with a large magnetic anomaly identified on numerous survey lines. Possible piece of ferrous debris, though the identified object is unlikely to have caused such a large magnetic anomaly. Possibly indicates the presence of a significant amount of buried ferrous debris in the vicinity. Located close to large magnetic anomaly 61309.	10.6	0.9	0	170
C_S0524	Not seen	71341	Debris	320574	5944108	A1	Short, linear dark reflector with shadow, associated with a large magnetic anomaly. Possible piece of ferrous debris, though the identified object is unlikely to have caused such a large magnetic anomaly. Possibly indicates the presence of a significant amount of buried ferrous debris in the vicinity.	3	0.3	0.1	239
C-D_M11940	Pole	72621	Dark reflector	319871	5948556	A1	Angled linear object with height, associated with a large magnetic anomaly identified on several lines. Probable natural or ferrous debris.	4.2	0.6	0.2	602.9

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
D_M04828	Boulder	71425	Debris	320159	5948872	A1	Area of irregular dark and bright reflectors, located within an area of coarse seabed sediment. Associated with a medium magnetic anomaly identified on more than one survey line. Located close to possible piece of debris 61428. Possible debris field containing some ferrous material.	16.5	6.6	0	34
D_S0550	Boulder	71426	Debris	320167	5948856	A1	Elongate dark reflector with shadow, associated with a medium magnetic anomaly. Located close to possible debris field 61428. Possible piece of ferrous debris.	3.4	0.4	0.2	49
D_S0573	Boulder	71471	Debris	320365	5947628	A1	Large dark reflector with large shadow, surrounded by a number of smaller, similar dark reflectors. Associated with a medium magnetic anomaly, possible ferrous debris.	2.8	1.5	0.5	59
E_M6337	Metal debris	71630	Debris	319357.5	5948949	A1	Bright reflector with a series of small, parallel dark reflectors running across it and a distinct shadow. Located in an area of coarse seabed sediment and associated with a large magnetic anomaly. Probable piece of ferrous debris.	1.8	1.7	0.3	246
E_S0684	Boulder	71630	Debris	320999	5947917	A1	Bright reflector with a series of small, parallel dark reflectors running across it and a distinct shadow. Located in an area of coarse seabed sediment and associated with a large magnetic anomaly. Probable piece of ferrous debris.	1.8	1.7	0.3	246
EC_M13324	Not seen	72534	Magnetic	314999	5948095	A1	Very large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	821.2
F_M08182	Boulder	71899	Magnetic	321687	5946899	A1	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	917
F_S0781	Anchor	71838	Debris	321390	5948646	A1	Two short, linear dark reflectors with small shadows lying at an angle to each other within an area of coarse seabed sediment. Associated with a large magnetic anomaly. Probable ferrous debris. It is unlikely that the identified objects solely account for the large magnetic anomaly, suggesting further buried ferrous debris is located within the vicinity.	4.6	0.4	0.2	530

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
F-G_M12421	Aircraft Propeller	72624	Magnetic	321383.5	5949185	A1	Very large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	1277.1
H_M10203	Boulder	72270	Debris	322816	5946638	A1	Irregular dark reflector with shadow located within an area of coarse seabed sediment. Associated with a large magnetic anomaly. Possible piece of ferrous debris. The identified object is unlikely to have caused the large magnetic anomaly observed, so the potential remains for further buried ferrous debris to be present within the immediate vicinity.	4.7	0.6	0.3	563
I_M10903	Metal debris	72360	Magnetic	323400	5947147	A1	Very large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large scatter of buried ferrous debris, or the buried remains of a ferrous structure. Located close to similar anomaly 62670 and possibly related.	-	-	-	2524
I_S1119	Fishing Gear (Possibly)	72365	Debris	323451	5947048	A1	Small area of distinct, irregular dark reflectors with shadows associated with a large magnetic anomaly. Possible piece of ferrous debris.	3.1	3.5	0.2	238
71512	Boulder	71512	Debris	320619	5946581	A2	Small possible debris field comprising two short curvilinear dark reflectors and one rounded dark reflector with a large shadow. No associated magnetic anomaly, possible non-ferrous debris.	5.6	4	0	-
71697	Not seen	71697	Rope/Chain	321561	5945247	A2	Curvilinear dark reflector with small shadow but no associated magnetic anomaly, located in an area of coarse seabed sediment. Possible length of rope or chain.	18	0.6	0.1	-
71859	Anchor	71859	Rope/Chain	321582.8	5948018	A2	Curvilinear dark reflector with small shadow but no associated magnetic anomaly, identified in an area of coarse seabed sediment. Possible length of rope or chain.	33.9	0.4	0.2	-
71868	Not seen	71868	Dark reflector	321666.3	5947715	A2	Irregular, elongate dark reflector with shadows, or series of adjacent dark reflectors. Located in an area of coarse seabed sediment, no associated magnetic anomaly. Could be natural or a piece of non-ferrous debris.	5	1.3	0.2	-

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
72078	Not seen	72078	Dark reflector	322128	5947969	A2	Curvilinear dark reflector without a shadow or associated magnetic anomaly, located in an area of coarse seabed sediment. Could be noise within the data, or a piece of non-ferrous debris.	5.6	0.5	0	-
72135	Not seen	72135	Seafloor disturbance	322256	5946559	A2	Area of seabed scars without an associated magnetic anomaly. Could indicate buried ferrous debris, or be the result of geotechnical work undertaken at nearby location BH12.	43.6	14.5	0	-
72150	Boulder	72150	Seafloor disturbance	322599	5946123	A2	Linear alignment of a number of dark reflectors with shadows, located in an area of coarse seabed sediment. No associated magnetic anomaly. Could be a natural seabed feature, or represent an area of non-ferrous debris.	41.9	2.8	0	-
73045	Not seen	73045	Rope/Chain	321107	5945562	A2	Long curvilinear rope or chain debris.	8.6	0.1	0	-
73083	Not seen	73083	Rope/Chain	322272	5947780	A2	Possible rope or chain attached to object on seabed. Located in a sandy area with some boulders.	27.6	0.6	0.3	-
70018_B1	Not seen	70018	Dark reflector	318974	5947284	A2	Straight linear dark reflector with variable reflectivity values along its length, this may represent a section of rope or chain but its form is quite indistinct and it may be a regular looking natural feature. Located in an area of flat seabed within a densely clustered spread of abundant tiny and frequent small-medium sized rocks.	13.5	1.3	0	-
A_M00011	Uncertain	70046	Magnetic	318379	5949166	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	93.6
A_M00027	Not seen	70050	Magnetic	318389	5949117	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	113.5
A_M00151	Boulder	70061	Magnetic	318537	5948931	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	310.8
A_M00253	Anchor	70111	Magnetic	318587	5948513	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	211.2
A_M00484	Pipe	70244	Magnetic	318839	5947891	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	118.3
A_M00606	Anchor	70210	Magnetic	318840	5947347	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	246.8

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
A_M00688	Metal debris	70189	Magnetic	318890	5947112	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	401.2
A_M01026_B1	Metal debris	70334	Magnetic	319284	5946086	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	356.9
A_M01032	Not seen	70335	Magnetic	319247	5946075	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	140.5
A_M01037	Metal debris	70336	Magnetic	319272	5946052	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	609.2
A_M01094	Pipe	70354	Magnetic	319138	5945916	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	118
A_M01313	Metal debris	70437	Magnetic	319509	5944970	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	370.9
A_M01340_B1	Pole	70442	Magnetic	319273	5944926	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	343.1
A_M01392	Not seen	70448	Magnetic	319273	5944857	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	1148.2
A_M01396	Not seen	70450	Magnetic	319297	5944845	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	124.6
A_M01426_B1	Metal debris	70457	Magnetic	319356	5944796	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	165.3
A_M01478_B1	Metal debris	70473	Magnetic	319469	5944721	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	441.9
A_M01564_B1	Not seen	70528	Magnetic	319601	5944364	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	150
A_M01615	Pipe	70541	Magnetic	319607	5944263	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	274.7
A_M01658_B1	Pipe	70549	Magnetic	319544	5944183	A2	Strong magnetic anomaly representing a very large amount of ferrous material.	-	-	-	375.5

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
A_M01668_B1	Metal debris	70554	Magnetic	319599	5944147	A2	Moderate strength magnetic anomaly representing a larger ferrous object.	-	-	-	159.7
A-B_M11412	Pipe	72644	Magnetic	318783	5948848	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	110.6
A-B_M11420_B1	Metal debris	72643	Magnetic	318708.8	5948824	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	196.1
A-B_M11433	Metal debris	72645	Magnetic	318903	5948763	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	210.7
A-B_M14208	Not seen	73005	Magnetic	318826	5948809	A2	Distinct medium sized monopole, forms part of a large curvilinear anomaly but no associated sidescan sonar contact or seabed feature visible on the bathymetry data.	-	-	-	73
A-B_M14211	Not seen	73008	Magnetic	318805	5948793	A2	Medium sized monopole with weaker dipole on adjacent line, possibly part of larger curvilinear anomaly but no associated sidescan sonar contact or seabed feature visible on the bathymetry data.	-	-	-	51
A-B_M14264	Fishing Pot	73024	Magnetic	319782	5944071	A2	Medium sized asymmetric dipole seen in 2 lines. Could be natural or piece of buried ferrous material	-	-	-	51
B_M02006_B1	Metal debris	70674	Magnetic	319191	5948255	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	207
B_M02053	Boulder/ Fishing Gear	70690	Magnetic	319205	5948057	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	110
B_M02128	Pipe	70724	Magnetic	319465	5947772	A2	Medium magnetic anomaly identified on more than one survey line, though without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	85

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
B_M02177	Anchor	70730	Magnetic	319354	5947662	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	161
B_M02181	Pole	70734	Magnetic	319259	5947646	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	767
B_M02264_B 1	Metal debris	70776	Magnetic	319391	5947306	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	218
B_M02523	Not seen	70850	Magnetic	319576	5946466	A2	Medium magnetic anomaly identified on more than one survey line, though without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	87
B_M02993	Not seen	70998	Magnetic	320056	5944780	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	143
B_M03072	Chain	71007	Magnetic	319973	5944666	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	153
B_M03084	Metal debris	71012	Magnetic	320084	5944652	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	269
B_M03112_B 1	Metal debris	71060	Magnetic	320080	5944275	A2	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.	-	-	-	236
B_M14291	Not seen	73023	Magnetic	319159	5949125	A2	Medium sized dipole anomaly with no associated sidescan sonar target and thus may be possibly buried ferrous material	-	-	-	61
B_M14336	Not seen	73007	Magnetic	318943	5948774	A2	Large distinct monopole, seabed feature visible in bathy though this is an isolated anomaly and not part of a broader set of anomalies. Could be natural or a small piece of buried ferrous debris.	-	-	-	112
B_M14505	Not seen	73026	Magnetic	319970	5944558	A2	Medium sized asymmetric dipole seen on one line. Could be natural or piece of buried ferrous material	-	-	-	50

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
B_S0358	Anchor	71085	Debris	320106	5944096	A2	Elongate dark reflector with shadow and associated medium magnetic anomaly. Probable piece of ferrous debris. Located just to the south of an area of disturbance caused by geotechnical operations at BH7, and could be recent related debris.	2.9	0.5	1.5	83
B-C_M11740_B1	Metal debris	72641	Magnetic	319328	5948829	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	102.6
B-C_M14601	Boulder	73021	Magnetic	319446	5948696	A2	Medium sized dipole identified on two survey lines. Could be possibly buried ferrous material as no associated sidescan sonar anomaly visible.	-	-	-	53
B-C_M14611	Pipe	73009	Magnetic	319288	5948643	A2	Very large irregular shaped dipole. Possibly buried ferrous material.	-	-	-	279
B-C_M14613	Not seen	73018	Magnetic	319377	5948639	A2	Medium sized dipole with a weaker signal on adjacent survey line. Could be buried ferrous material.	-	-	-	62
B-C_M14633	Metal debris	73013	Magnetic	319310	5948586	A2	Medium sized positive dipole identified on a single line. Possibly buried ferrous material.	-	-	-	60
B-C_M14696	Not seen	73027	Magnetic	320062	5946188	A2	Medium sized asymmetric dipole, which is also slightly present on adjacent lines. Could be natural or piece of buried ferrous material	-	-	-	79
C_71253	Not seen	71253	Rope/Chain	320054	5947187	A2	Curvilinear dark reflector with small shadow but no associated magnetic anomaly. Possible length of rope or chain. Small dark reflectors with shadows identified along its length, could also be fishing gear.	44	0.3	0.1	-
C_71303	Boulder	71303	Bright	320446	5945377	A2	Curved bright reflector without an associated magnetic anomaly. Could be natural, a seabed scar, or a piece of non-ferrous debris.	12.8	1.9	0	-
C_M03490	Chain	71210	Magnetic	319721	5948836	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	88
C_M03640	Ladder	71230	Magnetic	319772	5948373	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	264

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
C_M03641_B 1	Not seen	71232	Magnetic	319885	5948373	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	341
C_M03976_B 1	Winch	71263	Magnetic	320083	5946643	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	177
C_M04057	Metal debris	71269	Magnetic	320276	5946449	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	173
C_M04178_B 1	Metal debris	71285	Magnetic	320440	5945854	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	88
C_M04230_B 1	Winch	71289	Magnetic	320256	5945704	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	106
C_M04519_B 1	Not seen	71336	Magnetic	320659	5944210	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	127
C_M04524_B 1	Metal debris	71335	Magnetic	320619	5944199	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	193
C_M04591	Metal debris	71344	Magnetic	320611	5944082	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	194
C_M14867	Not seen	73028	Magnetic	320105	5946066	A2	Medium sized negative monopole that is visible on adjacent survey line. Could be natural or piece of buried ferrous material	-	-	-	62
C_S0378	Boulder	71212	Debris	319753	5948825	A2	Elongate dark reflector with large shadow, associated with a medium magnetic anomaly. Possible piece of ferrous debris.	2.6	0.4	0.3	32
C_S0398_B1	Boulder	71234	Dark reflector	319814	5948147	A2	Irregular dark reflector with shadow, located in an area of coarse seabed sediment. Possibly associated with a small magnetic anomaly. Could be a natural feature or a small piece of ferrous debris.	3.3	0.4	0.5	10

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C_S0496	Boulder	71307	Dark reflector	320396	5945130	A2	Dark reflector with large shadow but no associated magnetic anomaly. Could be natural or a piece of non-ferrous debris.	3.9	0.7	0.5	-
C-D_M14995	Not seen	73036	Magnetic	320038	5948493	A2	Distinct dipole. Medium magnetic anomaly without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	88
C-D_M15007_B1	Metal debris	73038	Magnetic	319938	5948324	A2	Distinct dipole, identified on more than one survey line.	-	-	-	57
C-D_M15016	Not seen	73039	Magnetic	320091	5948209	A2	Monopole anomaly. Medium magnetic anomaly without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	112
C-D_M15024	Not seen	73040	Magnetic	320106	5948183	A2	Distinct dipole of considerable strength with no associated sidescan sonar contact. Could indicate buried debris.	-	-	-	716
C-D_M15094	Anchor	73046	Magnetic	320796	5944303	A2	Very large and distinct magnetic dipole which could be buried ferrous material.	-	-	-	530
D_M04694	Fishing Pot	71401	Magnetic	320068	5949482	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	83
D_M04730	Not seen	71404	Magnetic	320159	5949379	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	106
D_M04739	Boulder	71403	Magnetic	320147	5949365	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	129
D_M04814	Chain	71408	Magnetic	320109	5949199	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	141
D_M05204	Capstan	71482	Magnetic	320557	5947524	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	284

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
D_M05356	Rope	71504	Magnetic	320753	5946949	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris. Amplitude probably overestimated due to noisy data.	-	-	-	517
D_M05455	Metal debris	71522	Magnetic	320749	5946463	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	275
D_M05853	Metal debris	71570	Magnetic	321141	5944669	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	286
D_S0563	Boulder	71452	Debris	320247	5948132	A2	Distinct dark reflector with shadow, possibly associated with a small magnetic anomaly. Possible piece of ferrous debris.	1.4	0.7	0.5	12
D_S0622	Uncertain	71539	Debris	320922	5945644	A2	Irregular curvilinear dark reflector with small shadow, associated with a medium a magnetic anomaly. Possible piece of ferrous debris.	11.4	0.6	0.1	30
D-E_M15198	Not seen	73052	Magnetic	320292	5949392	A2	Distinct dipole. Medium magnetic anomaly without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	78
D-E_M15228	Boulder	73056	Magnetic	320630	5948123	A2	Distinct dipole. Medium magnetic anomaly without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	70
D-E_M15237	Metal debris	73057	Magnetic	320740	5948050	A2	Strong distinct dipole but with no associated sidescan sonar contact visible, possibly buried ferrous debris due to its strength.	-	-	-	493
D-E_M15244	Capstan (Possibly)	73058	Magnetic	320602	5947990	A2	Monopole anomaly. Medium magnetic anomaly without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.	-	-	-	85
D-E_M15336	Boulder	73051	Magnetic	321320	5944975	A2	Medium sized positive dipole indicating ferrous material.	-	-	-	52
E_M6149	Anchor	71614	Magnetic	320831	5948747	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	165

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
E_M6348_B1	Metal debris	71643	Magnetic	320865	5947632	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	238
E_M7026	Metal debris	71704	Magnetic	321544	5945121	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris. Located approx. 35m SW of 61816 and is possibly related.	-	-	-	202
E_S0682	Boulder	71629	Rope/Chain	321025	5947949	A2	Curvilinear dark reflector with small shadow, with a larger dark reflector with larger shadow at one end. Located in an area of coarse seabed sediment, no associated magnetic anomaly. Possible short length of rope or chain.	5.3	0.3	0.5	-
E_S0700	UXO	71666	Debris	321340	5946830	A2	Elongate dark reflector with shadow located in an area of coarse seabed sediment. Possibly associated with a medium magnetic anomaly. Possible piece of ferrous debris.	2.1	0.6	0.5	30
EC_M12834	Anchor	72500	Magnetic	311572	5947878	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	93.8
EC_M12844	Boulder	72503	Magnetic	311611	5947820	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	91.2
EC_M12847	Not seen	72505	Magnetic	311675	5947805	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	205.6
EC_M12848	Metal debris	72504	Magnetic	311694	5947860	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	110.6
EC_M12859	Not seen	72506	Magnetic	311809	5947808	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	319.9
EC_M12871	Boulder	72509	Magnetic	311881	5947835	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	100.2
EC_M12875	Tyre	72508	Magnetic	311891	5947822	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	111.5
EC_M12919	Tyre	72513	Magnetic	312072	5947776	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	80.2

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
EC_M12935	Not seen	72514	Magnetic	312141	5947848	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	142.6
EC_M12987_B1	Boulder	72516	Magnetic	312453	5947791	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	93.6
EC_M12989	Fishing Pot	72517	Magnetic	312462	5947805	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	387.9
EC_M13000	Not seen	72518	Magnetic	312593	5947785	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	83.4
EC_M13046	Not seen	72519	Magnetic	312912	5947811	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	390.8
EC_M13071_B1	Metal debris	72520	Magnetic	313105	5947805	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	94.6
EC_M13122	Metal debris	72522	Magnetic	313433	5947833	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	120.9
EC_M13155	Anchor (Possibly)	72523	Magnetic	313719	5947805	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	233.4
EC_M13200	Not seen	72525	Magnetic	314098	5947884	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	251.5
EC_M13213	Boulder (Fishing Pot)	72527	Magnetic	314217	5947953	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	87.5
EC_M13223	Metal debris	72528	Magnetic	314325	5947910	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	433.4
EC_M13256	Pipe	72530	Magnetic	314487	5947963	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	112.6

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
EC_M13270	Metal debris	72531	Magnetic	314553	5948056	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	614.8
EC_M13271	Rope	72532	Magnetic	314558	5948022	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	136.8
EC_M13405	Not seen	72536	Magnetic	315547	5948254	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	118.8
EC_M13411	Metal debris	72537	Magnetic	315575	5948257	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	152.5
EC_M13460	Not seen	72539	Magnetic	315795	5948332	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	80.6
EC_M13467_B1	Concrete	72540	Magnetic	315816	5948346	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	89.8
EC_M13491_B1	Metal debris	72543	Magnetic	315928	5948409	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	112.6
EC_M13506	Not seen	72546	Magnetic	315998	5948376	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	254.2
EC_M13559	Boulder	72549	Magnetic	316240	5948455	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	99.4
EC_M13589	Metal debris	72551	Magnetic	316356	5948489	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	447.8
EC_M13600_B1	Fishing Pot	72552	Magnetic	316403	5948513	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	97.4

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
EC_M13633	Boulder	72553	Magnetic	316551	5948489	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	242.9
EC_M13796	Metal debris	72555	Magnetic	317211	5948690	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	101
EC_M13876_B1	UXO	72558	Magnetic	317521	5948782	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	111.3
EC_M13927	Anchor (Possibly)	72559	Magnetic	317814	5948890	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	245.1
EC_M13953_B2	Not seen	72560	Magnetic	317934	5948886	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	159.7
EC_M14030	Boulder	72562	Magnetic	318272	5948946	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	113.3
EC_M16174	Boulder	73201	Magnetic	311158	5947877	A2	Medium asymmetric dipole. No associated sidescan sonar targets. Possible buried ferrous material.	-	-	-	127.8
EC_M16181	Anchor	73204	Magnetic	311191	5947908	A2	Medium asymmetric dipole. No associated sidescan sonar targets. Possible buried ferrous material.	-	-	-	167.2
EC_S2019	Boulder	72557	Dark reflector	317444	5948742	A2	Irregularly shaped object with projection on far side, associated with a medium magnetic anomaly. Possible piece of ferrous debris.	2.5	1.4	0.4	77.7
E-F_M12282	Pipe	72623	Magnetic	321085.3	5948961	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	187.4
E-F_M12288	Pipe	72622	Magnetic	320981.5	5948807	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	143
E-F_M15517	Fishing Gear	73063	Magnetic	321637	5946472	A2	Very strong distinct dipole present over a number of lines but no associated sidescan sonar anomaly visible therefore suggesting that the object could be buried.	-	-	-	1001

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
E-F_M15527	Fishing Gear (Possibly)	73062	Magnetic	321584	5946331	A2	Large distinct monopole, present on adjacent lines but much weaker. No associated sidescan sonar targets which could indicate buried ferrous debris.	-	-	-	157
E-F_M15529	Metal debris	73061	Magnetic	321538	5946315	A2	Large dipole anomaly, anomaly present on three consecutive lines. This target has no associated mag or sidescan sonar targets and could be buried ferrous debris material.	-	-	-	112
F_M07228	Not seen	71806	Magnetic	321211	5949781	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	144
F_M07605	Metal debris	71841	Magnetic	321276	5948472	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	138
F_M07606	Not seen	71843	Magnetic	321358	5948467	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	165
F_M07617	Not seen	71844	Magnetic	321383	5948455	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	105
F_M07671	Not seen	71857	Magnetic	321484	5948027	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	123
F_M07779	Cable Reel	71861	Magnetic	321433	5947859	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	106
F_M07814	Pipe	71866	Magnetic	321462	5947748	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	141
F_M07944	Wooden Beam	71876	Magnetic	321628	5947488	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	89

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
F_M08092	UXO	71889	Magnetic	321564	5947215	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	83
F_M08191	Pipe	71901	Magnetic	321777	5946873	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	159
F_M08198	Chain	71903	Magnetic	321761	5946845	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	186
F_S0794	Anchor	71858	Rope/Chain	321522	5948015	A2	Curvilinear dark reflector with small shadow associated with a medium magnetic anomaly, identified in an area of coarse seabed sediment. Possible length of rope or chain.	24.4	0.5	0.1	62
F_S0828	Not seen	71902	Debris	321817	5946831	A2	Dark reflector with large shadow located within an area of coarse seabed sediment, associated with a medium magnetic anomaly. Possible piece of ferrous debris.	2.7	1.5	0.4	67
F-G_M12456	Metal debris	72632	Magnetic	321630	5948083	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	103.5
F-G_M12508	Rope	72628	Magnetic	322159	5946470	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	209
F-G_S2797	Boulder	73064	Debris	321685	5948128	A2	Large piece of possible debris in a 'V' shape on a rough and gravelly area of the seabed. No associated magnetic anomalies which suggests non-ferrous material.	4.8	0.6	0.2	-
G_M08678	Cable	72019	Magnetic	321852	5949352	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris. In an area of noisy data.	-	-	-	162
G_M08735	Deck Plate	72030	Magnetic	321754	5949130	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	88
G_M08844	Boulder	72044	Magnetic	321900	5948566	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	101

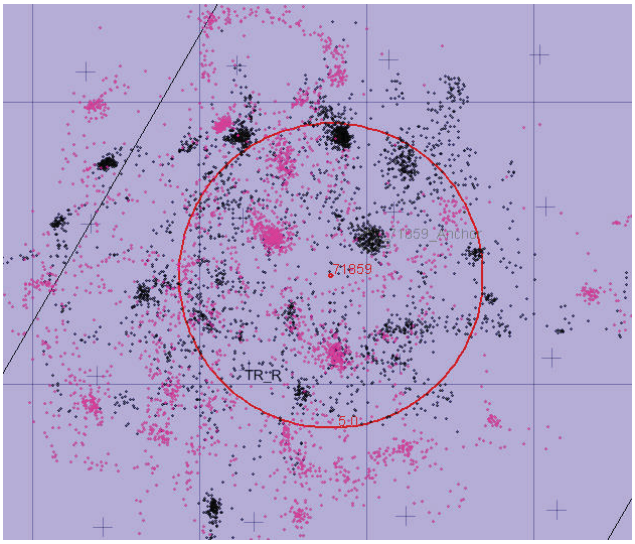
ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
G_M08845	Not seen	72046	Magnetic	321923	5948558	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris. In an area of noisy data.	-	-	-	162
G_M08847	Anchor	72043	Magnetic	321879	5948555	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	551
G_M08862	Not seen	72045	Debris	321927	5948529	A2	Rectangular bright reflector located close to an area of disturbed seabed within an area of coarse seabed sediment. Associated with a large magnetic anomaly. Possible piece of ferrous debris.	3.5	0.9	0	203
G_M08951	Boulder	72060	Magnetic	321972	5948339	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris. Amplitude possibly overestimated by noisy data.	-	-	-	397
G_M09043	Not seen	72084	Magnetic	322222	5947809	A2	Very large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large scattered of buried ferrous debris, or the buried remains of a ferrous structure.	-	-	-	1560
G_M09084	Concrete	72089	Magnetic	322079	5947695	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	176
G_M09109	Not seen	72108	Magnetic	322184	5947330	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	101
G_M09111	Not seen	72109	Magnetic	322236	5947328	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	905
G_M09212	Not seen	72130	Magnetic	322302	5946748	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	134
G_M09276	Not seen	72133	Magnetic	322268	5946627	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	82

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
G_M09284	Not seen	72132	Magnetic	322270	5946614	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	92
G_M09285	Not seen	72134	Magnetic	322250	5946613	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	423
G_M09318	Anchor	72139	Magnetic	322394	5946522	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	474
G_M09324	Pipe	72140	Magnetic	322401	5946502	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	266
G_M09326	Metal debris	72141	Magnetic	322414	5946494	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	87
G_M09356	Anchor	72151	Magnetic	322532	5946141	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	132
G_S0912	Boulder	72137	Debris	322431	5946662	A2	Distinct dark reflector with shadow associated with a large magnetic anomaly, located in an area of coarse seabed sediment. Possible piece of ferrous debris.	2.3	1.3	0.6	357
G-H_M12601_B1	Metal debris	72626	Magnetic	322416	5947227	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	449.7
G-H_M12687	Anchor	72627	Magnetic	322644	5946220	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	281.1
G-H_S1542	Boulder	72620	Dark reflector	322619	5946202	A2	Oval shaped object with shadow, associated with a medium magnetic anomaly seen in several lines. Possible natural or ferrous debris.	1.9	0.7	0.6	82.1
H_M09592	Boulder	72203	Magnetic	322140	5949981	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	141

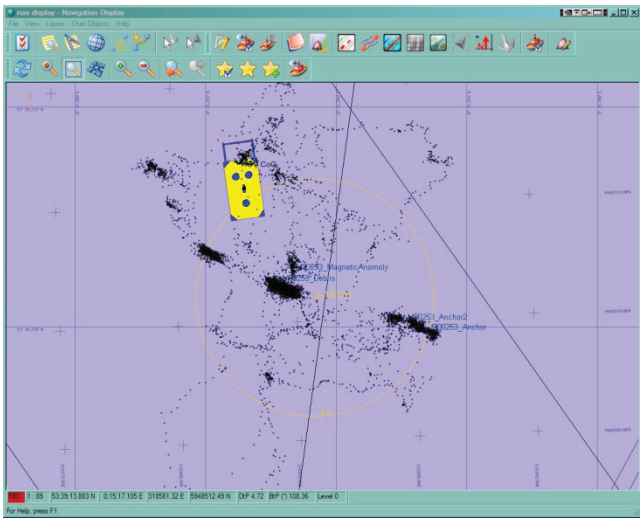
ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
H_M09756_B1	Not seen	72229	Magnetic	322384	5949063	A2	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	357
H_M09790	Not seen	72232	Magnetic	322365	5948949	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	155
H_M09977	Metal debris	72253	Magnetic	322601	5948283	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	510
H_M10041	Not seen	72259	Magnetic	322780	5947716	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	81
H-I_M12743	Not seen	72630	Magnetic	322706	5948493	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	89.7
H-I_M15954_B1	Chain	73088	Magnetic	322477	5949998	A2	Medium sized negative monopole anomaly, present on adjacent survey adjacent survey lines, could be possibly buried ferrous material.	-	-	-	72
H-I_M16000	Metal debris	73089	Magnetic	322925	5948194	A2	Extremely large monopolar monopole anomaly, also present on adjacent survey line. No associated sidescan sonar targets and may be possibly buried ferrous material.	-	-	-	710
H-I_M16003	Metal debris	73087	Magnetic	322762	5948134	A2	Medium sized distinct dipole with weaker dipoles present on adjacent line. Could be possibly buried ferrous material.	-	-	-	68
H-I_S2917	Not seen	73085	Magnetic	322945	5947151	A2	Medium sized distinct dipole but not present on adjacent survey lines and in an area with a large geological anomaly. Could be natural or piece of buried ferrous material.	-	-	-	60
I_M10500_B1	Not seen	72317	Magnetic	322911	5948918	A2	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	86
I_M10647	Not seen	72332	Magnetic	323178	5948250	A2	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.	-	-	-	86

ID	Object (UXO Survey)	WA ID	WA Class	WA Easting	WA Northing	WA Disc	Description	L (m)	W (m)	H (m)	Mag Ampl (nT)
I_M10995	Pipe	72373	Magnetic	323479	5946931	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	382
I-J_S2977	Boulder	73090	Debris	323233	5948310	A2	Small object with shadow, possible debris remains. Slightly right angled shaped debris, no associated magnetic anomaly suggests non-ferrous material.	1.3	0.4	0.3	-
J_M11108_B1	Boulder	72418	Magnetic	323465	5949427	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	530
J_M11160_B1	Not seen	72423	Magnetic	323537	5949299	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	143
J_M11198	Anchor	72425	Magnetic	323457	5949222	A2	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.	-	-	-	391
J_S1147	Boulder	72424	Debris	323361	5949182	A2	Dark reflector with shadow located in an area of coarse seabed sediment, associated with a medium magnetic anomaly. Possible piece of ferrous debris.	1.2	0.4	0.9	79

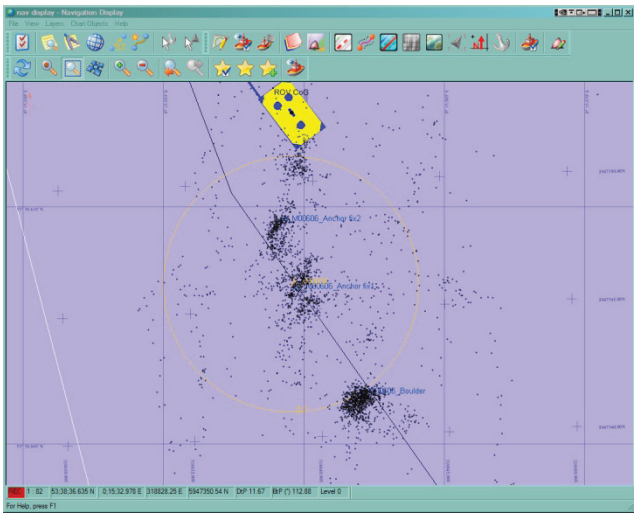
APPENDIX III: DATA SHEETS FOR TARGETS OF ARCHAEOLOGICAL INTEREST

Humber Gateway UXO Survey Archaeological Assessment			71859
Assessor	Wessex Archaeology	**Survey Date**	20/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321582.80 5948018.00	**As Found Position**	321584 5948019
Offshore Comments	Anchor Found		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV Only	
WA Site ID	71859	**Geophysics Discrimination**	A2
WA Position	321582.8 5948018	**Geophysical Details**	33.9 x 0.4 x 0.2
Geophysics Description	Curvilinear dark reflector with small shadow but no associated magnetic anomaly, identified in an area of coarse seabed sediment. Possible length of rope or chain.		
Archaeological Assessment	Grapnel anchor with four tines, and chain link. Probably modern (19th or 20th century), it may have been used as an anchor or to recover material lost on the seabed.		

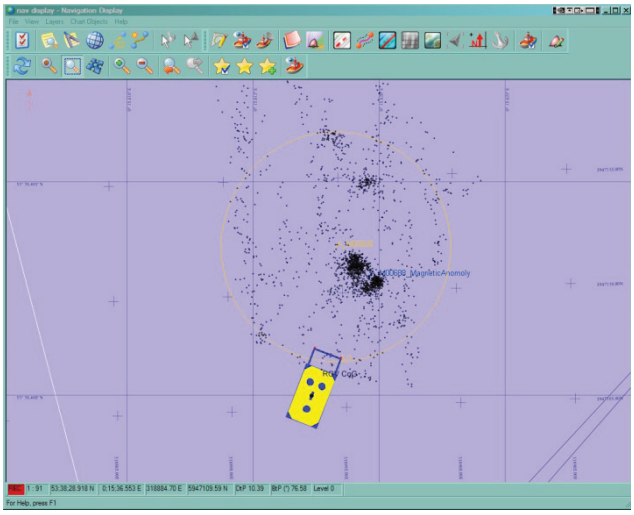
Image(s)	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10140

Humber Gateway UXO Survey Archaeological Assessment			A_M00253
Assessor	Wessex Archaeology	**Survey Date**	23/02/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	318585.80 5948511.00	**As Found Position**	318590.20 5948509.46
Offshore Comments	Anchor approx. L80cm W80cm, appears to be four pronged, caught under another anchor 1.2m W80cm. Secondary target hit on TSS coils, visual on small object partially buried 6cm width, no distinguishing features (318584.01 5948511.76)		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV Only	
WA Site ID	70111	**Geophysics Discrimination**	A2
WA Position	318587 5948513	**Geophysical Details**	211.2nT
Geophysics Description	Moderate strength magnetic anomaly representing a larger ferrous object.		
Archaeological Assessment	Possibly an anchor, but may be debris. The ‘shank’ actually appears to be angle iron.		
Image(s)			

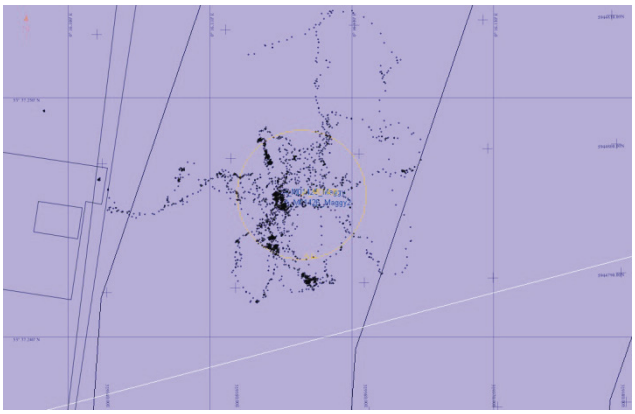
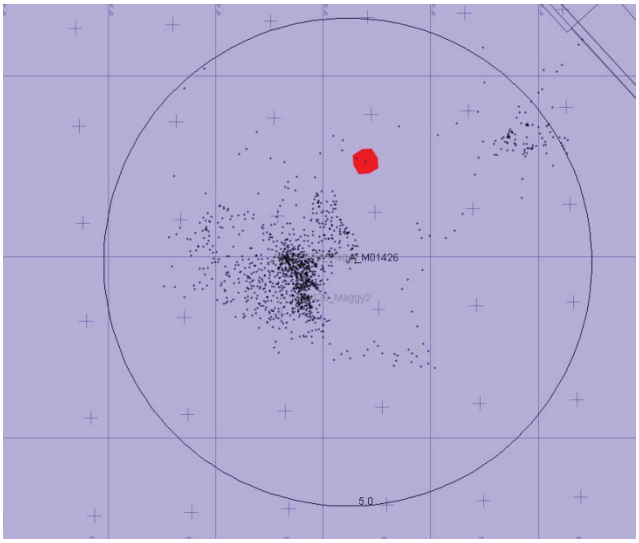
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10141

Humber Gateway UXO Survey Archaeological Assessment			**A_M00606**
Assessor	Wessex Archaeology	**Survey Date**	21/02/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	318839.00 5947346.00	**As Found Position**	318839.27 5947346.71
Offshore Comments	Large Anchor - Dimensions - 2.7m Long x 1m Wide - Orientation NW to SE. Adjacent feature – additional target boulder, L70cm x W30cm x H50cm (318841.19 5947341.62)		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV Only	
WA Site ID	70210	**Geophysics Discrimination**	A2
WA Position	318839 5947346	**Geophysical Details**	246.8nT
Geophysics Description	Moderate strength magnetic anomaly representing a larger ferrous object.		
Archaeological Assessment	Probable Admiralty pattern anchor, it appears that one fluke is sheared off/missing.		
Image(s)			

Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10142

Humber Gateway UXO Survey Archaeological Assessment			**A_M00688**
Assessor	Wessex Archaeology	**Survey Date**	22/02/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	318894.80 5947112.00	**As Found Position**	318896.20 5974110.68
Offshore Comments	Small piece of metal framework, 10x20cm exposed, appears to be attached to larger part, 30x60cm approx. 60cm apart, structure appears partially buried.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV Only	
WA Site ID	70189	**Geophysics Discrimination**	A2
WA Position	318894.8 5947112	**Geophysical Details**	401.2nT
Geophysics Description	Strong magnetic anomaly representing a very large amount of ferrous material.		
Archaeological Assessment	Probable debris or mine base; may be a large amount of ferrous material buried.		
Image(s)			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and		

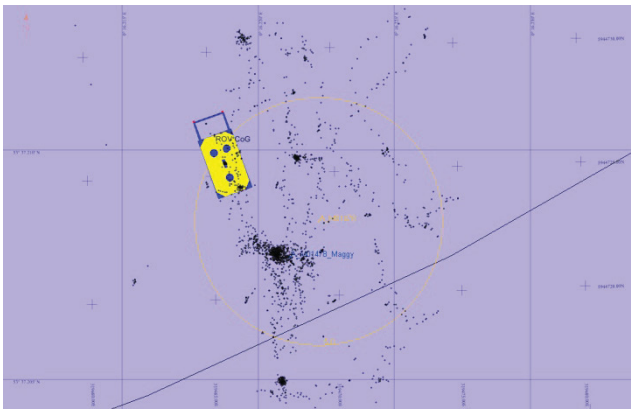
	seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10143

Humber Gateway UXO Survey Archaeological Assessment			A_M01426
Assessor	Wessex Archaeology	**Survey Date**	A1 - 19/02/2013 B1 - 06/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 - 319355.4 5944797 B1 - 319355.40 5944797.00	**As Found Position**	A1 – 319353.83 5944797.07 B1 - 319354 5944796
Offshore Comments	A1 - Straight edged object, partially buried, metallic, possibly 0.2-0.7m length. B1 - Angle iron 1.6m long 40mm wide flush to seabed. Adjacent feature – TSS hit contact buried, 1.2m long x 400mm wide, dug down 200m - nothing found (319354 5944797).		
ROV Trackplot(s) A_M01426_A1		**Diver Trackplot(s) A_M01426_B1**	
			
WA Site ID	70457	**Geophysics Discrimination**	A2
WA Position	319355.4 5944797	**Geophysical Details**	165.3nT
Geophysics Description	Moderate strength magnetic anomaly representing a larger ferrous object.		
Archaeological Assessment	Probable modern debris, may be wreck related.		

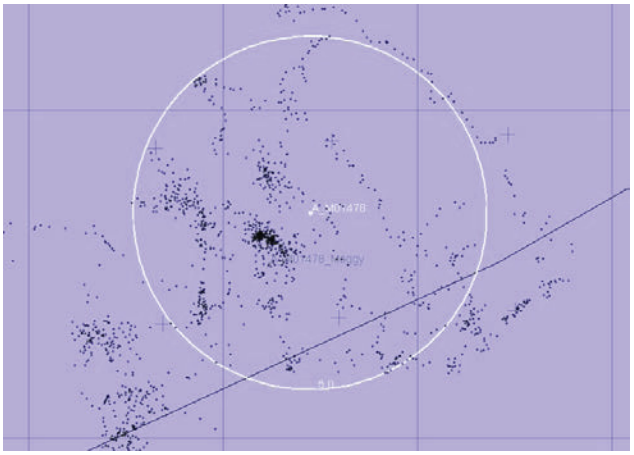
Image(s)	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10144

Humber Gateway UXO Survey Archaeological Assessment			A_M01478
Assessor	Wessex Archaeology	**Survey Date**	A1 - 18/02/2013 B1 - 26/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 - 319469.3 5944723 B1 - 319469.30 5944723.00	**As Found Position**	A1 - 319468.08 5944721.61 B1 - 319468 5944722
Offshore Comments	A1 - Long metallic object. Approx 1.2-1.5m length. B1 - Diver located a metallic object. Appears to be a section of metal beam. L2.5m x W0.lm. No other objects found in target area.		

ROV Trackplot(s) A_M01478_A1



Diver Trackplot(s) A_M01478_B1

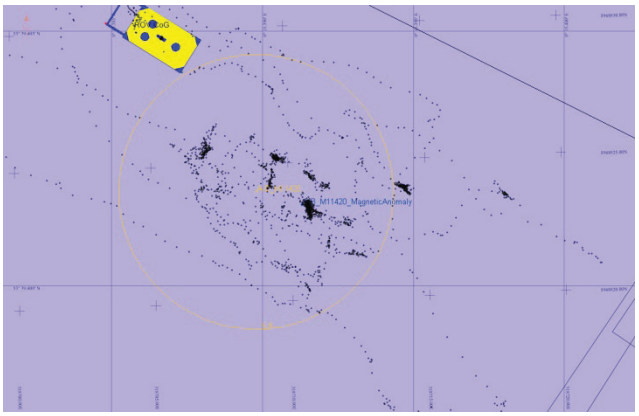
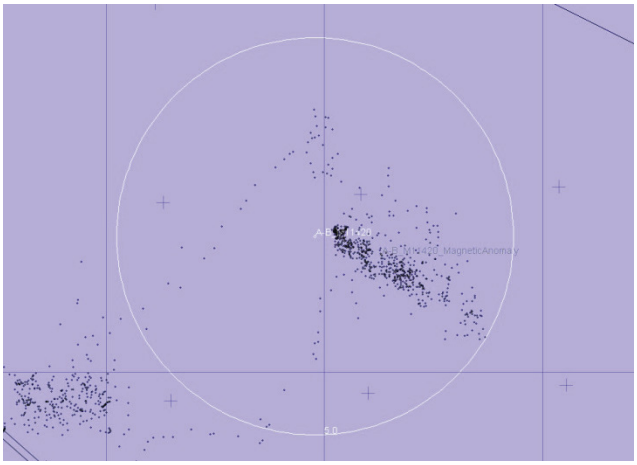


WA Site ID	70473	**Geophysics Discrimination**	A2
WA Position	319469.3 5944723	**Geophysical Details**	441.9nT
Geophysics Description	Strong magnetic anomaly representing a very large amount of ferrous material.		
Archaeological Assessment	Possible modern debris, or may represent a larger buried feature.		

Image(s)

Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10145

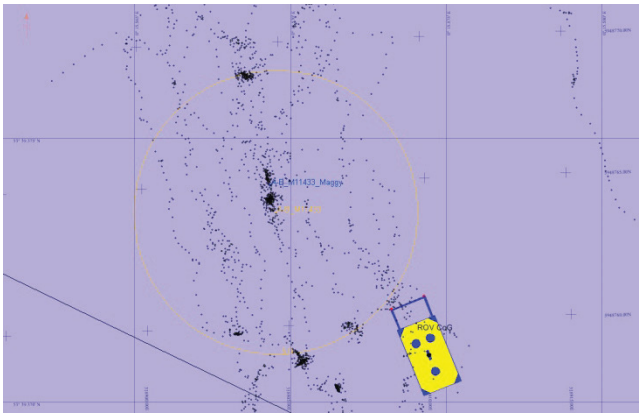
Humber Gateway UXO Survey Archaeological Assessment			A-B_M11420
Assessor	Wessex Archaeology	**Survey Date**	A1 - 23/02/2013 B1 - 02/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 - 318708.80 5948824.00 B1 - 318708.80 5948824.00	**As Found Position**	A1 - 318710.45 5948823.47 B1 - 318710 5948824
Offshore Comments	A1 – Strong TSS reading, no visual target found. B1 - Section of beam, 1.8m long 140mm wide 50mm high off sea bed		

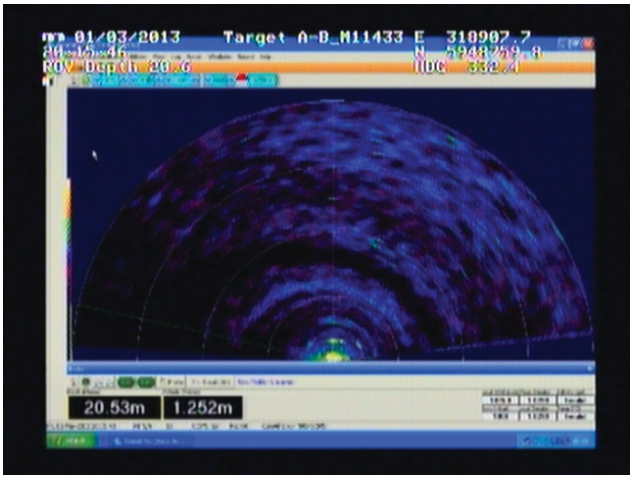
ROV Trackplot(s) A-B_M11420_B1	**Diver Trackplot(s) A-B_M11420_B1**
	

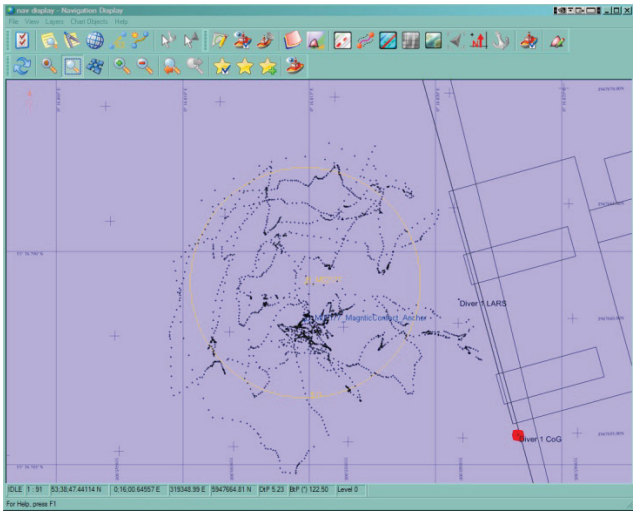
WA Site ID	72643	**Geophysics Discrimination**	A2
WA Position	318708.8 5948824	**Geophysical Details**	196.1nT
Geophysics Description	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Probable modern debris, may be wreck related.		

Image(s)

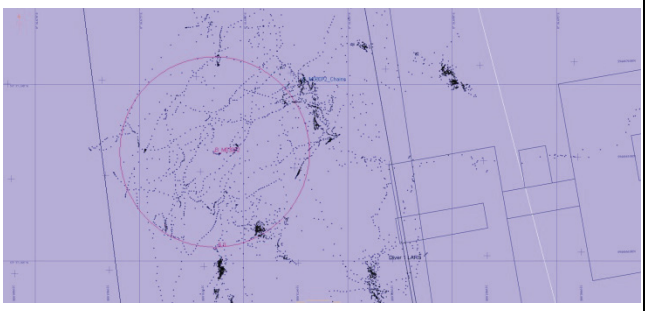
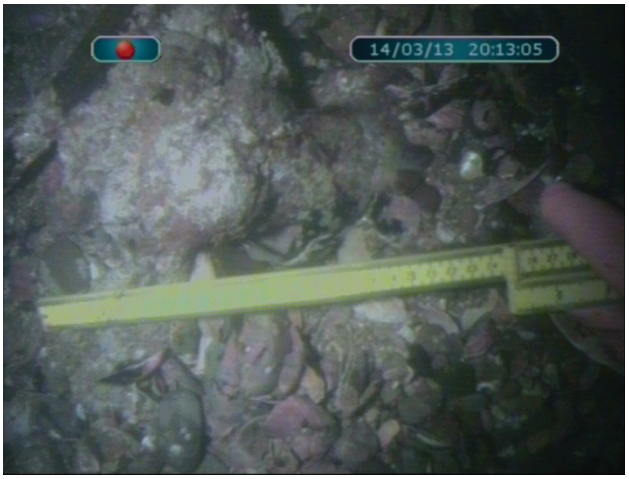
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10146

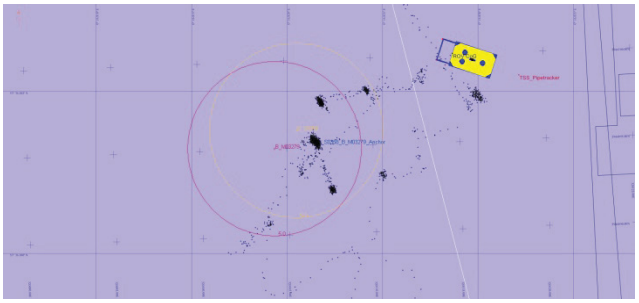
Humber Gateway UXO Survey Archaeological Assessment			A-B_M11433
Assessor	Wessex Archaeology	**Survey Date**	01/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	318904.70 5948764.00	**As Found Position**	318904.53 5948764.97
Offshore Comments	Shaft with medium levels of corrosion. One end appears to have a shackle on it.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV Only	
WA Site ID	72645	**Geophysics Discrimination**	A2
WA Position	318904.7 5948764	**Geophysical Details**	210.7nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Possible modern debris, or partially buried anchor.		
Image(s)			

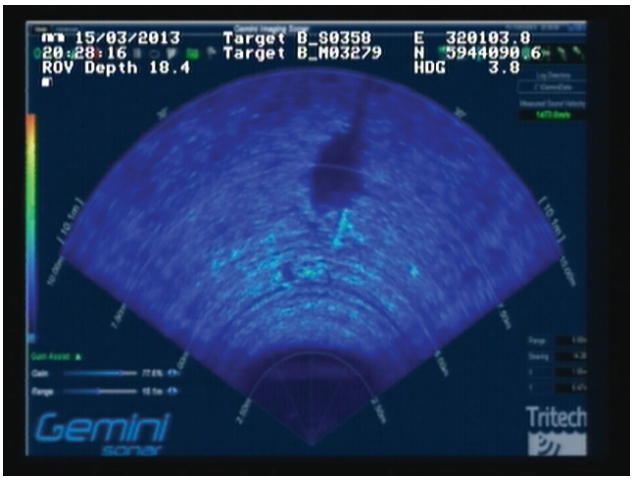
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10147

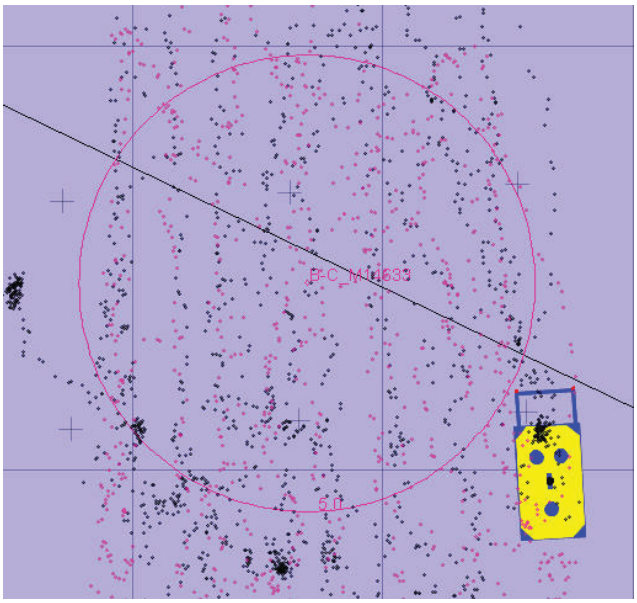
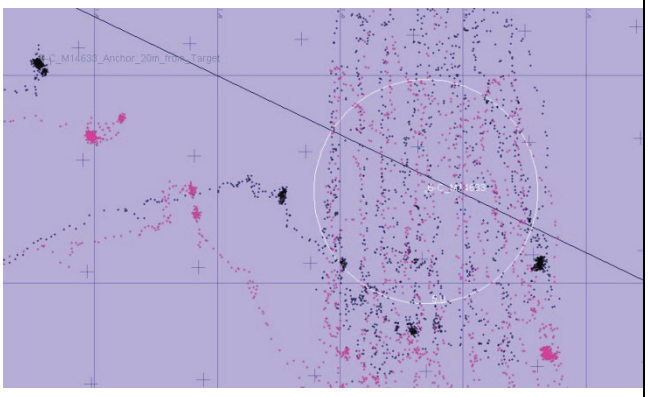
Humber Gateway UXO Survey Archaeological Assessment			**B_M02177**
Assessor	Wessex Archaeology	**Survey Date**	04/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	319353.40 5947662.00	**As Found Position**	319353.31 5947660.35
Offshore Comments	Anchor - 2.5m Long x 2.0m Wide		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver Only			
WA Site ID	70730	**Geophysics Discrimination**	A2
WA Position	319353.4 5947662	**Geophysical Details**	161nT
Geophysics Description	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.		
Archaeological Assessment	Possible modern debris, but may represent buried material of maritime origin.		
Image(s)			

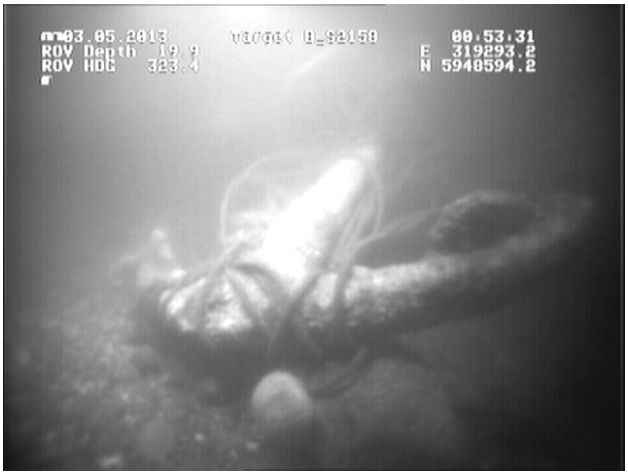
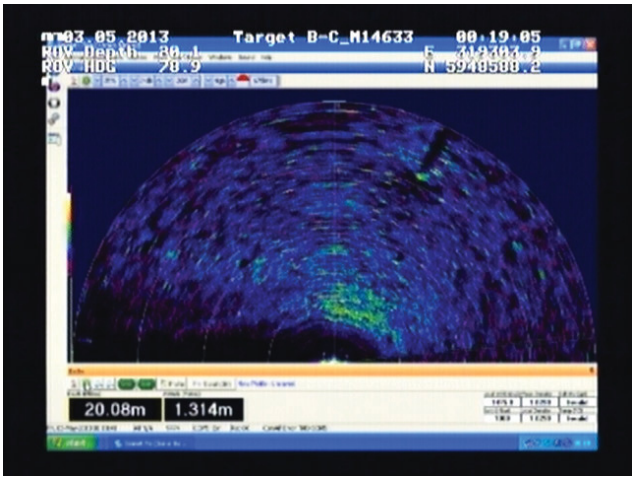
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10148

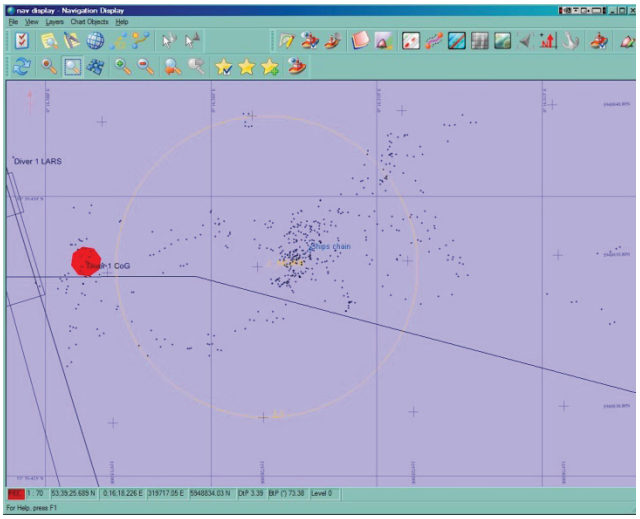
Humber Gateway UXO Survey Archaeological Assessment			B_M03072
Assessor	Wessex Archaeology	**Survey Date**	14/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	319970.8 5944666.0	**As Found Position**	-
Offshore Comments	No Contact Found - No ID (small chain found outside target area).		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver Only			
WA Site ID	71007	**Geophysics Discrimination**	A2
WA Position	319970.8 5944666	**Geophysical Details**	153nT
Geophysics Description	Large magnetic anomaly identified on a number of survey lines, but without an associated sidescan sonar contact. Possibly a large piece of buried ferrous debris.		
Archaeological Assessment	Probable large ferrous concretion.		
Image(s)			
		Chain: 	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.		
ORPAD ID	EON_10149		

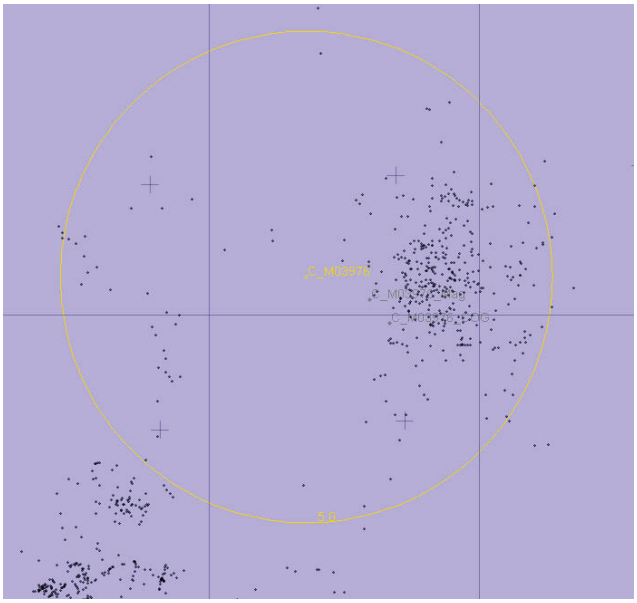
Humber Gateway UXO Survey Archaeological Assessment			**B_S0358**
Assessor	Wessex Archaeology	**Survey Date**	15/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320105.60 5944096.00	**As Found Position**	320107 5944095
Offshore Comments	Anchor with rope and netting attached		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV Only	
WA Site ID	71085	**Geophysics Discrimination**	A2
WA Position	320105.6 5944096	**Geophysical Details**	83nT
Geophysics Description	Elongate dark reflector with shadow and associated medium magnetic anomaly. Probable piece of ferrous debris. Located just to the south of an area of disturbance caused by geotechnical operations at BH7, and could be recent related debris.		
Archaeological Assessment	Possible modern debris, but may be historic aviation or maritime in origin.		
Image(s)			

	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10150

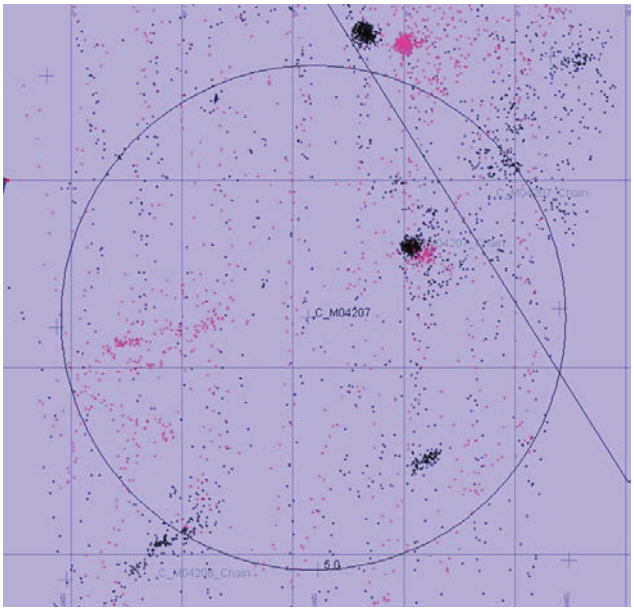
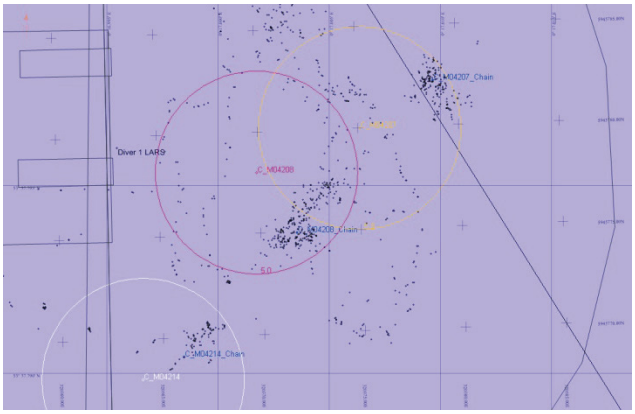
Humber Gateway UXO Survey Archaeological Assessment			B-C_M14633
Assessor	Wessex Archaeology	**Survey Date**	03/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	319310.30 5948588.00	**As Found Position**	-
Offshore Comments	Nothing found in target area (Fixes taken on metal debris and anchor outside of target area found during transit (anchor – 319293 5948594; metal debris – 319286 5948637))		
ROV Trackplot(s)			
			
WA Site ID	73013	**Geophysics Discrimination**	A2
WA Position	319310.3 5948588	**Geophysical Details**	60nT
Geophysics Description	Medium sized positive dipole identified on a single line. Possibly buried ferrous material.		
Archaeological Assessment	Admiralty pattern anchor; probable date range: 19th century.		

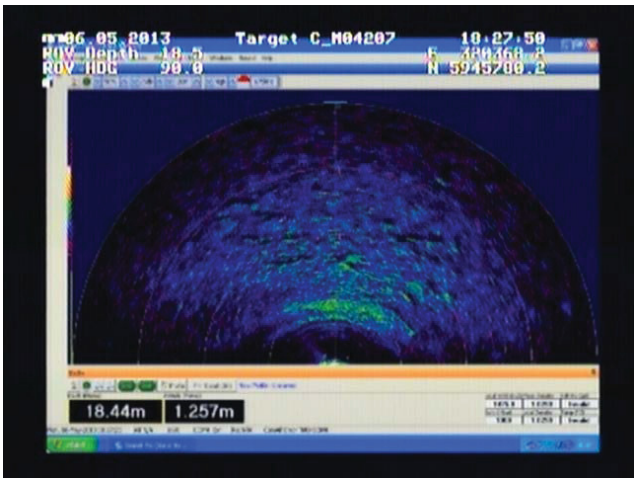
Image(s)	
	
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10151 and EON_10152

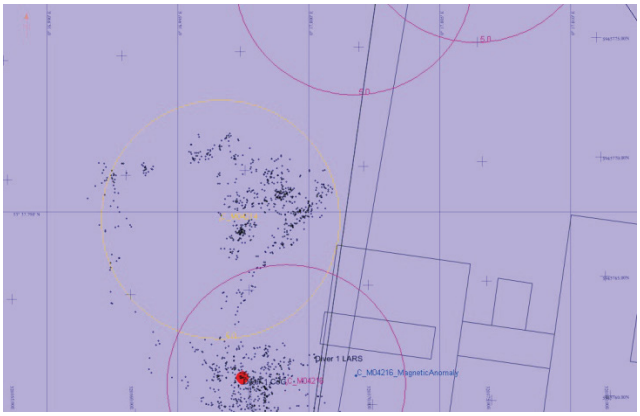
Humber Gateway UXO Survey Archaeological Assessment			**C_M03490**
Assessor	Wessex Archaeology	**Survey Date**	09/02/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	319720.30 5948835.00	**As Found Position**	319722 5948836
Offshore Comments	Admiralty Chain.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver Only			
WA Site ID	71210	**Geophysics Discrimination**	A2
WA Position	319720.3 5948835	**Geophysical Details**	88nT
Geophysics Description	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	**Probable buried debris. May be maritime in origin.**		
Image(s)			
No images			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.		
ORPAD ID	EON_10153		

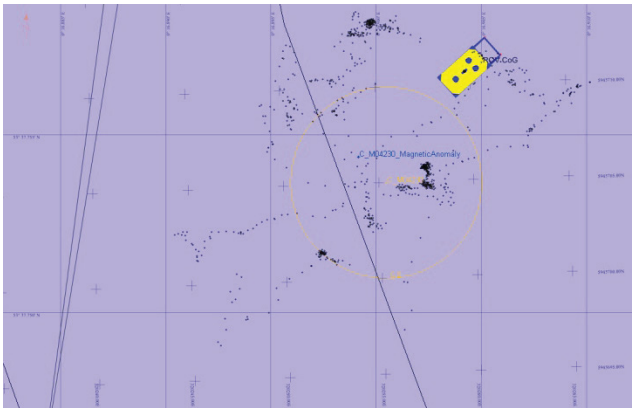
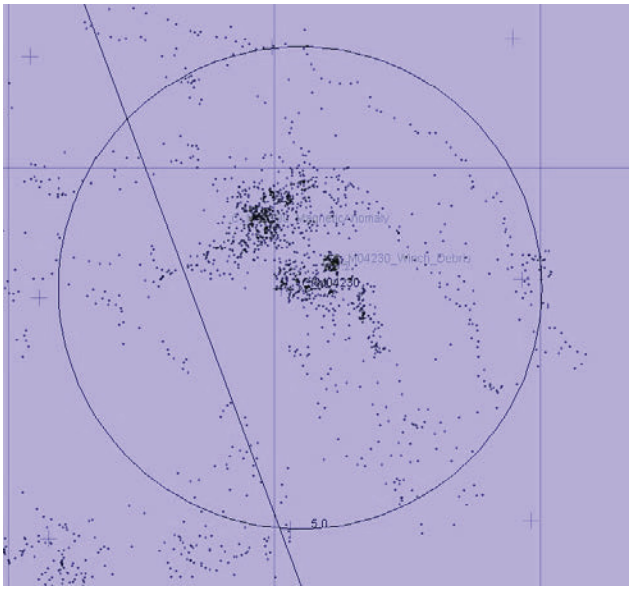
Humber Gateway UXO Survey Archaeological Assessment			C_M03976
Assessor	Wessex Archaeology	**Survey Date**	A1 - 15/02/2013 B1 - 07/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 320083.10 5946643.00	**As Found Position**	A1 & B1 - 320084 5946642
Offshore Comments	A1 - Scrap steel possibly a winch drum L810mm x W570mm x H230mm.		
ROV Trackplot(s) C_M03976_A1		**Diver Trackplot(s) C_M03976_B1**	
			
WA Site ID	71263	**Geophysics Discrimination**	A2
WA Position	320083.1 5946643	**Geophysical Details**	177nT
Geophysics Description	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Probable debris but may be WWI mine base.		

Image(s)	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10154

Humber Gateway UXO Survey Archaeological Assessment			C_M04207
Assessor	Wessex Archaeology	**Survey Date**	A1 - 16/02/2013 B1 06/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 320375.10 594780.00	**As Found Position**	A1 - 320379 5945782 B1 - 321709 5945323
Offshore Comments	A1 - Chain Link 0.96m x 0.16m. Lying flush with seabed. Adjacent feature – Target C_M04208 adjacent with additional chain found. B1 - Chain - small links, possibly partly buried.		
ROV Trackplot(s) C_M04207_B1		**Diver Trackplot(s) C_M04207_A1**	
			
WA Site ID	71286	**Geophysics Discrimination**	A1
WA Position	320375.1 5945780	**Geophysical Details**	1379nT
Geophysics Description	Very large magnetic anomaly identified on numerous survey lines, but with no associated sidescan sonar contact. Possibly represents a significant amount of buried ferrous debris or a buried wreck at this location. Located close to 61310, another large magnetic anomaly with very little evident on the seabed that could have caused it.		
Archaeological Assessment	Possible buried anchor or chain deposit, or further ferrous debris or wreck material.		

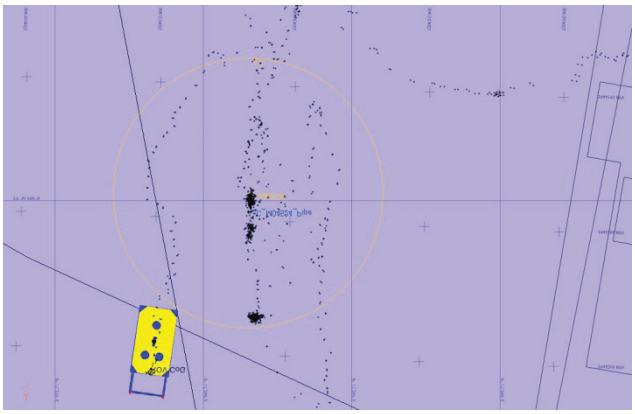
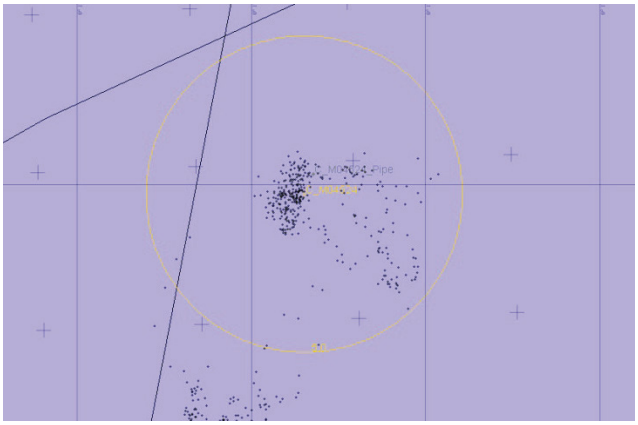
Image(s)	
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10155

Humber Gateway UXO Survey Archaeological Assessment			C_M04214
Assessor	Wessex Archaeology	**Survey Date**	15/02/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320363.90 5945768.00	**As Found Position**	320365.98 5945769.05
Offshore Comments	Magnetic chain		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver only			
WA Site ID	71287	**Geophysics Discrimination**	A1
WA Position	320363.9 594768	**Geophysical Details**	170nT
Geophysics Description	Curvilinear dark reflector without a shadow, associated with a large magnetic anomaly identified on numerous survey lines. Possible piece of ferrous debris, though the identified object is unlikely to have caused such a large magnetic anomaly. Possibly indicates the presence of a significant amount of buried ferrous debris in the vicinity. Located close to large magnetic anomaly 61309.		
Archaeological Assessment	Unknown, but probable chain/debris.		
Image(s)			
No images			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.		
ORPAD ID	EON_10157		

Humber Gateway UXO Survey Archaeological Assessment			C_M04230
Assessor	Wessex Archaeology	**Survey Date**	A1 - 15/02/2013 B1 - 06/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 320255.40 5945705.00	**As Found Position**	A1 - 320254 5945706 B1 - 320256 5945705
Offshore Comments	A1 - TSS Hit, fix taken. No visual – No ID B1 - Old deck winch 1m long 560mm x 370mm		
ROV Trackplot(s) C_M04230_A1		**Diver Trackplot(s) C_M04230_B1**	
			
WA Site ID	71289	**Geophysics Discrimination**	A2
WA Position	32055.4 5945705	**Geophysical Details**	106nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Possible winch drum of 20th century origin. May be part of WWI mine base.		

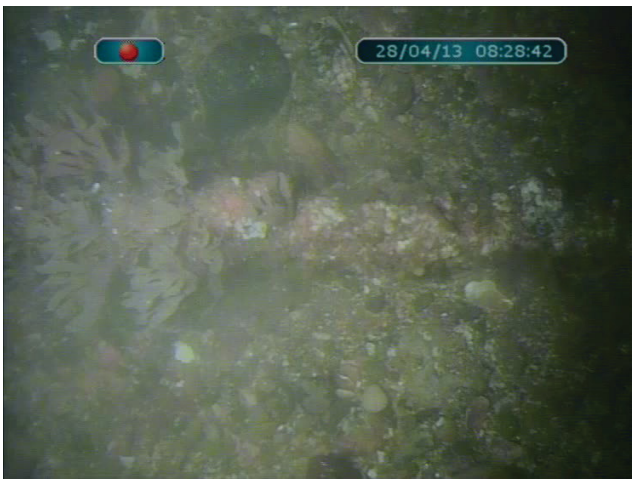
Image(s)	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10158

Humber Gateway UXO Survey Archaeological Assessment			C_M04524
Assessor	Wessex Archaeology	**Survey Date**	A1 - 17/02/2013 B1 - 28/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 320618.40 5944199.00	**As Found Position**	A1 - 320618.7 5944199.63 B1 - 320619 5944200
Offshore Comments	A1 - Pipe viewed – Length 1-2m. Suggested diver investigation. B1 - Diver located metallic debris. Appears to be angle iron or “C" channel section. Ll.5m x 70mm thickness. Height off sea bed 70mm		

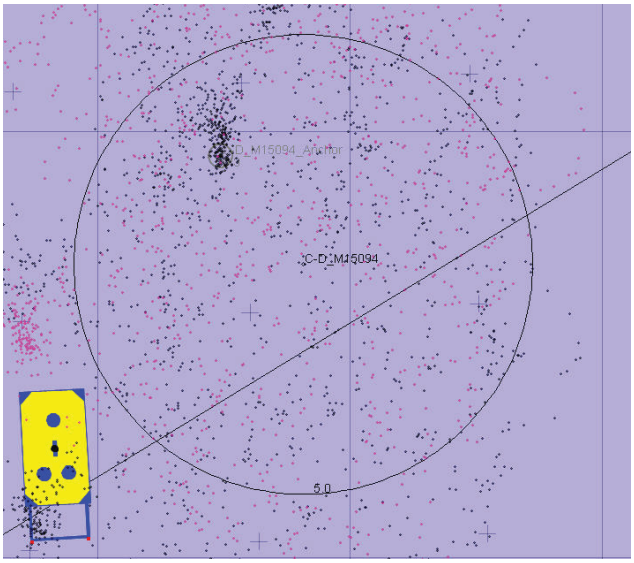
ROV Trackplot(s) C_M04524_A1	**Diver Trackplot(s) C_M04524_B1**
	

WA Site ID	71335	**Geophysics Discrimination**	A2
WA Position	320618.4 5944199	**Geophysical Details**	193nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Probable ferrous debris, may be maritime in origin.		

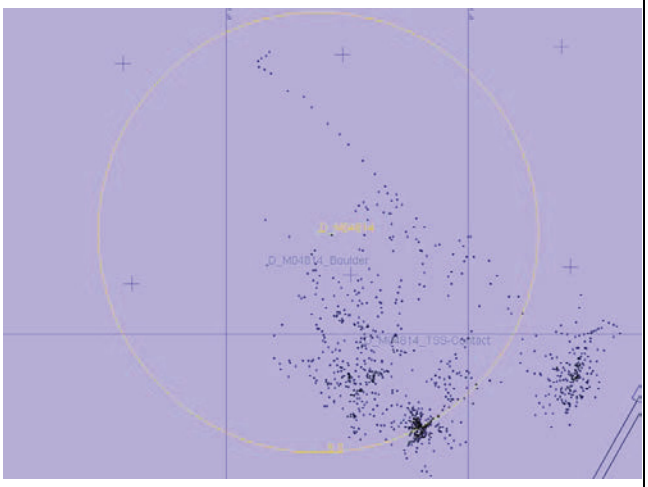
Image(s)

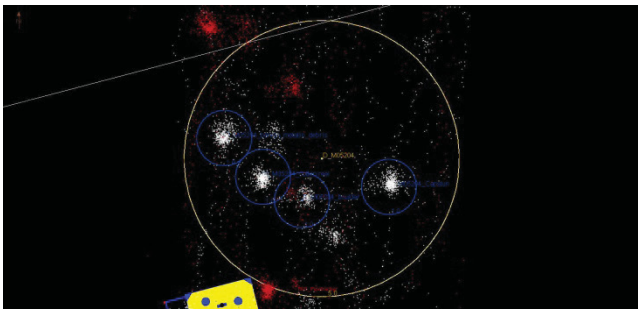
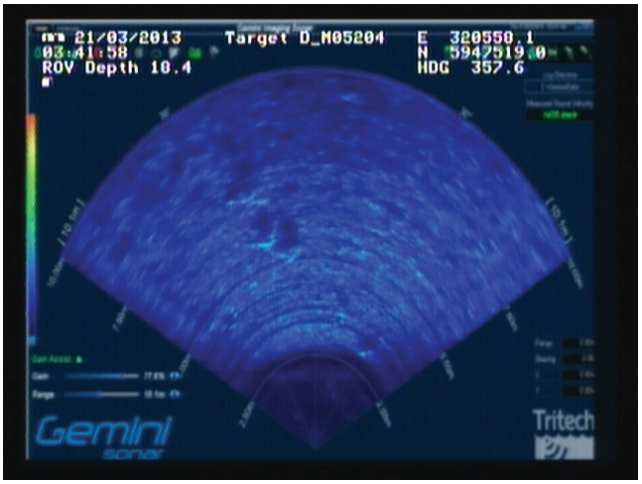


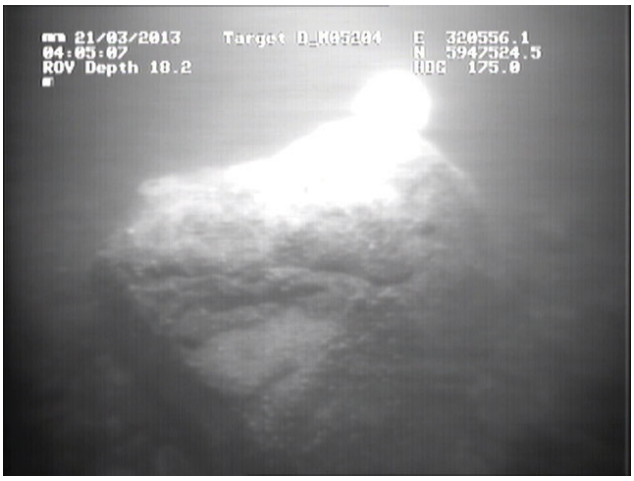
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10159

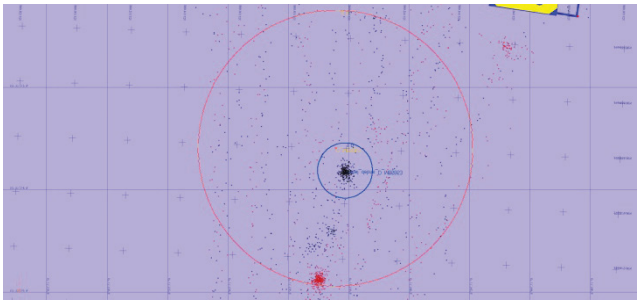
Humber Gateway UXO Survey Archaeological Assessment			C-D_M15094
Assessor	Wessex Archaeology	**Survey Date**	27/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320796.20 5944301.00	**As Found Position**	320794 5944303
Offshore Comments	Anchor found - L2m x WO.5m		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	73046	**Geophysics Discrimination**	A2
WA Position	320796.2 5944301	**Geophysical Details**	530nT
Geophysics Description	Very large and distinct magnetic dipole which could be buried ferrous material.		
Archaeological Assessment	Probable admiralty pattern anchor, 19th century.		
Image(s)			

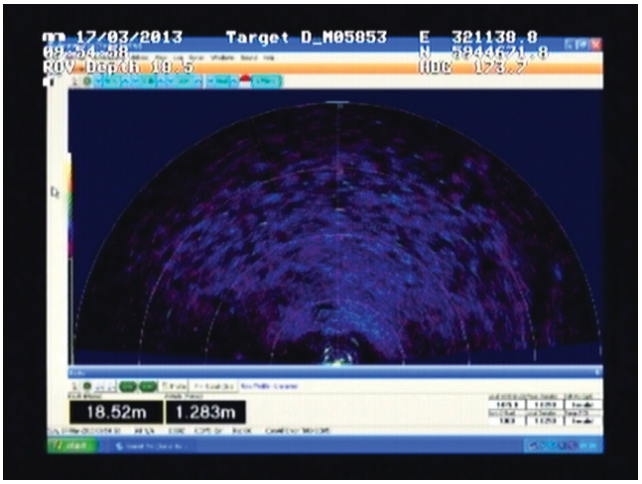
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10160

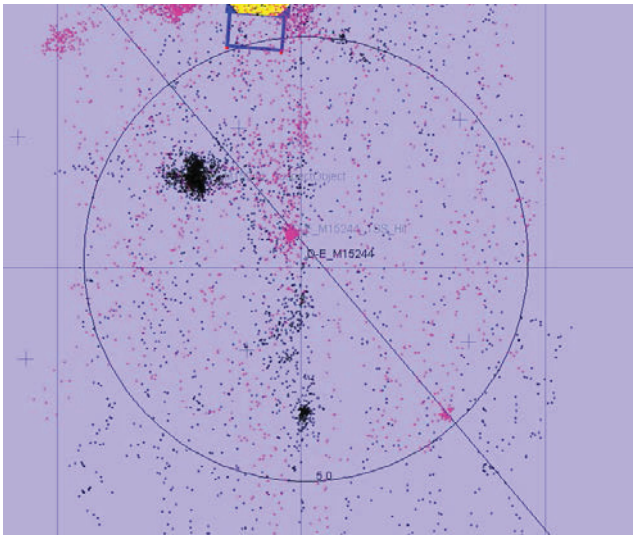
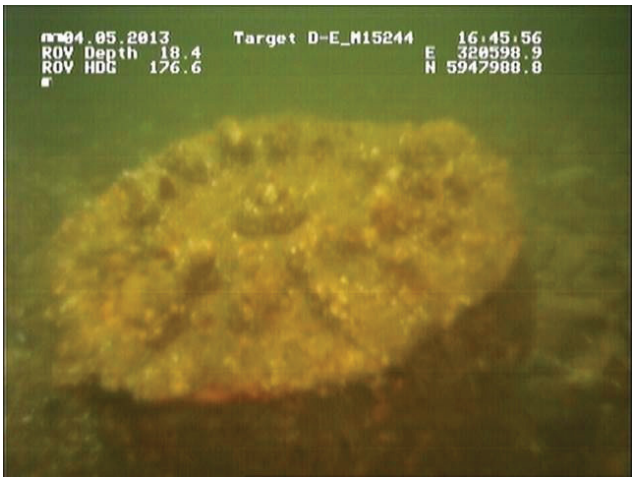
Humber Gateway UXO Survey Archaeological Assessment			D_M04814
Assessor	Wessex Archaeology	**Survey Date**	01/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320109.30 5959196.00	**As Found Position**	320110 5949493
Offshore Comments	Appears to be three links of chain. 250mm long, 120mm wide, 60mm high.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver only			
WA Site ID	71408	**Geophysics Discrimination**	A2
WA Position	320109.3 5949196	**Geophysical Details**	141nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Probable chain link.		
Image(s)			
Actions	Reported through ORPAD. No further action required.		
ORPAD ID	EON_10161		

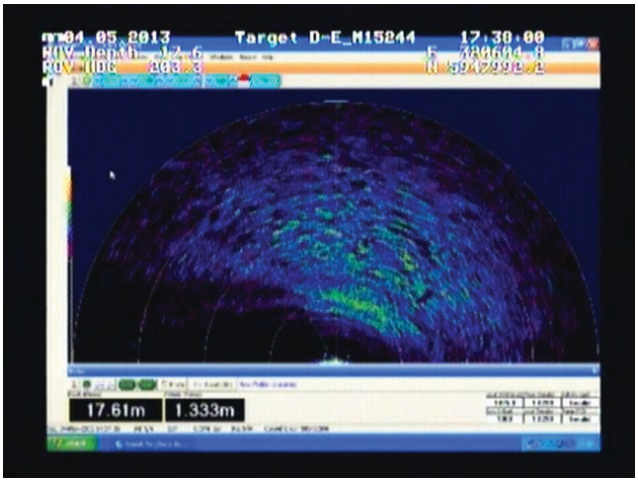
Humber Gateway UXO Survey Archaeological Assessment			D_M05204
Assessor	Wessex Archaeology	**Survey Date**	21/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320557.40 5947526.00	**As Found Position**	320560 5947525
Offshore Comments	Roller - Capstan found visually and a small piece of metal frame noted approx 0.5m in length. Adjacent feature – Boulder approx. size 500mm x 500mm (3200553.88 5947526.88).		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71482	**Geophysics Discrimination**	A2
WA Position	320557.4 5947526	**Geophysical Details**	284nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Winch drum or roller from a vessel. May be wreck related.		
Image(s)			
			

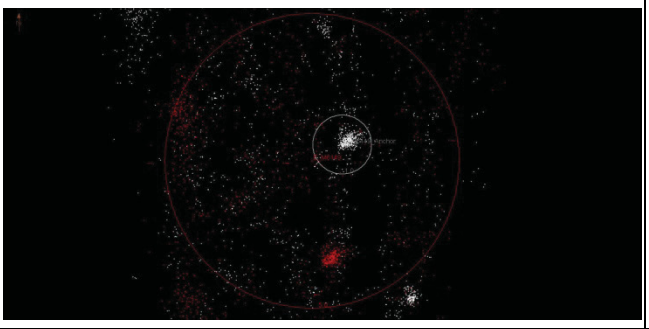
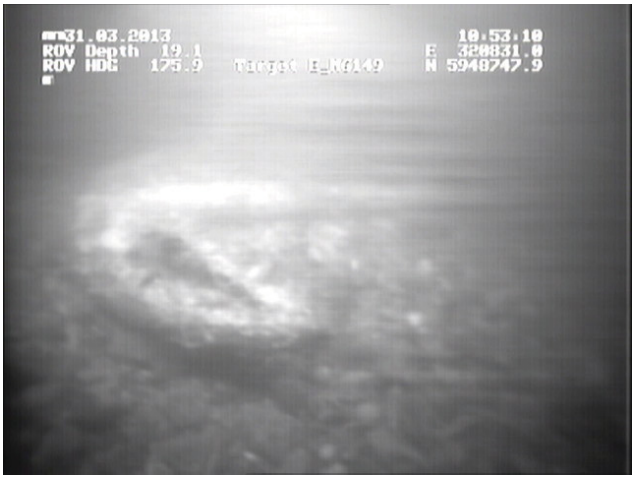
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10162

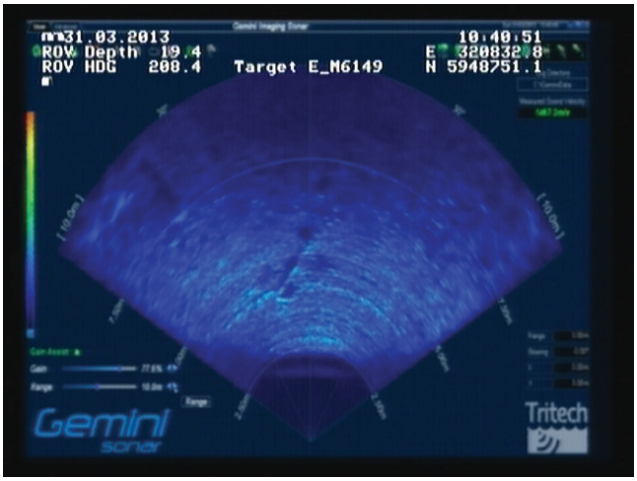
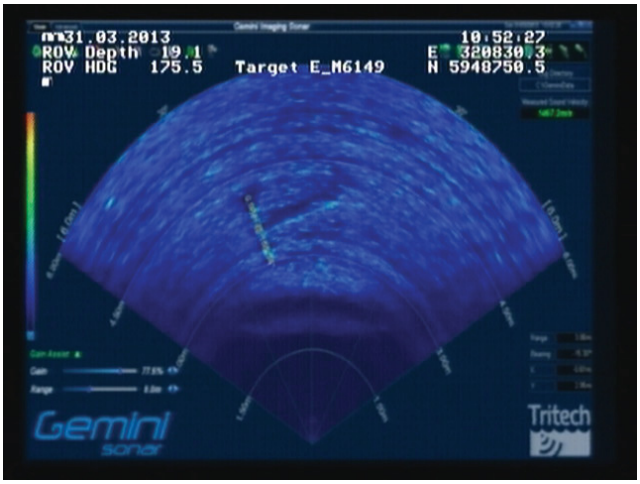
Humber Gateway UXO Survey Archaeological Assessment			D_M05853
Assessor	Wessex Archaeology	**Survey Date**	17/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321139.60 5944668.00	**As Found Position**	321140 5944669
Offshore Comments	Large section of box shape metal debris		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71470	**Geophysics Discrimination**	A2
WA Position	321139.6 5944668	**Geophysical Details**	286nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Debris, may be iron framing or struts of maritime origin.		
Image(s)			

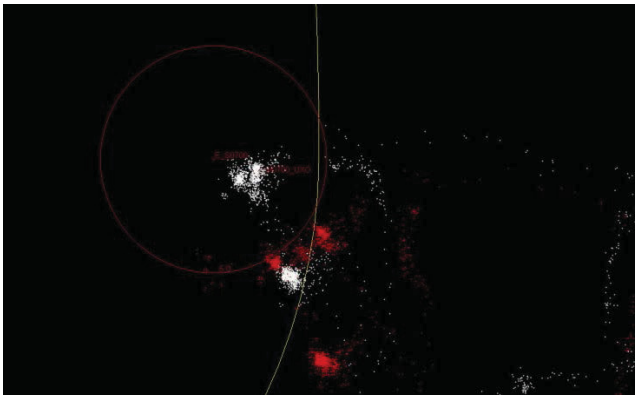
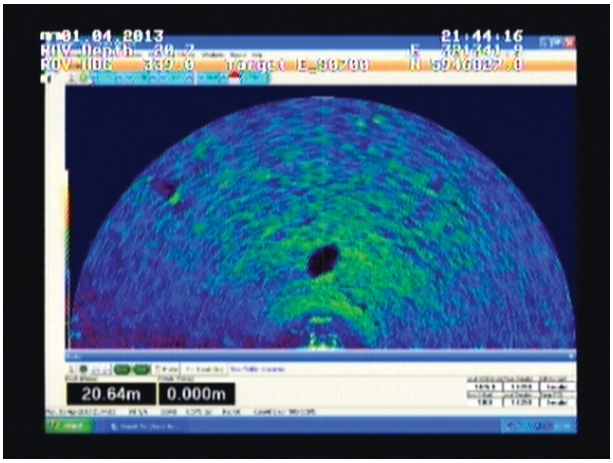
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10163

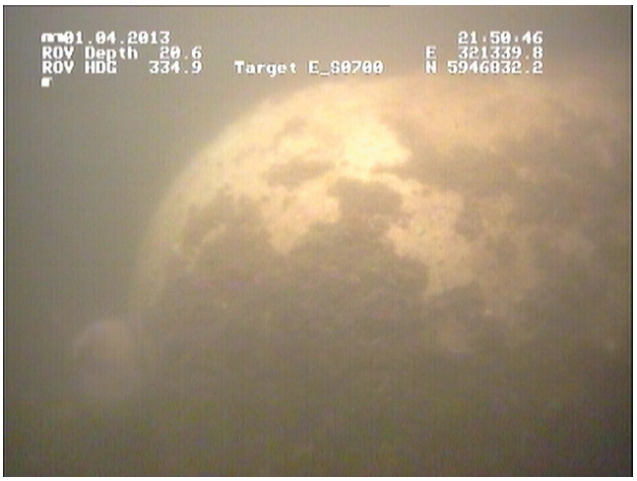
Humber Gateway UXO Survey Archaeological Assessment			D-E_M15244
Assessor	Wessex Archaeology	**Survey Date**	04/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320601.40 5947987.00	**As Found Position**	320599 5947989
Offshore Comments	Possible capstan. Adjacent feature – TSS hit no visual, no ID (320601 5947988)		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	73058	**Geophysics Discrimination**	A2
WA Position	320601.4 5947987	**Geophysical Details**	85nT
Geophysics Description	Monopole anomaly. Medium magnetic anomaly without an associated sidescan sonar contact. Possibly a piece of buried ferrous debris.		
Archaeological Assessment	Possible roller or cable drum, may be part of WWI mine base.		
Image(s)			
			

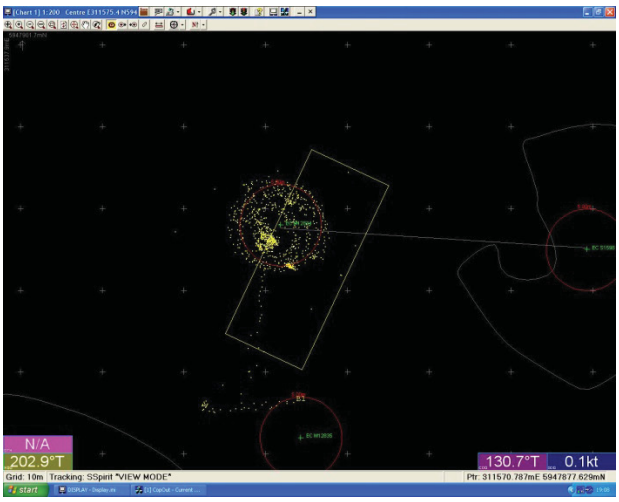
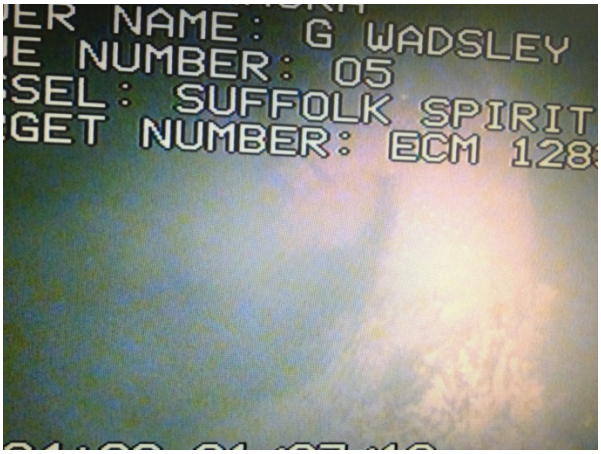
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10164

Humber Gateway UXO Survey Archaeological Assessment			E_M6149
Assessor	Wessex Archaeology	**Survey Date**	31/03/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	320829.90 5948746.00	**As Found Position**	320830 5948746
Offshore Comments	Large Anchor Approx size 1900mm in Length x 1000mm wide point to point		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71614	**Geophysics Discrimination**	A2
WA Position	320829.9 5948746	**Geophysical Details**	165nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Admiralty pattern anchor. Probable 19th century date.		
Image(s)			
			

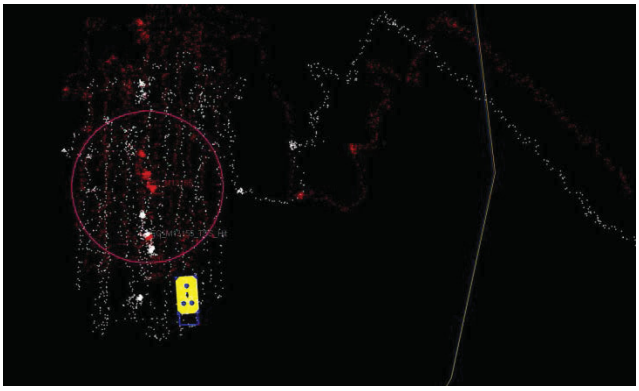
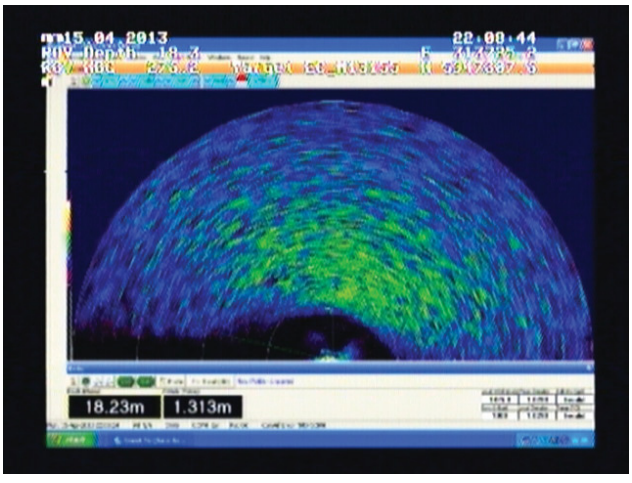
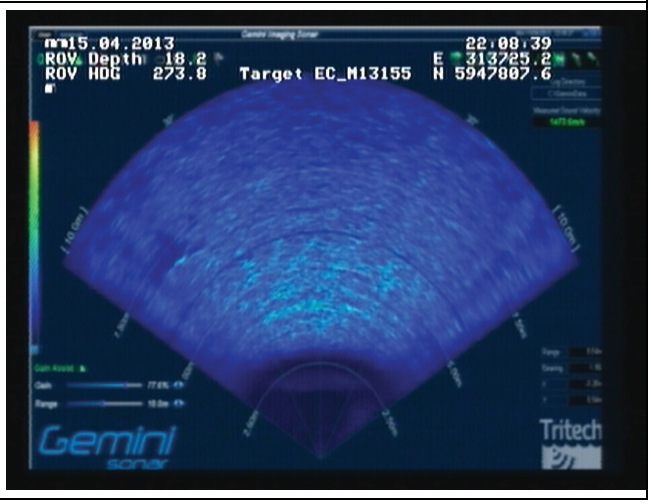
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10165

Humber Gateway UXO Survey Archaeological Assessment			**E_S0700**
Assessor	Wessex Archaeology	**Survey Date**	01/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321338.70 5946833.00	**As Found Position**	321341 5946832
Offshore Comments	Target Suspect German GC Mine.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71666	**Geophysics Discrimination**	A2
WA Position	321338.7 5946833	**Geophysical Details**	30nT
Geophysics Description	Elongate dark reflector with shadow located in an area of coarse seabed sediment. Possibly associated with a medium magnetic anomaly. Possible piece of ferrous debris.		
Archaeological Assessment	Second World War airdropped German LMB magnetic/acoustic anti-shipping mine (British designation 'GC') containing *c.* 1,500 lbs of high explosive.		
Image(s)			
			

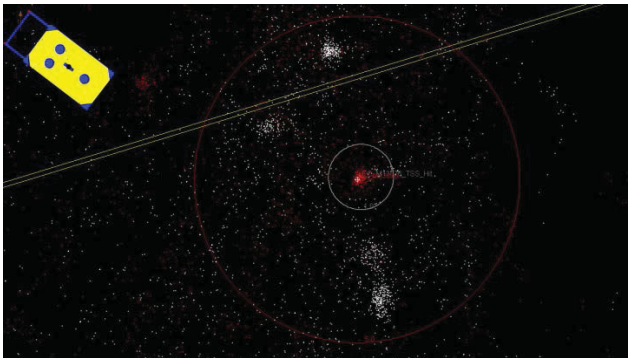
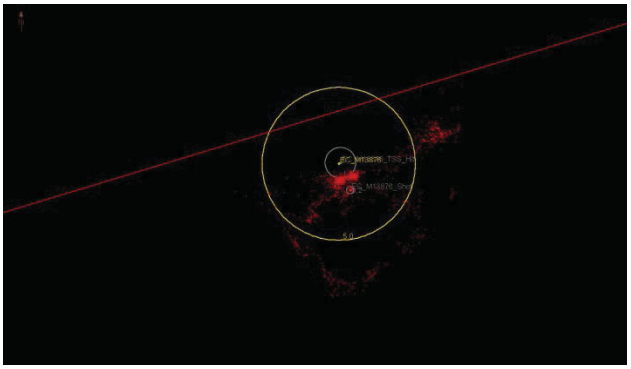
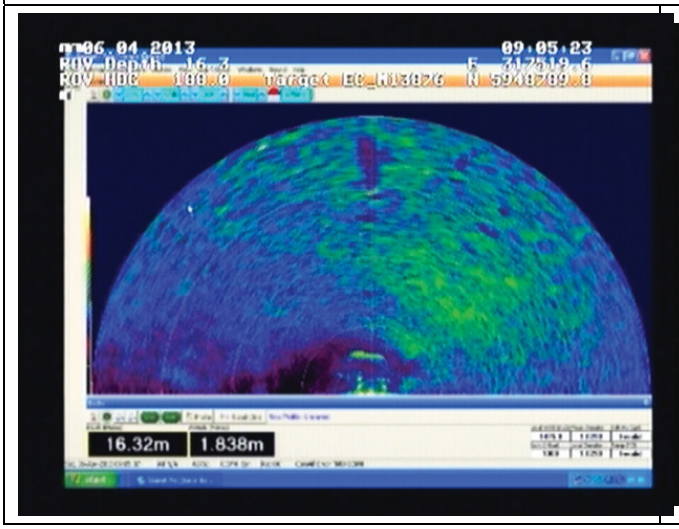
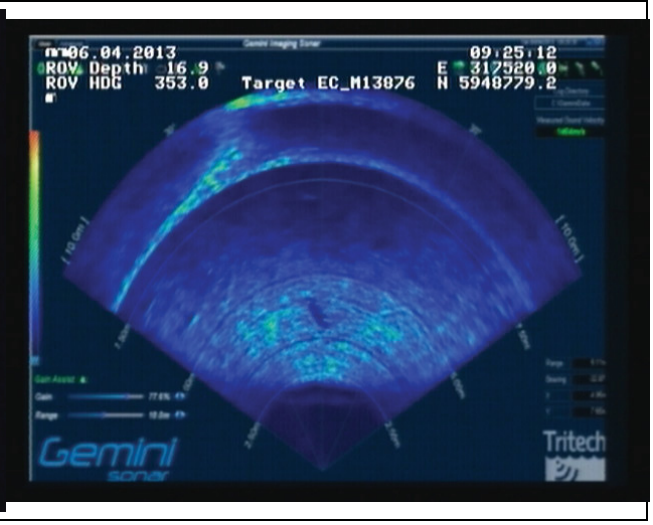
	
Actions	Reported through ORPAD. UXO requirements take precedence.
ORPAD ID	EON_10166

Humber Gateway UXO Survey Archaeological Assessment			EC_M12834
Assessor	Wessex Archaeology	**Survey Date**	31/07/2013
Assessment Date	November 2013	**Survey Company**	Ramora Global Ltd.
Expected Position	311571.80 5947876.42	**As Found Position**	311570.71 5957876.42
Offshore Comments	Anchor – 2m x 2m x 250mm		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver only			
WA Site ID	72500	**Geophysics Discrimination**	A2
WA Position	311571.8 5947878	**Geophysical Details**	93.8nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Possible admiralty pattern anchor.		
Image(s)			
			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to		

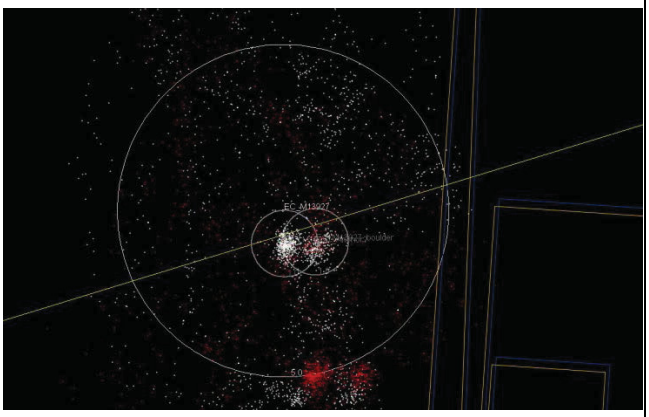
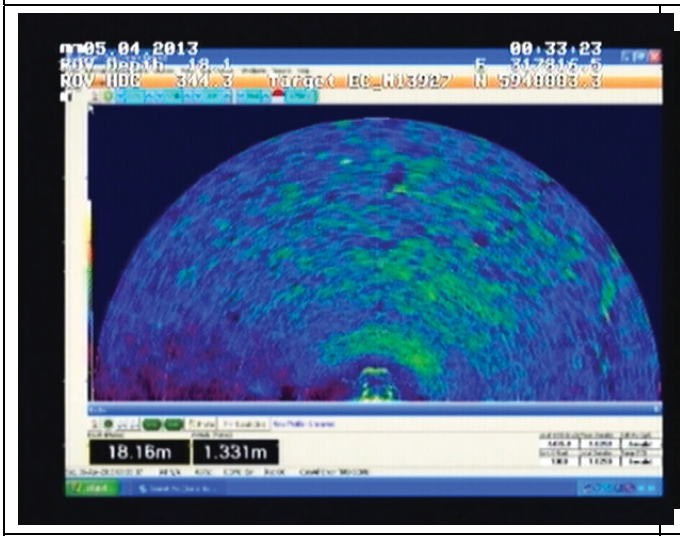
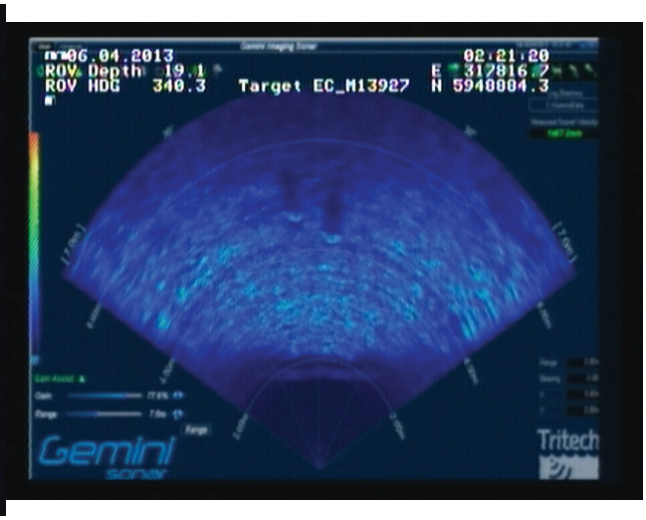
	seabed provide new position for ORPAD report.
ORPAD ID	EON_10167

Humber Gateway UXO Survey Archaeological Assessment			EC_M13155
Assessor	Wessex Archaeology	**Survey Date**	15/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	313719 5947808	**As Found Position**	313719 5947805
Offshore Comments	Possible anchor approximately 2 metres in length. Visual large shackle and chain links.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72523	**Geophysics Discrimination**	A2
WA Position	313719 5947808	**Geophysical Details**	233.4nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Possible anchor and chain.		
Image(s)			
			

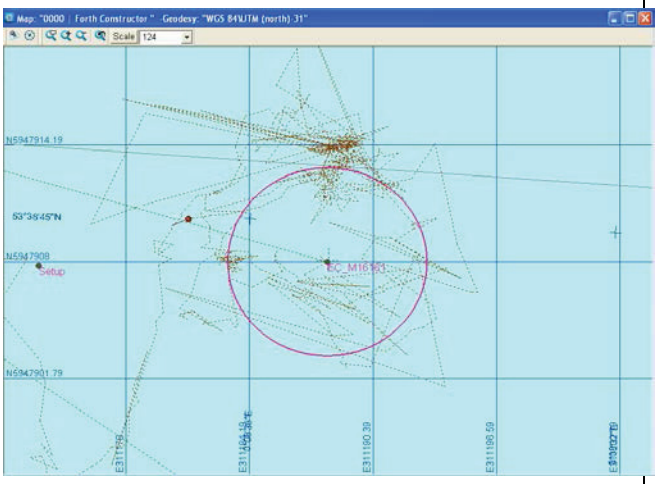
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10168

Humber Gateway UXO Survey Archaeological Assessment			EC_M13876
Assessor	Wessex Archaeology	**Survey Date**	A1 - 06/04/2013 B1 - 11/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 317520 5948783	**As Found Position**	A1 - 317519 5948783 B1 - 317520 5948781
Offshore Comments	A1 - No visibility, ID from sonar 750 x 220mm, revisit required. B1 - Possible shell, length of taper 400-500mm, length OA 850mm, diameter 250mm.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
			
WA Site ID	72558	**Geophysics Discrimination**	A2
WA Position	317519.6 5948783	**Geophysical Details**	111.3nT
Geophysics Description	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Unknown but may be historic UXO.		
Image(s)			
			

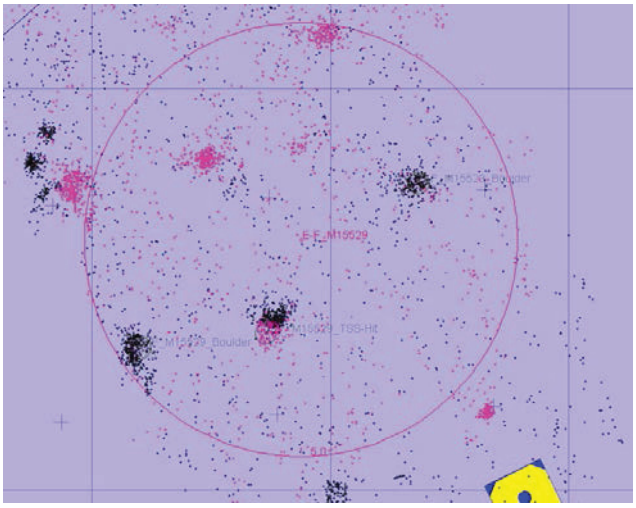
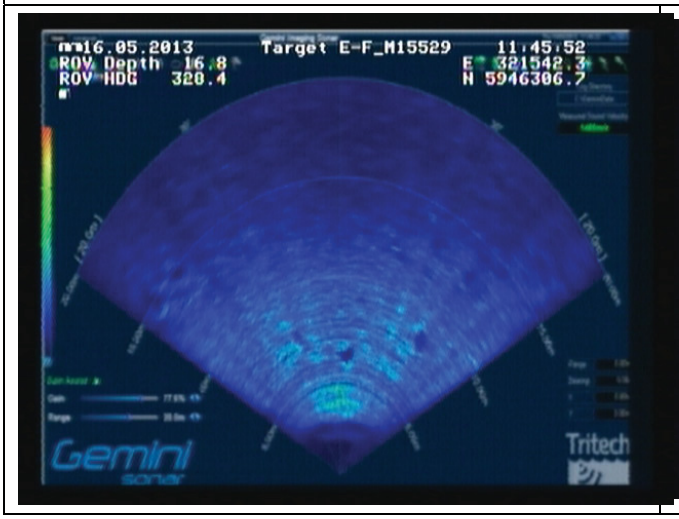
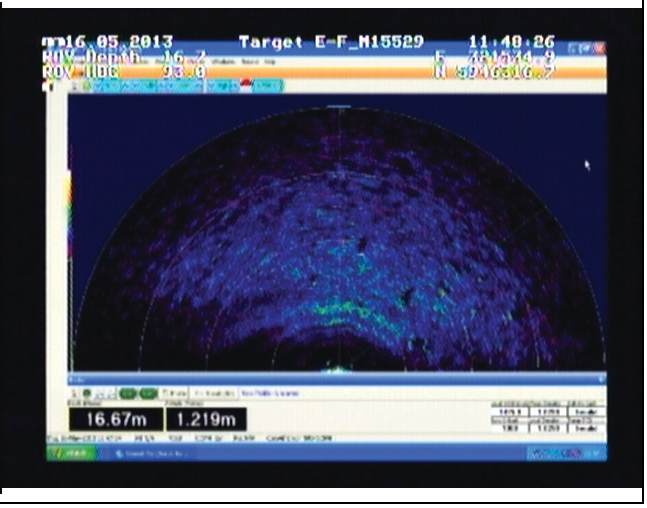
Actions	Reported through ORPAD. UXO requirements take precedence.
ORPAD ID	EON_10169

Humber Gateway UXO Survey Archaeological Assessment			EC_M13927
Assessor	Wessex Archaeology	**Survey Date**	06/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	317815 5948890	**As Found Position**	317814 5948889
Offshore Comments	TSS hit unidentified metallic object, possibly an anchor.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72559	**Geophysics Discrimination**	A2
WA Position	317814.6 5948890	**Geophysical Details**	245.1nT
Geophysics Description	Large magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Possible mine bases.		
Image(s)			
			

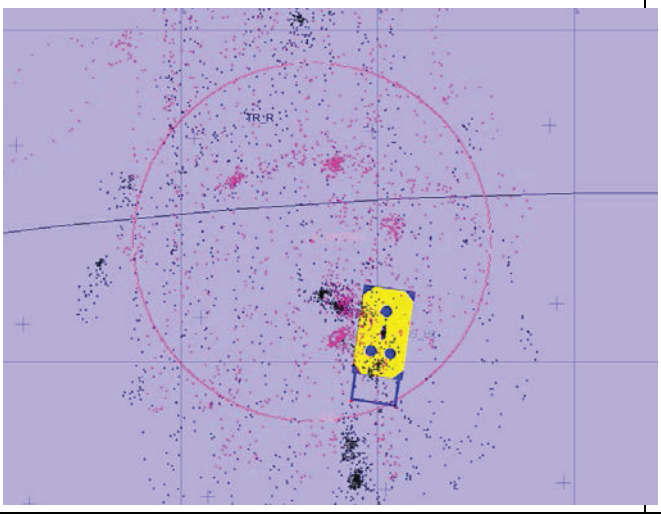
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10170

Humber Gateway UXO Survey Archaeological Assessment			EC_M16181
Assessor	Wessex Archaeology	**Survey Date**	07/07/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	311188 5947908	**As Found Position**	311172 5947939
Offshore Comments	Large anchor, intact 2m x 2m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
Diver only			
WA Site ID	73204	**Geophysics Discrimination**	A2
WA Position	311188 5947908	**Geophysical Details**	167.2nT
Geophysics Description	Medium asymmetric dipole. No associated sidescan sonar targets. Possible buried ferrous material.		
Archaeological Assessment	Possible anchor or debris.		
Image(s)			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to		

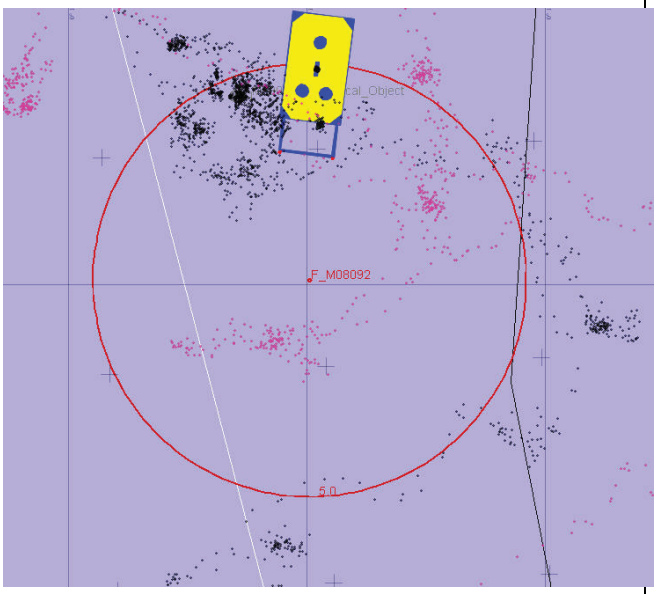
	seabed provide new position for ORPAD report.
ORPAD ID	EON_10171

Humber Gateway UXO Survey Archaeological Assessment			E-F_M15529
Assessor	Wessex Archaeology	**Survey Date**	16/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321540.70 5946314.00	**As Found Position**	321540 5946312
Offshore Comments	TSS contact on hollow pyramid shaped metal debris, approx. 0.5mx 0.2mx 0.2m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	73061	**Geophysics Discrimination**	A2
WA Position	321540.7 5946314	**Geophysical Details**	112nT
Geophysics Description	Large dipole anomaly, anomaly present on three consecutive lines. This target has no associated mag or sidescan sonar targets and could be buried ferrous debris material.		
Archaeological Assessment	Unknown debris, may be of maritime origin.		
Image(s)			
			

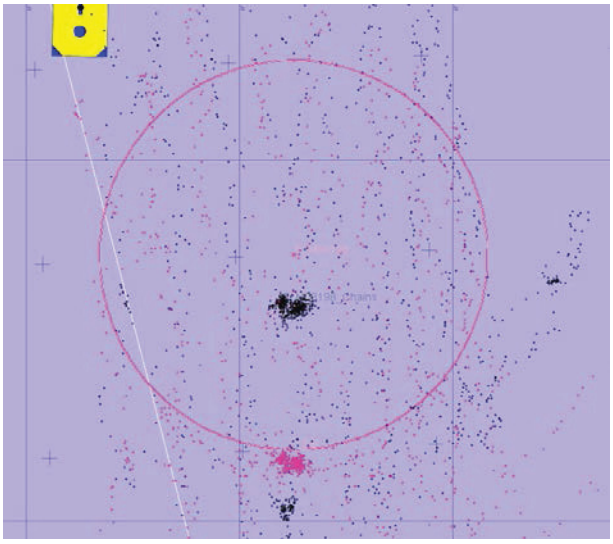
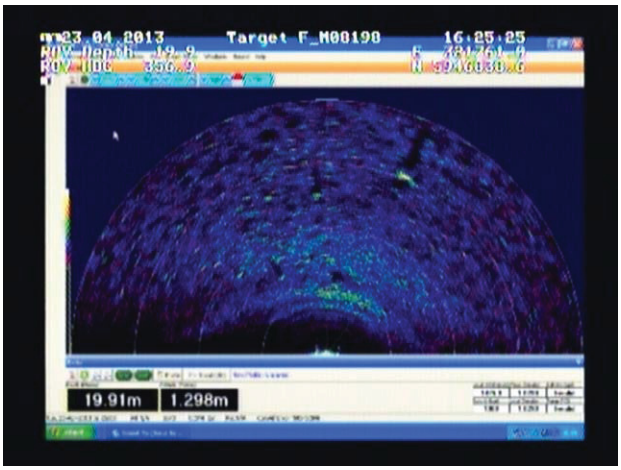
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10172

Humber Gateway UXO Survey Archaeological Assessment			F_M07944
Assessor	Wessex Archaeology	**Survey Date**	20/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321628.20 5947487.00	**As Found Position**	321629 5947484
Offshore Comments	Medium T55 Contact, possible piece of wooden beam with bolts.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71876	**Geophysics Discrimination**	A2
WA Position	321628.2 5947487	**Geophysical Details**	89nT
Geophysics Description	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Possible wreck material.		
Image(s)			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and		

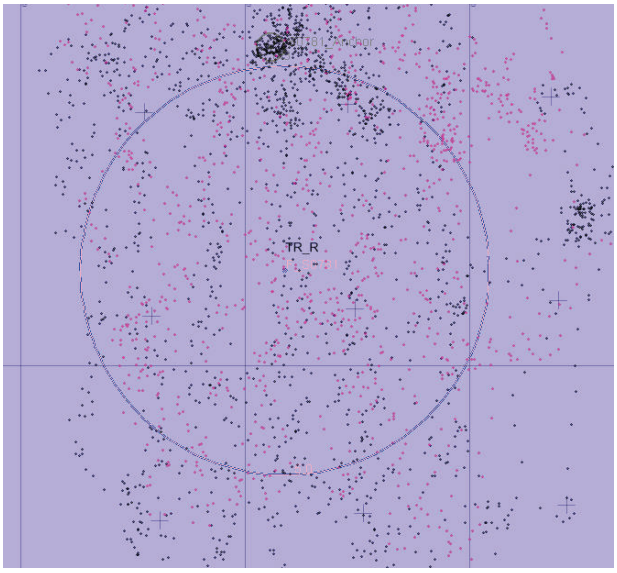
	seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10173

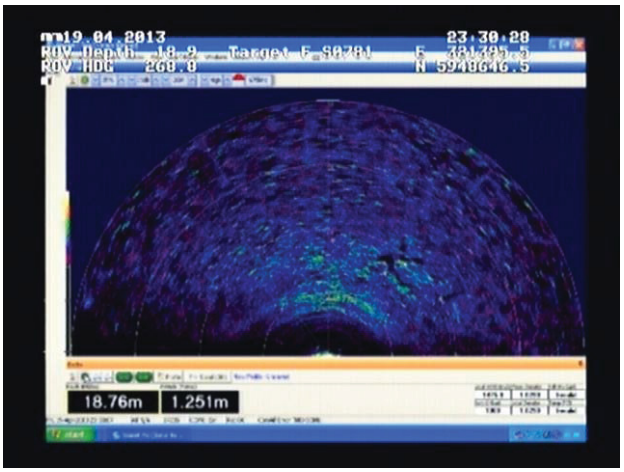
Humber Gateway UXO Survey Archaeological Assessment			F_M08092
Assessor	Wessex Archaeology	**Survey Date**	23/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321564.70 5947217.00	**As Found Position**	321563 5947221
Offshore Comments	TSS Contact - Cylindrical projectile confirmed as UXO by Bactec. L0.5m x W0.15m sitting proud of seabed.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71889	**Geophysics Discrimination**	A2
WA Position	321564.7 5947217	**Geophysical Details**	83nT
Geophysics Description	Medium magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Artillery shell, probably solid shot. Swaged obturating ring at rear shows the shell has been fired from an artillery piece (naval or field).		
Image(s)			

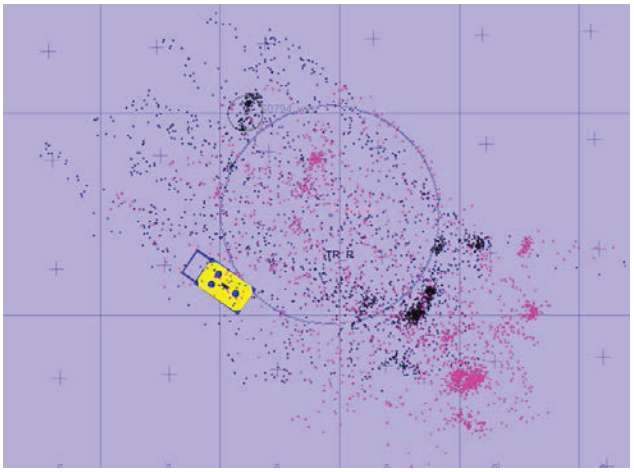
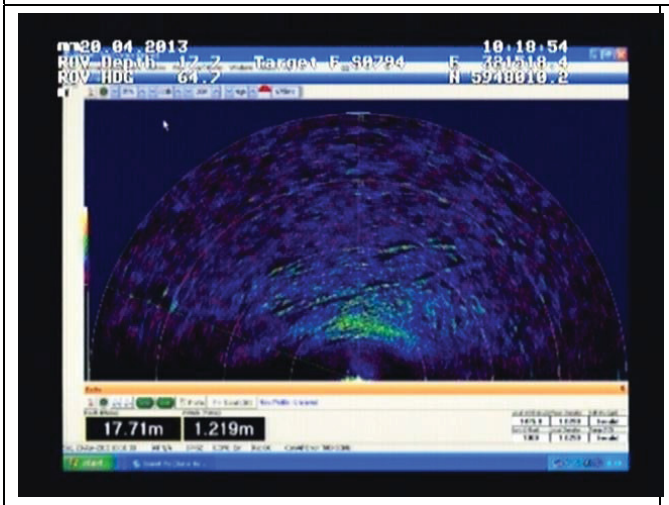
Actions	Reported through ORPAD. UXO requirements take precedence.
ORPAD ID	EON_10174

Humber Gateway UXO Survey Archaeological Assessment			F_M08198
Assessor	Wessex Archaeology	**Survey Date**	23/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321761.50 5946845.00	**As Found Position**	321761 5946844
Offshore Comments	Small amount of chain.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71903	**Geophysics Discrimination**	A2
WA Position	321761.5 5946845	**Geophysical Details**	186nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Ferrous chain links, may be attached to a buried anchor.		
Image(s)			
			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and		

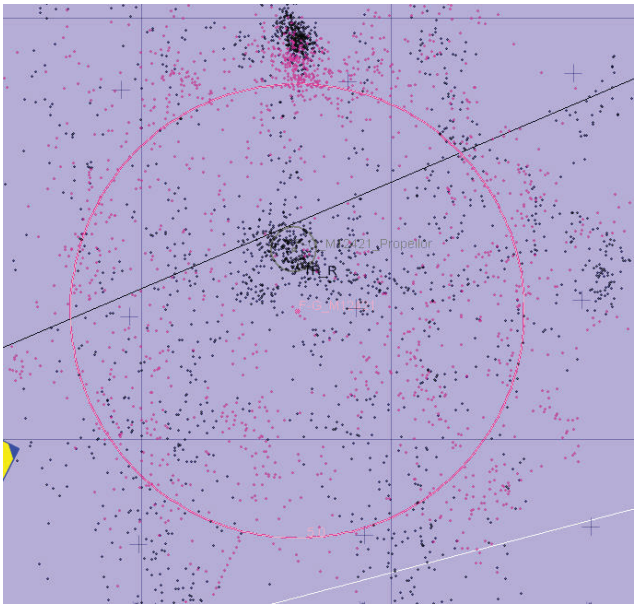
	seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10175

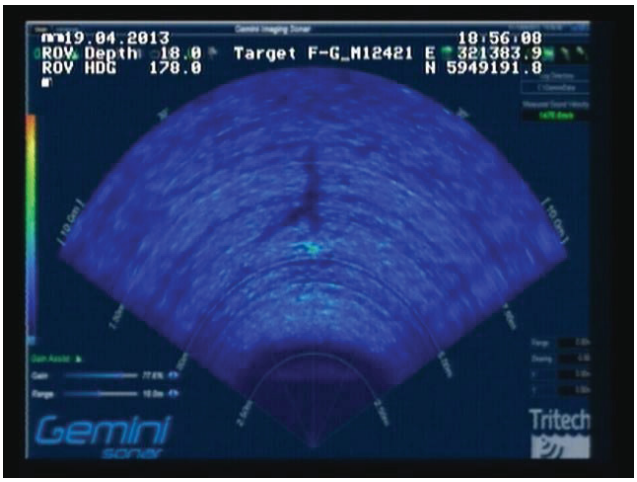
Humber Gateway UXO Survey Archaeological Assessment			**F_S0781**
Assessor	Wessex Archaeology	**Survey Date**	19/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321388.30 5948646.00	**As Found Position**	321388 5948651
Offshore Comments	Large anchor L3.8m x W1.9m found at the edge of target area.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71838	**Geophysics Discrimination**	A1
WA Position	321388.3 5948646	**Geophysical Details**	530nT
Geophysics Description	Two short, linear dark reflectors with small shadows lying at an angle to each other within an area of coarse seabed sediment. Associated with a large magnetic anomaly. Probable ferrous debris. It is unlikely that the identified objects solely account for the large magnetic anomaly, suggesting further buried ferrous debris is located within the vicinity.		
Archaeological Assessment	Large anchor, probably admiralty pattern 19th century.		

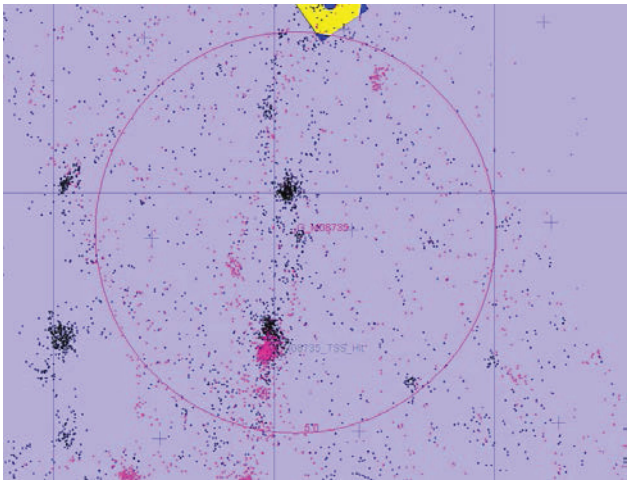
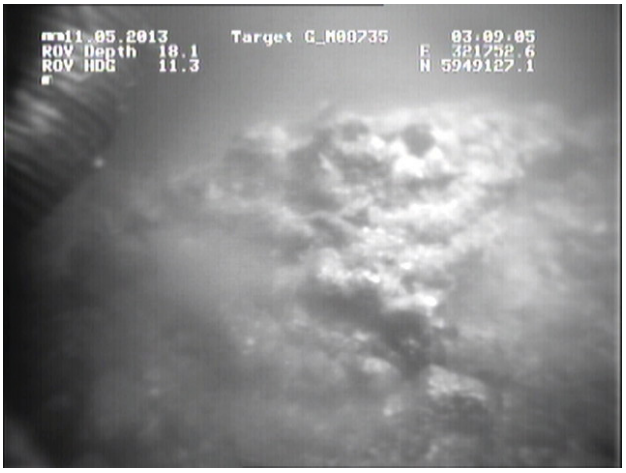
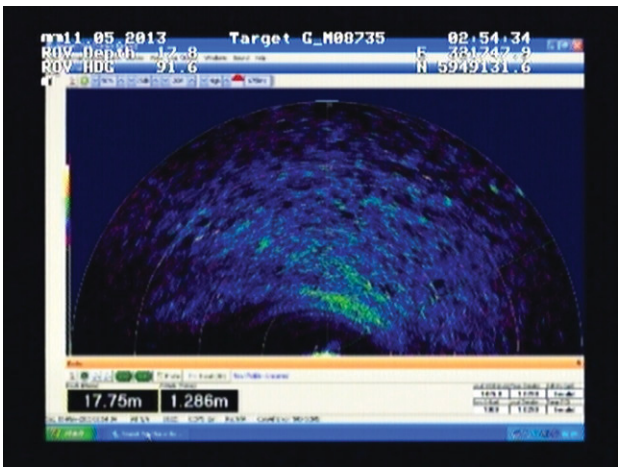
Image(s)	
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10176

Humber Gateway UXO Survey Archaeological Assessment			F_S0794
Assessor	Wessex Archaeology	**Survey Date**	20/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321522.70 5948012.00	**As Found Position**	-
Offshore Comments	Anchor wire all around target area. Same wire as found and visually followed from F_M07685.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	71858	**Geophysics Discrimination**	A2
WA Position	321522.7 5948012	**Geophysical Details**	62nT
Geophysics Description	Curvilinear dark reflector with small shadow associated with a medium magnetic anomaly, identified in an area of coarse seabed sediment. Possible length of rope or chain.		
Archaeological Assessment	Possible WWI mine base.		
Image(s)			
			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and		

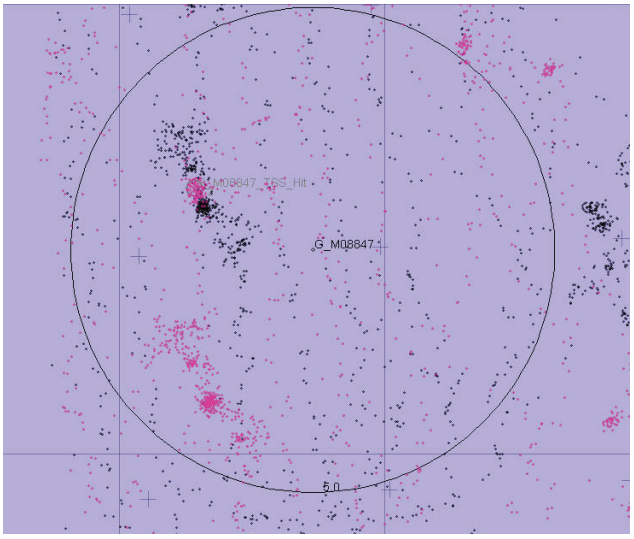
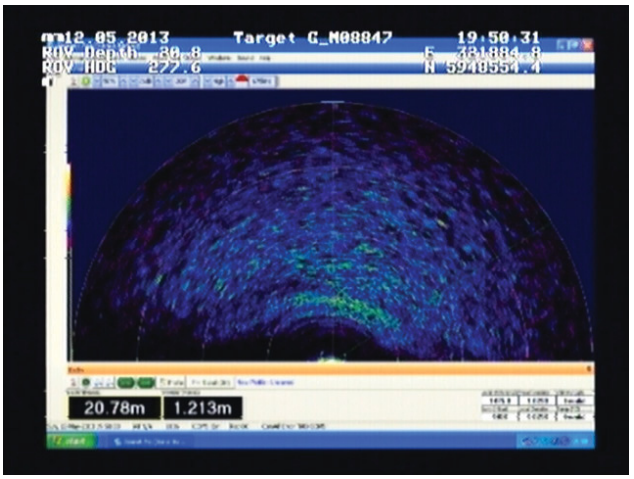
	seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10177

Humber Gateway UXO Survey Archaeological Assessment			F-G_M12421
Assessor	Wessex Archaeology	**Survey Date**	19/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321383.70 5949185.00	**As Found Position**	321384 5949186
Offshore Comments	Aircraft propeller, one blade missing, one partially buried, one fully exposed. Blade approx 1m long - gearing attached.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72624	**Geophysics Discrimination**	A1
WA Position	321383.5 5949185	**Geophysical Details**	1277.1nT
Geophysics Description	Very large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	'Hamilton Standard' type propeller from a radial engined British aircraft, evident from the epi-cyclic gearing observed. This identification discounts in-line engined aircraft (such as Spitfires or Mosquitos) and is likely to have come from either an Armstrong Whitworth A.W.38 Whitley; a Handley Page H.P.52 Hampden; or a Vickers Wellington.		

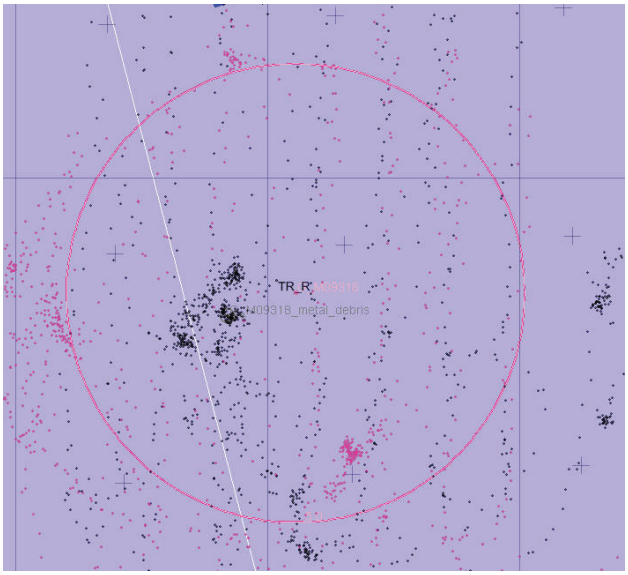
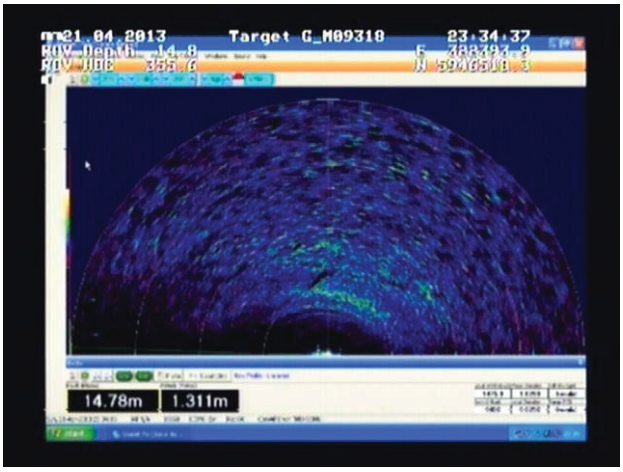
Image(s)	
	
Actions	TEZ, ROGE ROV survey of anomalies and 20m radius sweep
ORPAD ID	TBC

Humber Gateway UXO Survey Archaeological Assessment			G_M08735
Assessor	Wessex Archaeology	**Survey Date**	11/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321753.60 5949130.00	**As Found Position**	321753 5949127
Offshore Comments	TSS hit, possible deck plate.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72030	**Geophysics Discrimination**	A2
WA Position	321753.6 5949130	**Geophysical Details**	88nT
Geophysics Description	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Ferrous material of unknown origin.		
Image(s)			
			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to		

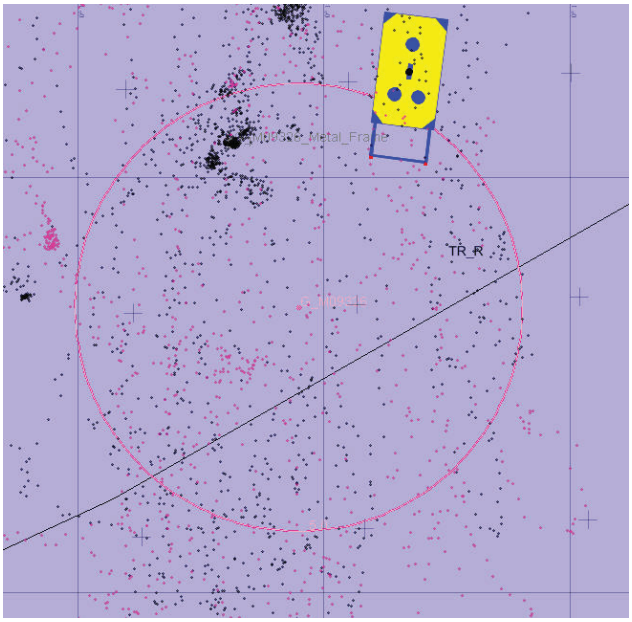
	seabed provide new position for ORPAD report.
ORPAD ID	EON_10178

Humber Gateway UXO Survey Archaeological Assessment			G_M08847
Assessor	Wessex Archaeology	**Survey Date**	12/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	321878.60 5948555.00	**As Found Position**	321876 5948556
Offshore Comments	Anchor L2m x W1m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72043	**Geophysics Discrimination**	A2
WA Position	321878.6 5948555	**Geophysical Details**	551nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Possible anchor.		
Image(s)			
			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and		

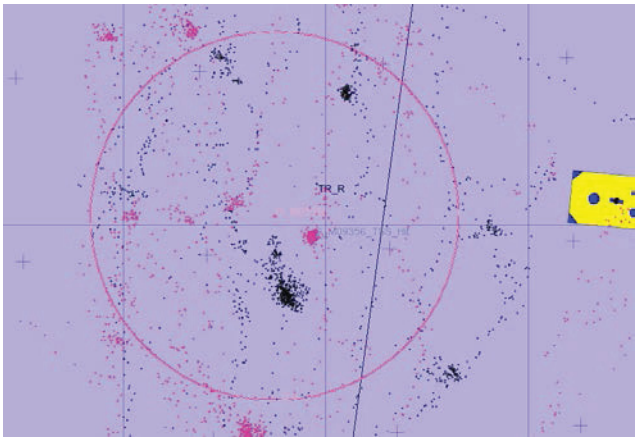
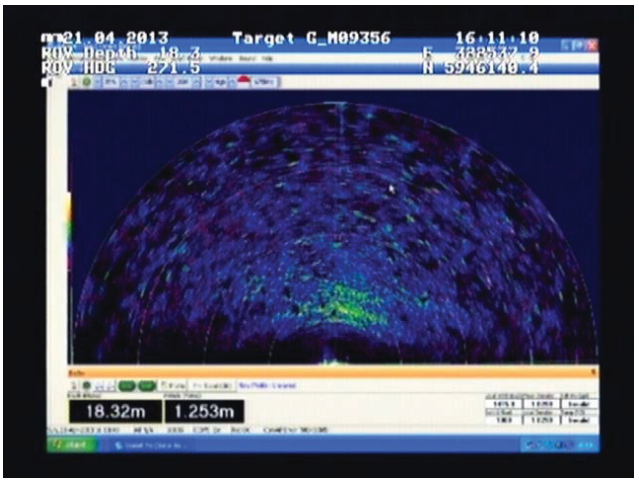
	seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10179

Humber Gateway UXO Survey Archaeological Assessment			G_M09318
Assessor	Wessex Archaeology	**Survey Date**	21/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322393.90 5946524.00	**As Found Position**	322392 5946524
Offshore Comments	TSS contact - Possibly a home-made anchor approx. 2m long.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72139	**Geophysics Discrimination**	A2
WA Position	322393.9 5946524	**Geophysical Details**	474nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Possible anchor or debris.		
Image(s)			
			

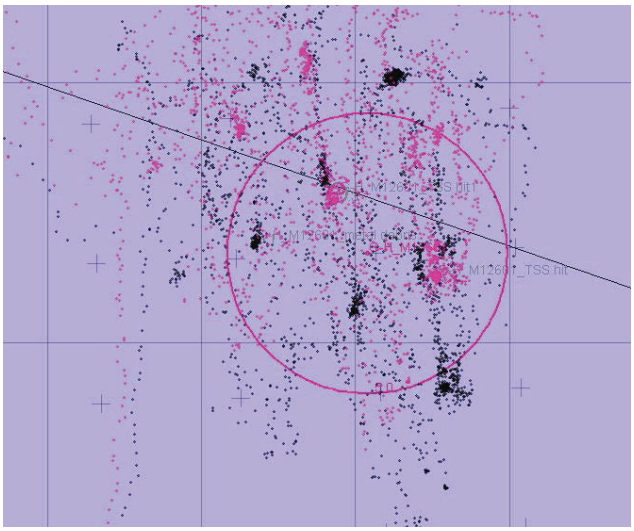
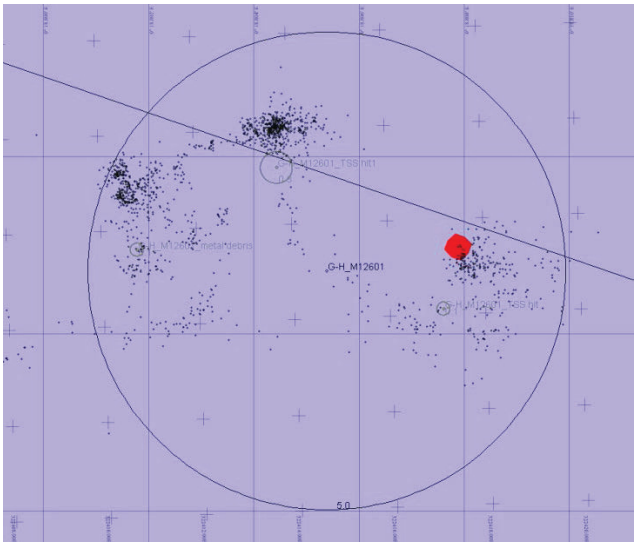
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10180

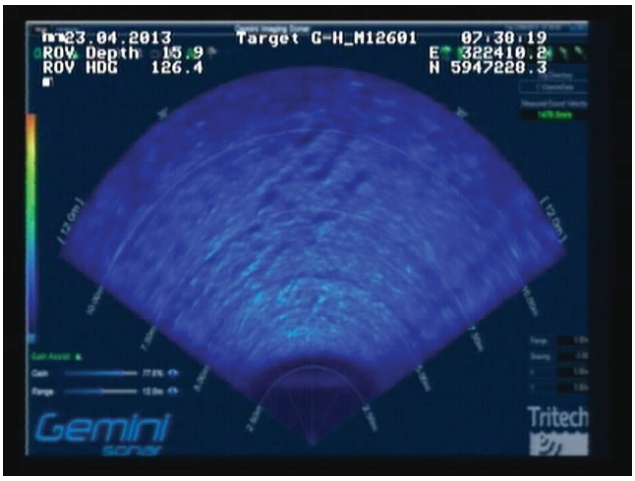
Humber Gateway UXO Survey Archaeological Assessment			G_M09326
Assessor	Wessex Archaeology	**Survey Date**	21/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322413.70 5946495.00	**As Found Position**	322412 5946499
Offshore Comments	Metal Frame - L1m x W 1m x H1.2m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72141	**Geophysics Discrimination**	A2
WA Position	322413.7 5946495	**Geophysical Details**	87nT
Geophysics Description	Medium magnetic anomaly without an associated sidescan sonar contact. Possible piece of buried ferrous debris.		
Archaeological Assessment	Debris, probable ferrous framing and possible wreck material.		

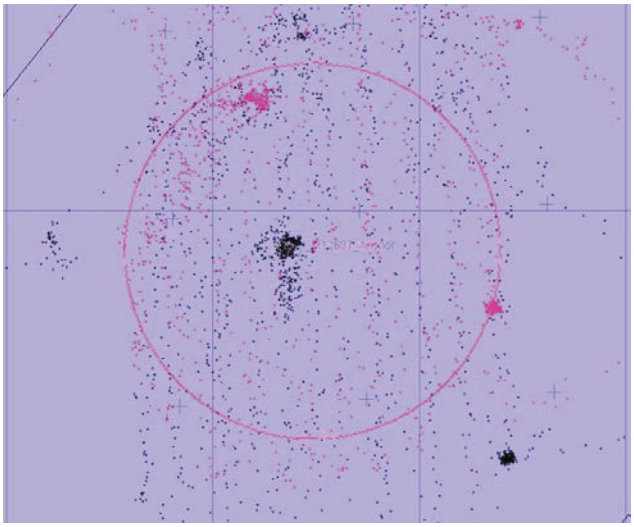
Image(s)	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10181

Humber Gateway UXO Survey Archaeological Assessment			G_M09356
Assessor	Wessex Archaeology	**Survey Date**	21/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322531.90 5946141.00	**As Found Position**	322533 5946140
Offshore Comments	Anchor found, approx. L1.0m x W0.4m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72151	**Geophysics Discrimination**	A2
WA Position	322531.9 5946141	**Geophysical Details**	132nT
Geophysics Description	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Probable tubular framing, may be wreck related.		
Image(s)			
			
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.		

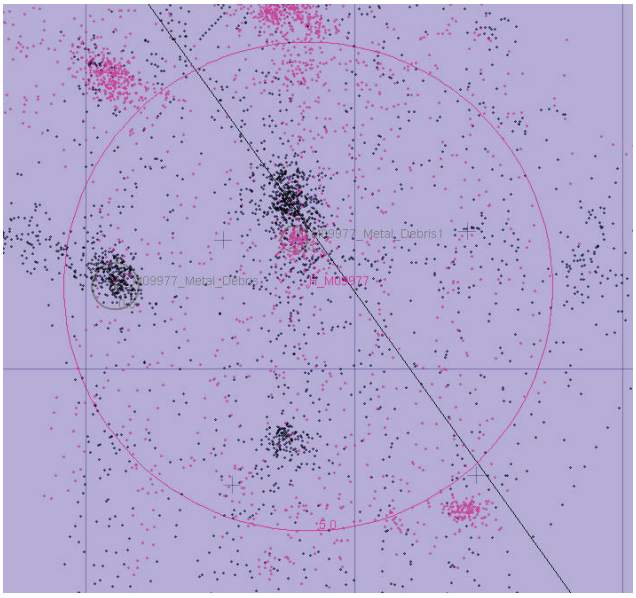
ORPAD ID	EON_10182

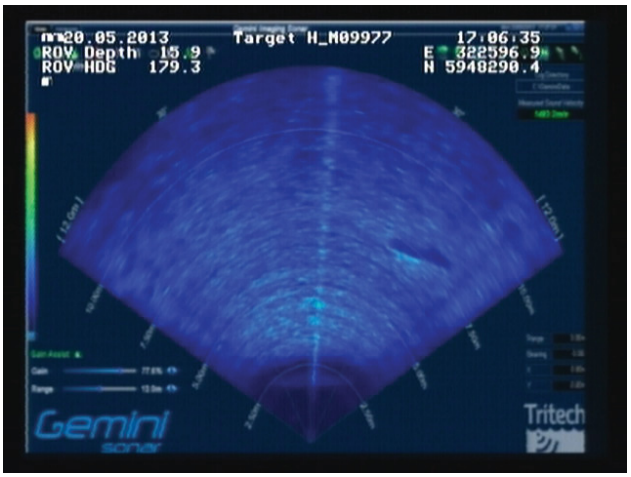
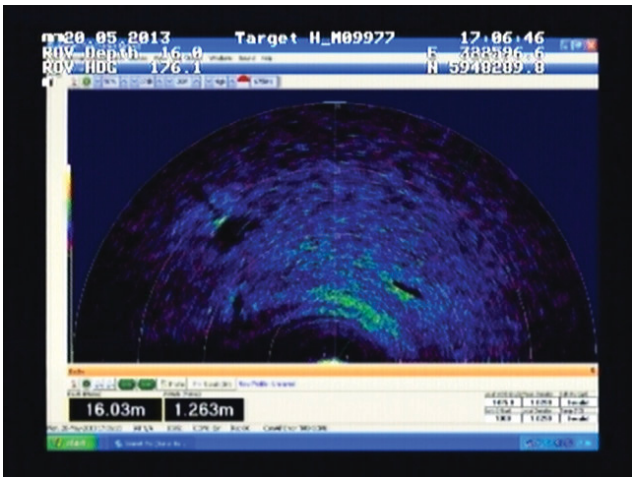
Humber Gateway UXO Survey Archaeological Assessment			G-H_M12601
Assessor	Wessex Archaeology	**Survey Date**	A1 - 23/04/2013 B1 - 01/06/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 322414.70 5947225.00	**As Found Position**	A1 - 322417 5947224 B1 - 322414 5947227
Offshore Comments	A1 - 2 x Large TSS hits, no visual - no ID. B1 - Metallic debris, triangular base - L 1m x W1m x H0.5m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
			
WA Site ID	72626	**Geophysics Discrimination**	A2
WA Position	322414.7 5947225	**Geophysical Details**	449.7nT
Geophysics Description	Large magnetic anomaly without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Debris, may be wreck related.		

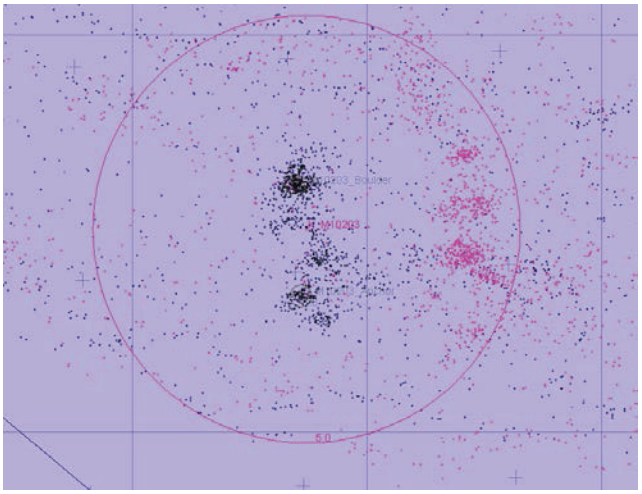
Image(s)	
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10183

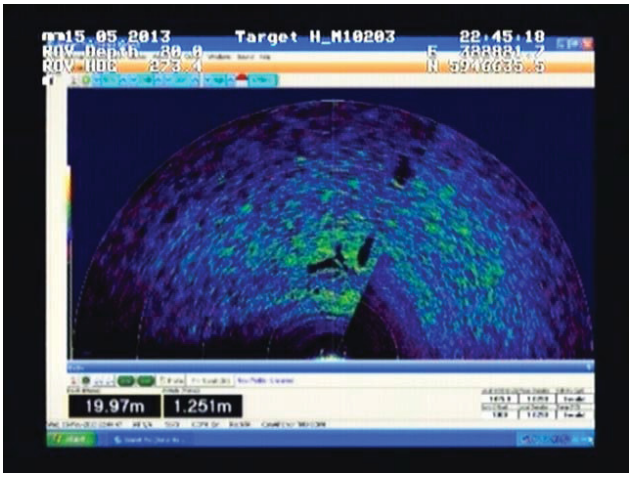
Humber Gateway UXO Survey Archaeological Assessment			G-H_M12687
Assessor	Wessex Archaeology	**Survey Date**	21/04/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322643.70 5946219.00	**As Found Position**	322643 5946219
Offshore Comments	Anchor found - approx. L2.0m x W0.5m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72627	**Geophysics Discrimination**	A2
WA Position	322643.7 5946219	**Geophysical Details**	281.1nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Possible admiralty longshank anchor, 18th century.		
Image(s)			

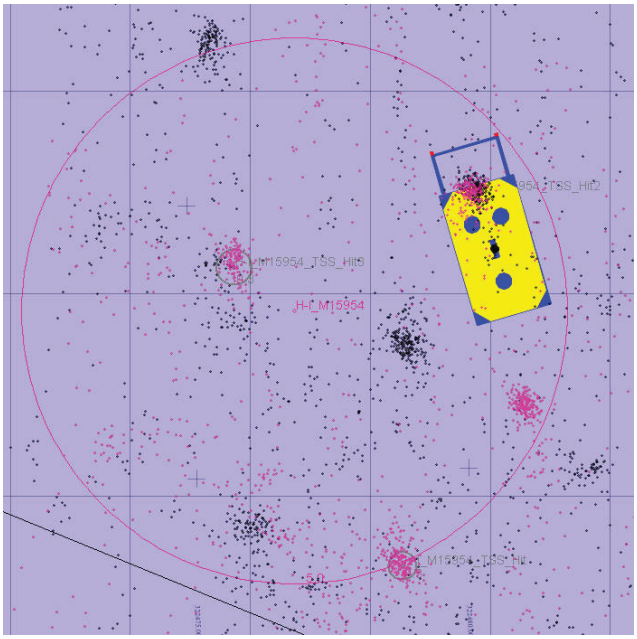
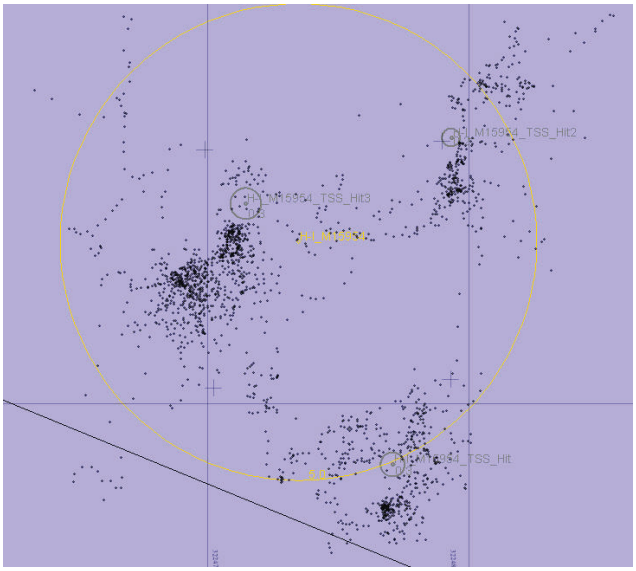
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10184

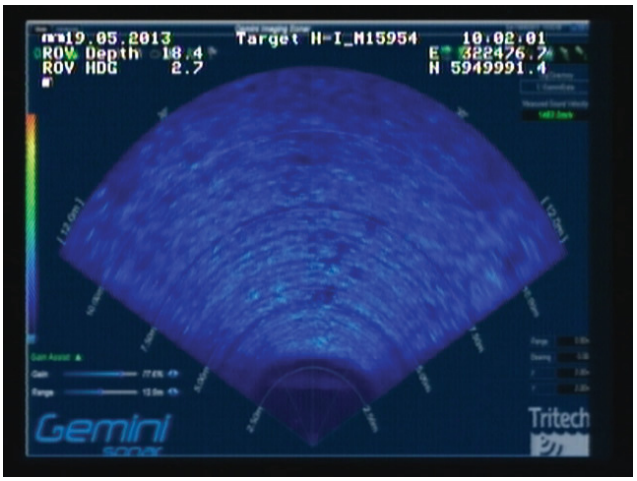
Humber Gateway UXO Survey Archaeological Assessment			H_M09977
Assessor	Wessex Archaeology	**Survey Date**	20/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322596.70 5948284.00	**As Found Position**	322596 5948285
Offshore Comments	TSS contact - no visual - no ID. TSS contact - metal debris. Extends for 2-3m to outside of target area.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72253	**Geophysics Discrimination**	A2
WA Position	322596.7 5948284	**Geophysical Details**	510nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Ferrous debris, may be wreck related. Further material may be buried.		

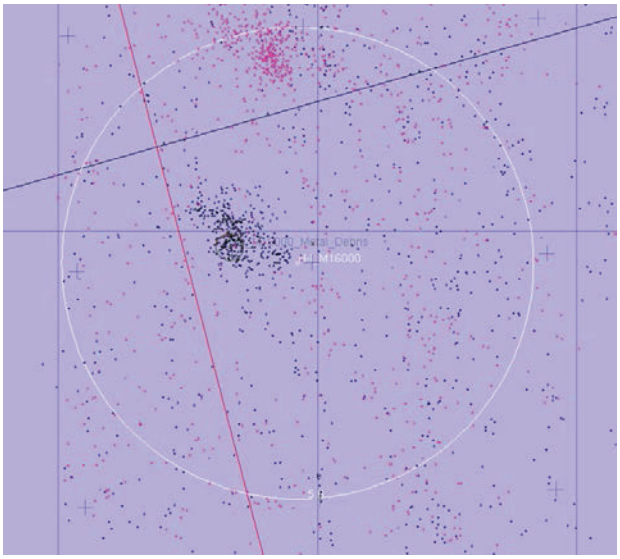
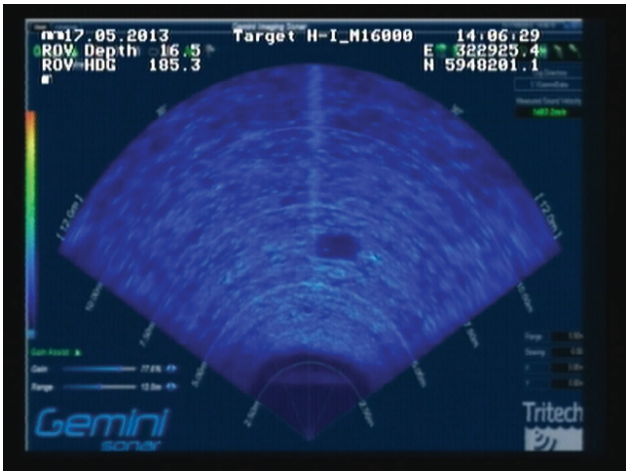
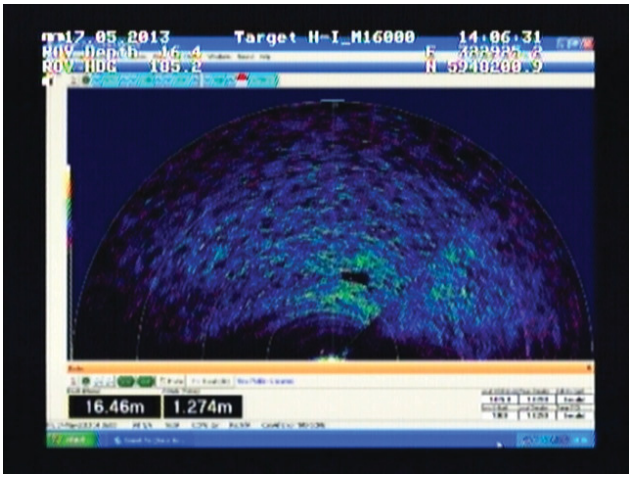
Image(s)	
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10185

Humber Gateway UXO Survey Archaeological Assessment			H_M10203
Assessor	Wessex Archaeology	**Survey Date**	16/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322815.30 5946636.00	**As Found Position**	322815 5946637
Offshore Comments	Approx. L0.7mx W0.5mx H0.7m (adjacent: TSS contact on anchor L1.5mx W1.0m).		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72270	**Geophysics Discrimination**	A1
WA Position	322815.3 5946636	**Geophysical Details**	563nT
Geophysics Description	Irregular dark reflector with shadow located within an area of coarse seabed sediment. Associated with a large magnetic anomaly. Possible piece of ferrous debris. The identified object is unlikely to have caused the large magnetic anomaly observed, so the potential remains for further buried ferrous debris to be present within the immediate vicinity.		
Archaeological Assessment	Probable admiralty anchor, 19th century.		

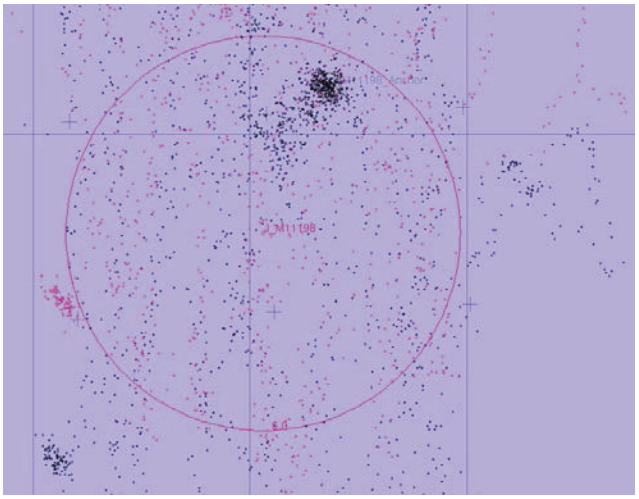
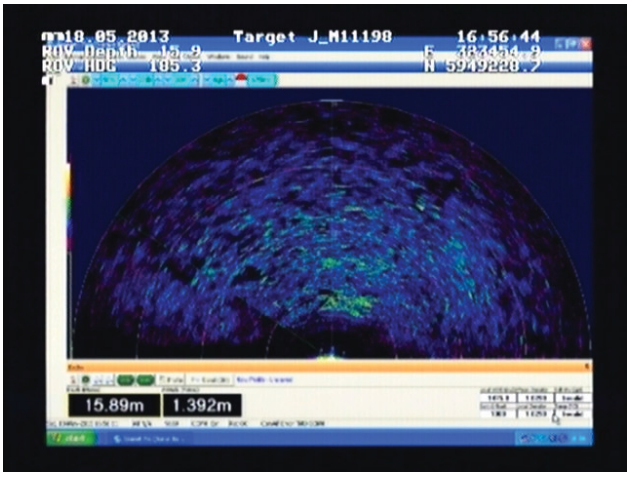
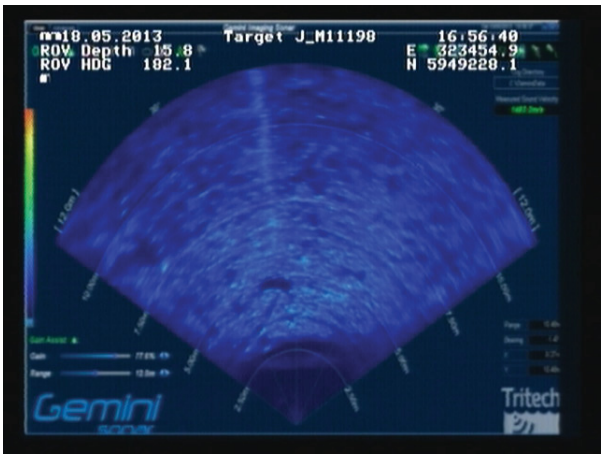
Image(s)	
	
Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10186

Humber Gateway UXO Survey Archaeological Assessment			H-I_M15954
Assessor	Wessex Archaeology	**Survey Date**	A1 - 19/05/2013 B1 - 29/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	A1 & B1 - 322476.90 5949998.00	**As Found Position**	A1 - 322476 5949999 B1 - 322475 5949997
Offshore Comments	A1 - TSS contact - no visual - no ID. B1 - Diver located chain links in four main locations throughout target location. In one location the chain was attached to a metal object 350mm x 400mm (possible anchor/clump weight).		
ROV Trackplot(s)		**Diver Trackplot(s)**	
			
WA Site ID	73088	**Geophysics Discrimination**	A2
WA Position	322476.9 5949998	**Geophysical Details**	72nT
Geophysics Description	Medium sized negative monopole anomaly, present on adjacent survey adjacent survey lines, could be possibly buried ferrous material.		
Archaeological Assessment	Chain link, may be connected to anchor.		

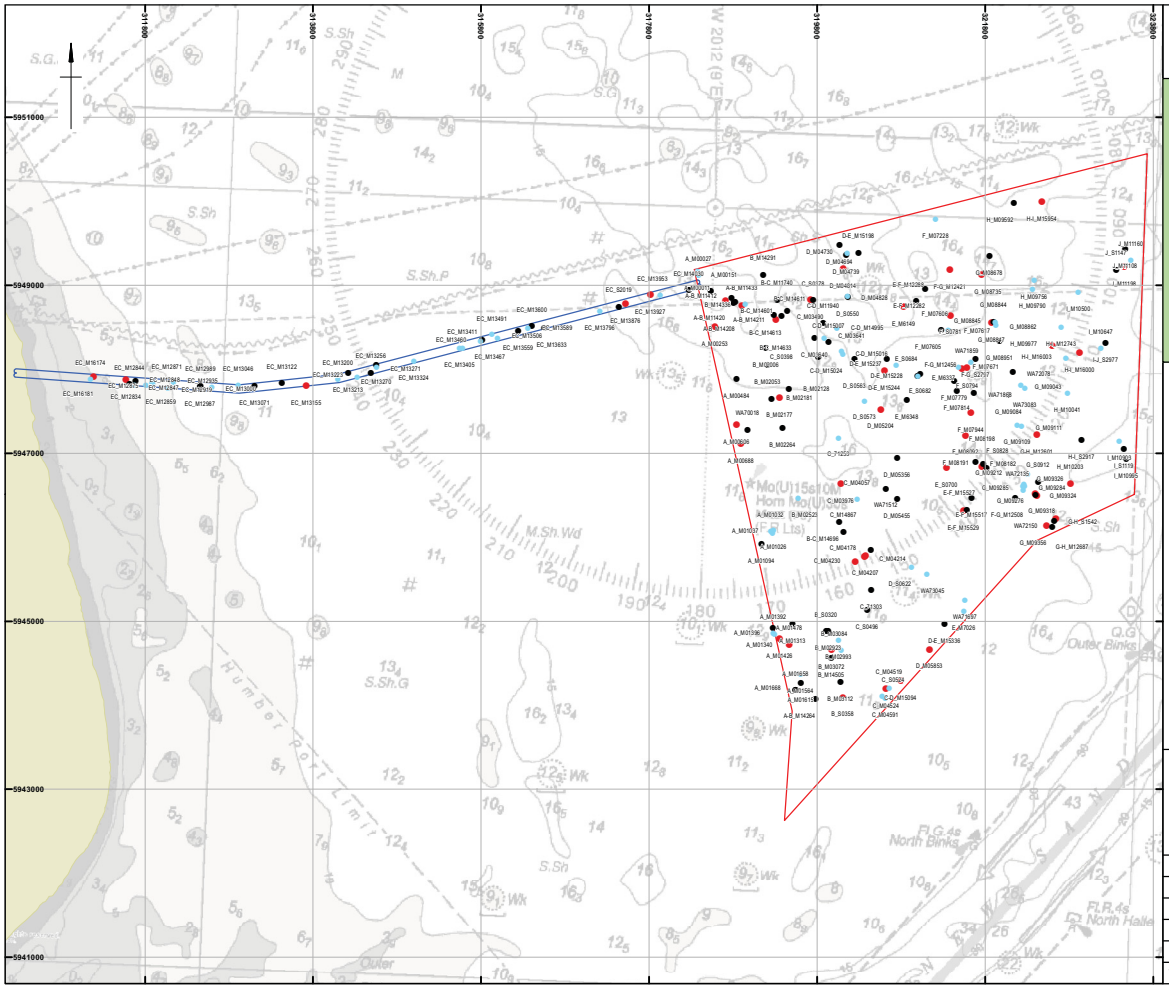
Image(s)	
	
Actions	Reported through ORPAD. No further action required.
ORPAD ID	EON_10187

Humber Gateway UXO Survey Archaeological Assessment			H-I_M16000
Assessor	Wessex Archaeology	**Survey Date**	17/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	322924.70 5948195.00	**As Found Position**	322923 5948195
Offshore Comments	TSS contact - Possibly a girder approx. 1.5-2m long.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	73089	**Geophysics Discrimination**	A2
WA Position	322924.7 5948195	**Geophysical Details**	710nT
Geophysics Description	Extremely large monopolar anomaly, also present on adjacent survey line. No associated sidescan sonar targets and may be possibly buried ferrous material.		
Archaeological Assessment	Probable structural metalwork, may be of maritime origin.		
Image(s)			
			

Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10188

Humber Gateway UXO Survey Archaeological Assessment			J_M11198
Assessor	Wessex Archaeology	**Survey Date**	18/05/2013
Assessment Date	November 2013	**Survey Company**	Red7Marine Offshore Ltd.
Expected Position	323454.80 5949222.00	**As Found Position**	323457 5949226
Offshore Comments	Anchor/ metal debris 2m x 1.5m.		
ROV Trackplot(s)		**Diver Trackplot(s)**	
		ROV only	
WA Site ID	72425	**Geophysics Discrimination**	A2
WA Position	323454.8 5949222	**Geophysical Details**	391nT
Geophysics Description	Large magnetic anomaly identified on more than one survey line, but without an associated sidescan sonar contact. Possible large piece of buried ferrous debris.		
Archaeological Assessment	Probably anchor, possibly a longshank, 18th century.		
Image(s)			
			

Actions	Reported through ORPAD. Retain if recovered, undertake initial assessment and seek advice through ORPAD Implementation Service. If moved or returned to seabed provide new position for ORPAD report.
ORPAD ID	EON_10189



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Revision Number:	0
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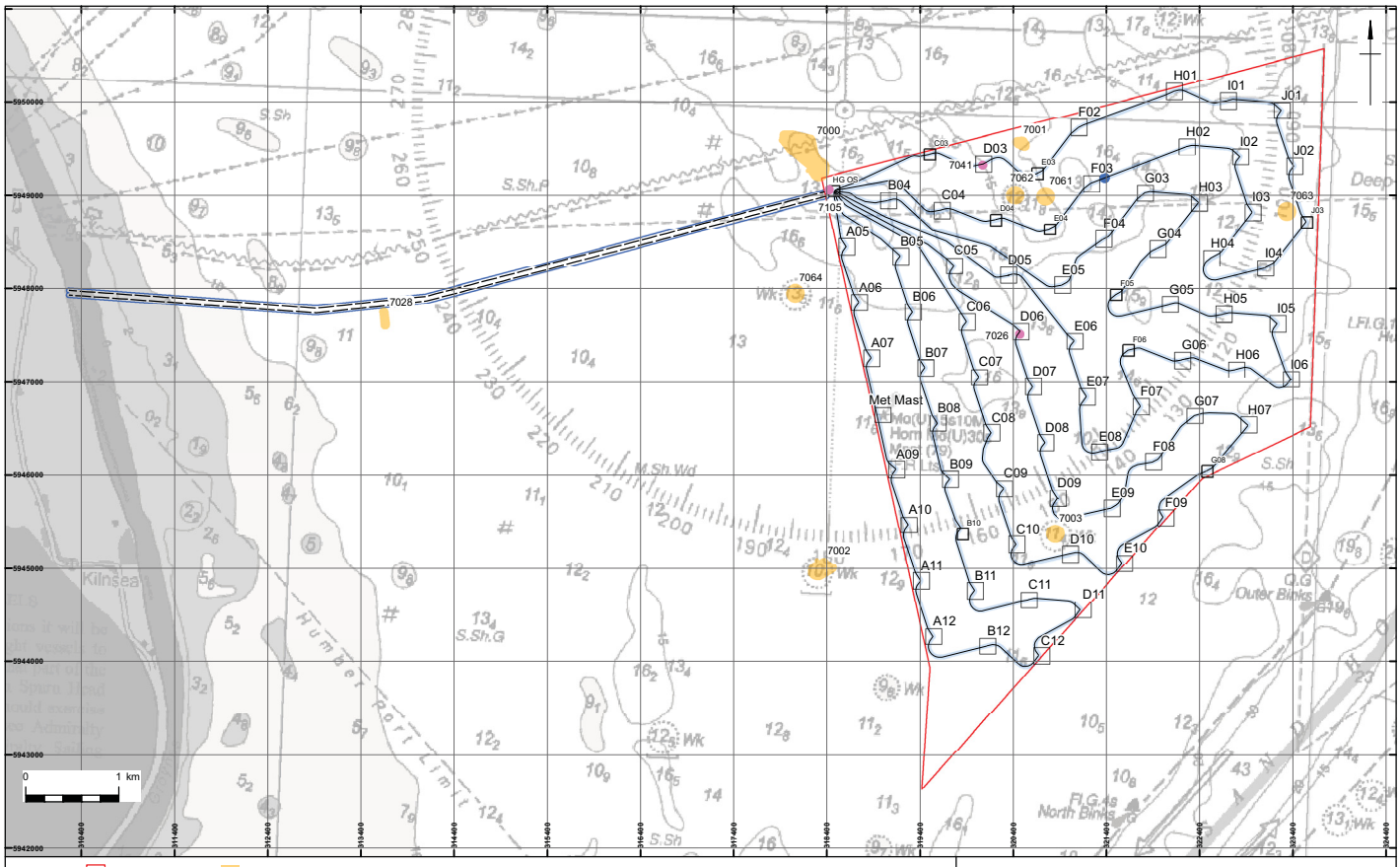
Location of Reviewed Targets

Figure 1



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Archaeological Exclusion Zones and buffer zones, current in 2013

Figure 2

wessex archaeology

salisbury rochester sheffield edinburgh

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