SCARJet

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

Trial Location	Coordinates of each corner (1km x 1km square)	
	WGS 84 (°)	
Waypoints	**Latitude**	**Longitude**
1	55° 58.8193 N	001° 41.9155 W
2	55° 58.3013 N	001° 41.7415 W
3	55° 58.2032 N	001° 42.6555 W
4	55° 58.7212 N	001° 42.8522 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 jet trenching. The proposed site for SCARJet has also been identified to be out with the boundary for the Seagreen windfarm development area identified on the National Marine Plan map below.

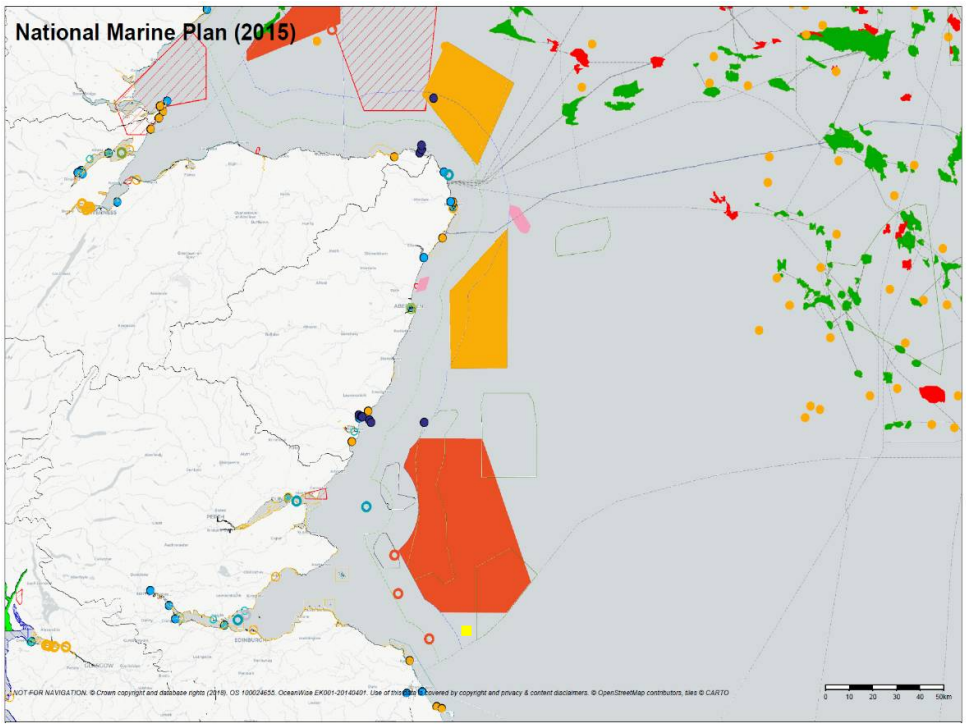

Figure 1: National Marine Plan Map (2015). Yellow box shows approximate location of proposed trial site.

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. No offshore infrastructure is shown in the proposed SCARJet location on the Offshore Oil & Gas map (Figure 2).

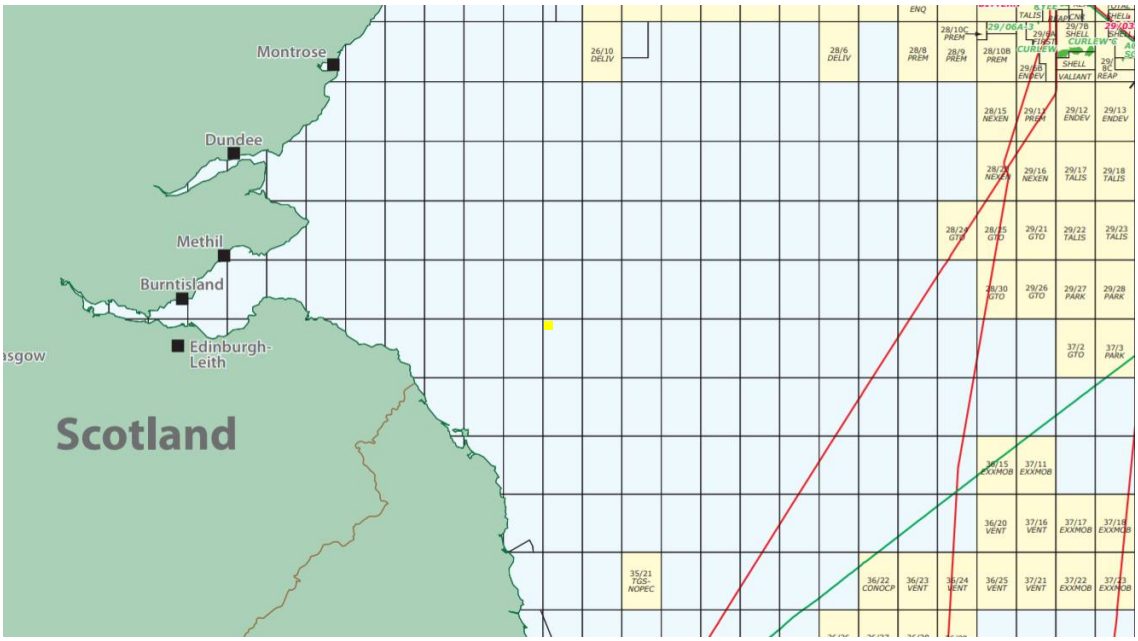

Figure 2: North Sea Offshore Oil & Gas Map, Offshore Magazine, 2013.

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.

BGS describes the surface sediments at the proposed site as "marine sediments, Holocene (undifferentiated) –SAND" (Figure 2).

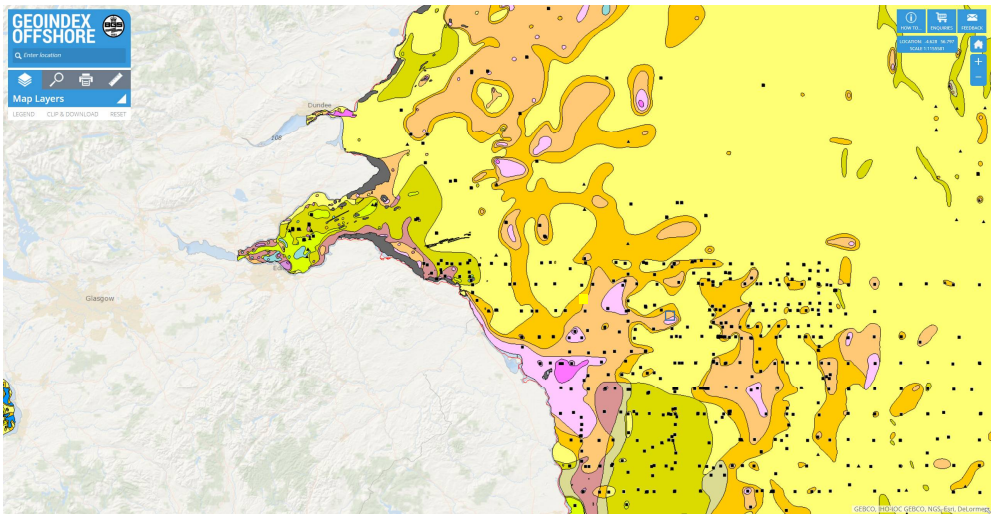

Figure 3: BGS Seabed Sediment map

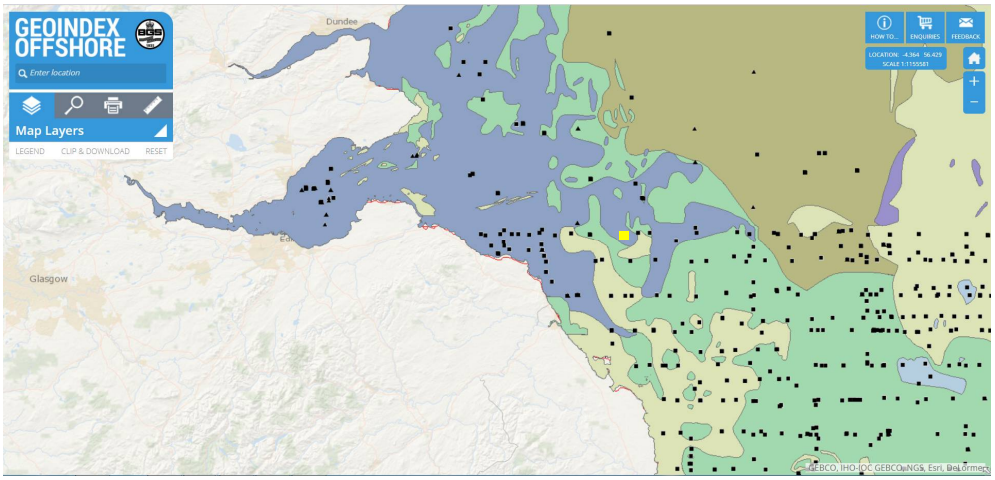

Figure 4: BGS Quaternary Deposits Summary Lithologies Map

BGS indicates that the thickness of the Quaternary deposits in this section is >50m. Water depth at the proposed site is approximately 60m. Soils at this location are interpreted to be muddy SAND with fine to medium SAND grains. No geotechnical information is available in the specific proposed site. However, BGS soil test (65077039) has been performed in similar soils approximately 10km away from the trial site (55.965, -1.5), performed by a Sediment Gravity Corer. Sample name is +55-002/212/CS/1, Activity ID is 1989112 and sample source was completed on Cruise 1982/5. The source of these samples is identified as legacy geological data describing units in offshore samples, interpretation is derived from handwritten sample station data sheets. No further data has been provided in this database.

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 SCARJet tool.

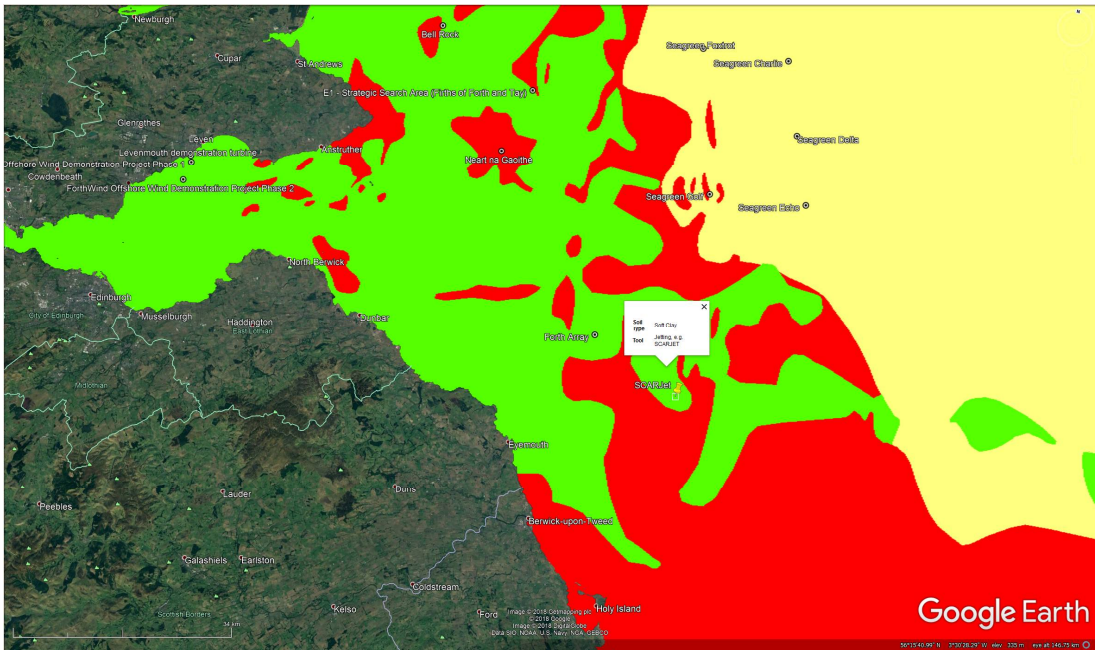

Figure 5: Oceaneering Soil Capabilities database