SCARMAX

Based on Oceaneering database and publicly available data the following proposed site has been determined to be a viable location for a SCAR5 Trial and is summarised in the table below.

Trial Location	Coordinates of each corner (1km x 1km square)	
	WGS 84 (°)	
Waypoint	Latitude	Longitude
1	57° 21.1933 N	00° 29.1777 W
2	57° 20.682 N	00° 29.3865 W
3	57° 20.8047 N	00° 30.3278 W
4	57° 21.3157 N	00° 30.1281 W

Table 1: Proposed Trial Location

The criteria used to identify the proposed site included a location within Scottish waters, outside the 12NM limit for territorial waters, an area of 1km by 1km, and suitable soil conditions for the SCAR5 tool. The open source data taken from the National Marine Plan (2015) has been reviewed and suggests that no offshore products, infrastructure, or proposed activities are present in this location. Information from Marine Scotland has also been reviewed and appears to suggest the absence of any products in this site.

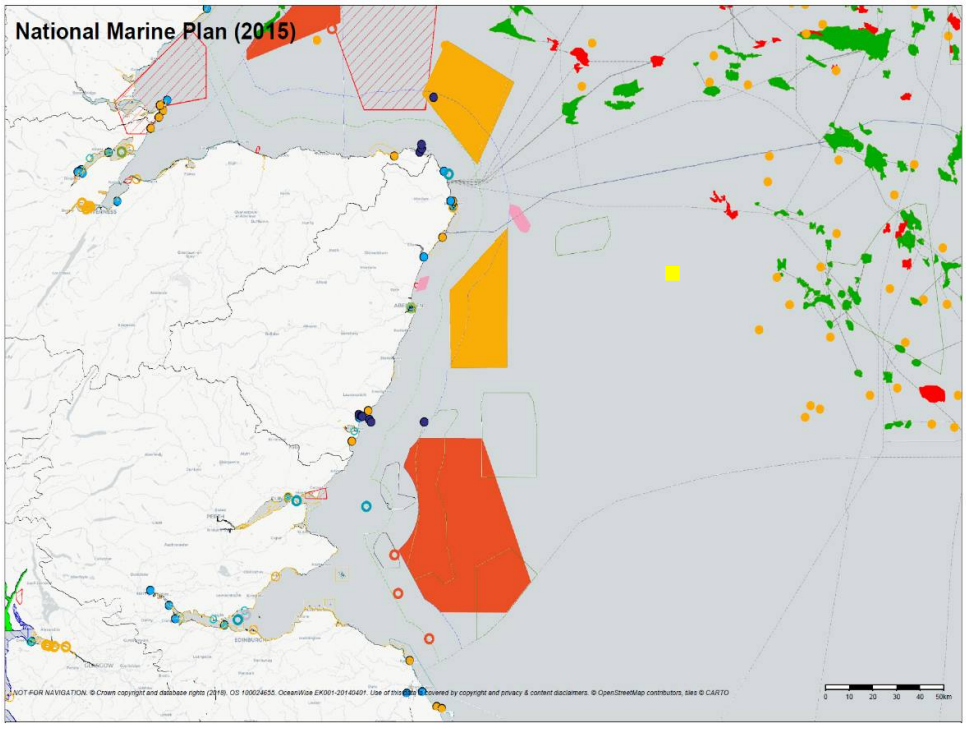

Figure 1: National Marine Plan Map (2015). Yellow box shows approximate location of proposed trial site.

The open source data taken from the National Marine Plan (2015) has been reviewed and suggests that no offshore products, infrastructure, or proposed activities are present in this location. Information from Marine Scotland has also been reviewed and appears to suggest the absence of any products in this site. The proposed site appears to be away from any major oil & gas fields, with the closest being Dauntless and Durward fields as shown on the Offshore Oil & Gas map below (Figure 2).

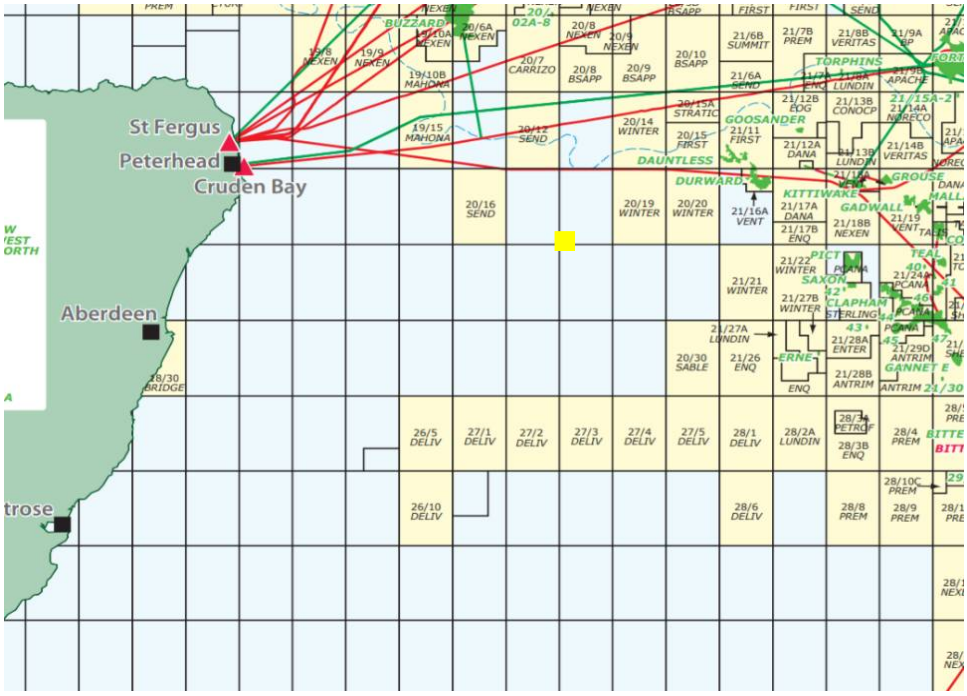

Figure 2: North Sea Offshore Oil & Gas Map, Offshore Magazine, 2013.

Geotechnical Assessment

Oceaneering have conducted a soil assessment using publicly available data and internal database. The following assessment indicates that shallow soil conditions present at the proposed site are ideal for a SCARJet trial.

Surface sediments in this location are described as “marine sediments, Holocene (undifferentiated) – gravelly SAND”.

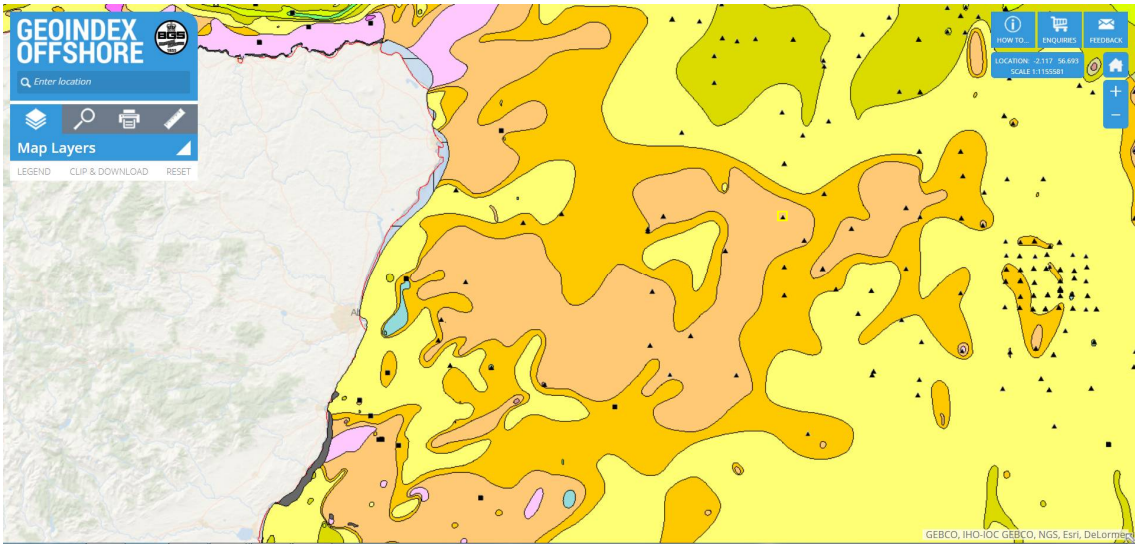

Figure 3: BGS Seabed Sediment map

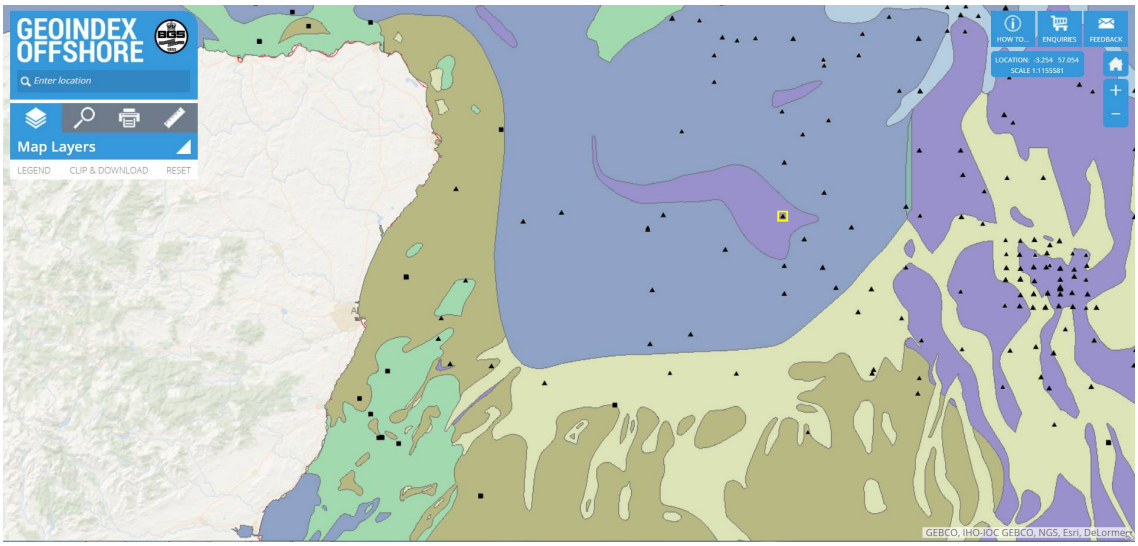

Figure 4: BGS Quaternary Deposits Summary Lithologies Map

BGS Quaternary Deposits Summary Lithologies database describes the soils conditions in the proposed site as "Firm to hard interbedded" which is ideal for the SCAR5 tool. BGS indicates that the thickness of the Quaternary deposits in this section is >50m. 4 vibrocores were taken at a location with latitude of 57.351 and longitude of -0.5, by BGS on sample source cruise 1980/4. Sample name is +57-001/191/VE/1 and activity ID is 2001554. Water depth at the 4 vibrocore locations is 78m.

- Sample 1 (65210585) was sourced from compressive and shear strength readings taken from offshore samples. Shear strength is listed as 124kPa with a compressive strength of 241kPa showing that the shallow soils conditions are expected to be a stiff CLAY.
- Sample 2 (65209301) was sourced from geotechnical measurements taken from offshore samples, primarily collated by BGS Engineering Geologist Dave Long with supplementary additions. Shear strength is listed as 137kPa with a compressive strength of 298kPa showing that the shallow soils conditions are expected to be a stiff CLAY.
- Sample 3 (65205359) was sourced from geotechnical measurements taken from offshore samples, primarily collated by BGS Engineering Geologist Dave Long with supplementary

additions. Shear strength is listed as 124kPa with a compressive strength of 241kPa showing that the shallow soils conditions are expected to be a stiff CLAY.

- Sample 4 (65210586) was sourced from compressive and shear strength readings taken from offshore samples. Shear strength is listed as 137kPa with a compressive strength of 298kPa showing that the shallow soils conditions are expected to be a stiff CLAY.

Publicly available data taken from BGS aligns with information from Oceaneering soil capabilities database which suggests that the shallow soil conditions at the proposed site are ideal for the SCAR5 tool.

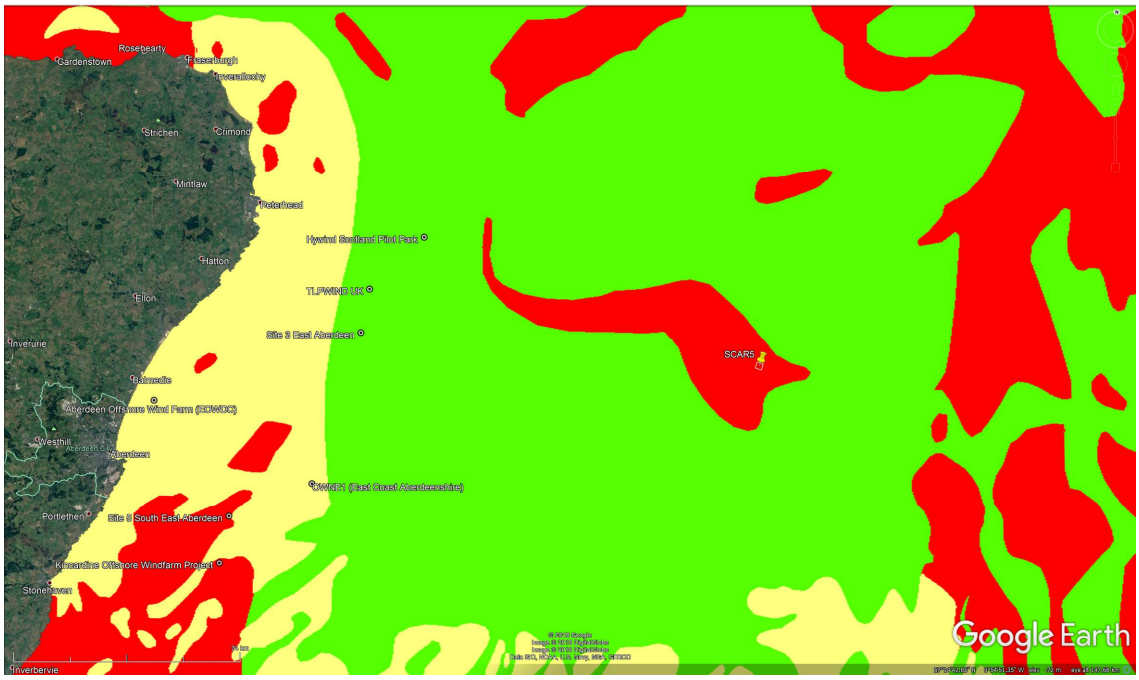

Figure 5: Oceaneering Soil Capabilities database