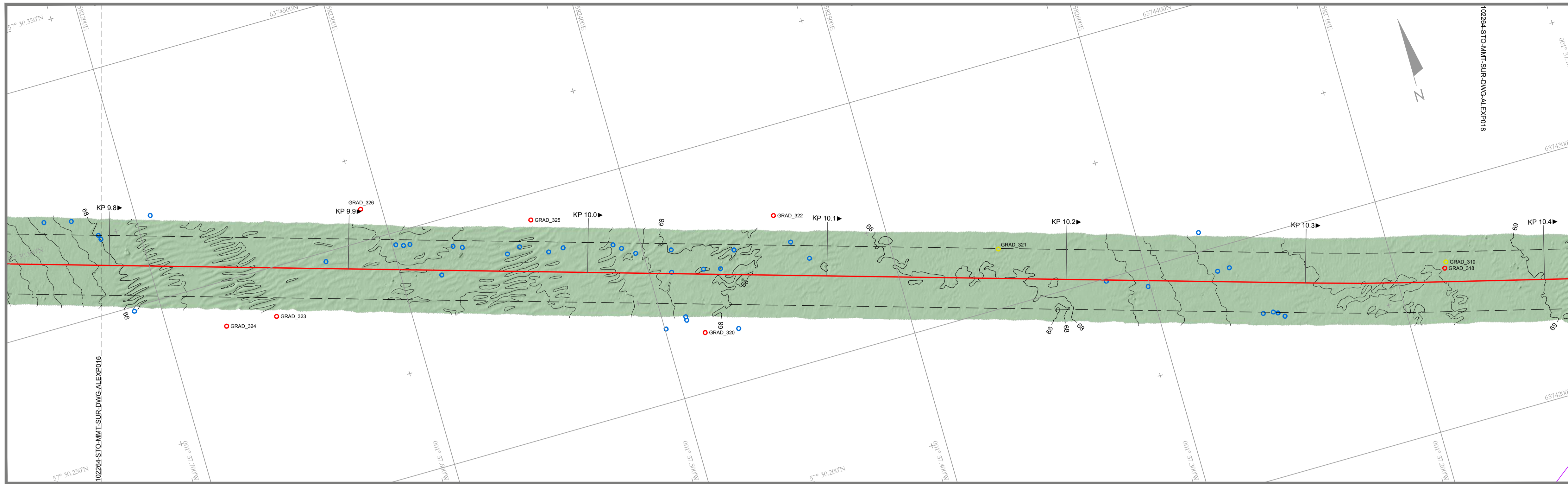


BATHYMETRY - Horizontal Scale 1:1000



SURVEY NOTES

Horizontal Datum : WGS84, Grid north displayed in charts
 Projection : UTM Zone 30 N
 Chart Latitude and Longitude are given in format DMM mmm
 Central Scale Factor : 0.9996
 False Easting : 500 000 m
 False Northing : 0 m
 Latitude Origin : 0°
 Central Meridian : 3° 00' 00"W
 Dimensions : In metres unless otherwise stated
 Vertical Reference : LAT
 Height Model : DTU10
 Reference Document : ST16826 Hywind Scotland UXO Survey Report: C178-MMT-G-RA-0005
 Coastline : From background database (for guidance only)
 Survey Date : April - May 2016

Offshore vessel : MV Edda Fonn
 Positioning : Seapath with Fugro Starpack XP
 Secondary Positioning : Fugro Starpack XP
 USBL Positioning : Kongsberg HHPAP 500
 ROV : Kydesign Supporter
 INS Primary UW Positioning : IXSEA ROVINS
 INS Secondary UW Positioning : IXSEA Octans 3000
 Multibeam Echo Sounder : Dual R2Sonic 2024 (200-400 kHz)
 Side Scan Sonar : Edgetech 4200 (300/600 kHz)
 Gradiometer : Innovatum Gradiometer Array (12 sensor)

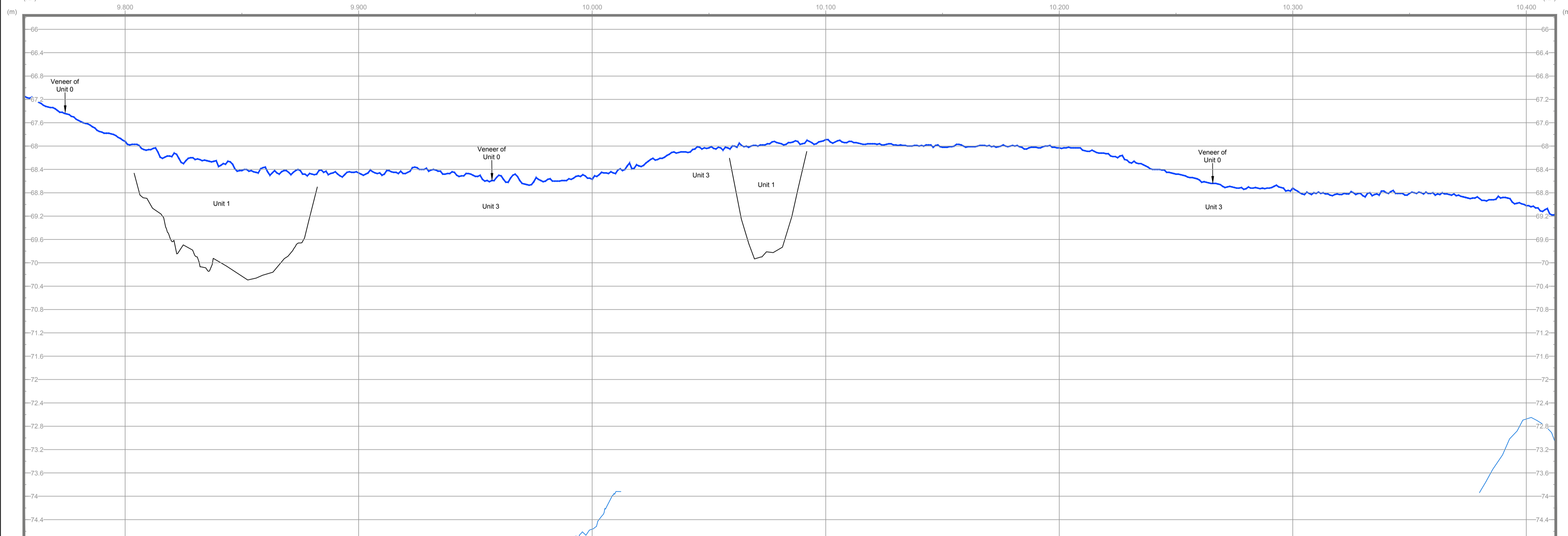
LEGEND

- Surveied Cable Route with KP
- Adjacent Surveyed Cable Route
- Geophysical Survey Corridor
- Territorial Border
- Matchline to neighbouring chart
- Detected Cables Survey 2013
- Planned Anchor Lines (client supplied)
- Wind Turbine Generator (client supplied)

BATHYMETRY

- Water Depth Contour (interval 0.2 m) with labels
 - Water Depth Contour (interval 1 m) with labels
 - ⊕ BOR-001 Borehole Location with ID *
 - ⚠ CPT-001 CPT Location with ID *
 - GRAD_001 Potential UXO (5-10kg)
 - GRAD_001 Potential UXO (>10kg)
 - ▲ G-001 ROV Inspected Target with ID **
 - Gradiometer Anomaly
- Notes:
 * Borehole and CPT locations taken from Statoil Doc. No.: C178-GGI-G-RA-00002_02
 ** ROV Inspected position refers to As-Found or Re-located target position
- Depths are given in metres and refer to LAT

LONGITUDINAL PROFILE WITH SHALLOW GEOLOGY - Vertical Scale 1:40



LONGITUDINAL PROFILE WITH SHALLOW GEOLOGY

- Seabed Profile
- Internal Reflector
- Reflector
- C-034 Sampling Location with ID

| Unit | Acoustic Characteristics | Geological interpretation |
|------|---|--|
| 0 | Good acoustic penetration. Medium to high reflectivity. Limited to rare internal structure. | Holocene deposits, typically consisting of gravelly silty fine to medium SAND along the cable route and slightly silty fine to medium SAND in proximity to the wind farm area. |
| 1 | Good acoustic penetration. Medium to high reflectivity. Limited to rare internal structure. | Forth Formation, slightly silty to silty, very gravelly, fine to coarse SAND. |
| 2a | Varying degrees of penetration. Low to high reflectivity. Low to high amplitude internal reflectors alternating with transparent sections, occasionally with parallel to sub parallel internal reflectors | Witch Ground Formation - Witch member, very soft to firm, slightly silty, slightly sandy to sandy, slightly gravelly CLAY. |
| 2b | Varying degrees of penetration. Low to high reflectivity. Low to high amplitude internal reflectors alternating with transparent sections, occasionally with parallel to sub parallel internal reflectors | Witch Ground Formation - Fladen member, soft to firm slightly sandy slightly gravelly CLAY. |
| 3a | No acoustic penetration. Top of unit characterised by irregular high amplitude reflector. Associated with mounded numerous boulder areas where outcropping. (Usually indistinguishable from Unit 2 where buried). | Wee Bankie Formation, stiff to hard, slightly sandy gravelly CLAY. |
| 3b | Varying degrees of penetration. Low to high reflectivity. Low to high amplitude near chaotic internal reflectors | Wee Bankie Formation, silty to very silty SAND. |
| 4 | No acoustic penetration. Top of unit characterised by irregular reflector of high amplitude. | BEDROCK |

ENGINEERING DATA

| Revision | Revision Description | Drawn | Checked | Approved | Date |
|----------|----------------------|-------|---------|----------|----------|
| A | Issued For Use | JH | HA | KG | 20160712 |
| 02 | For Client Review | JH | HA | KG | 20160614 |

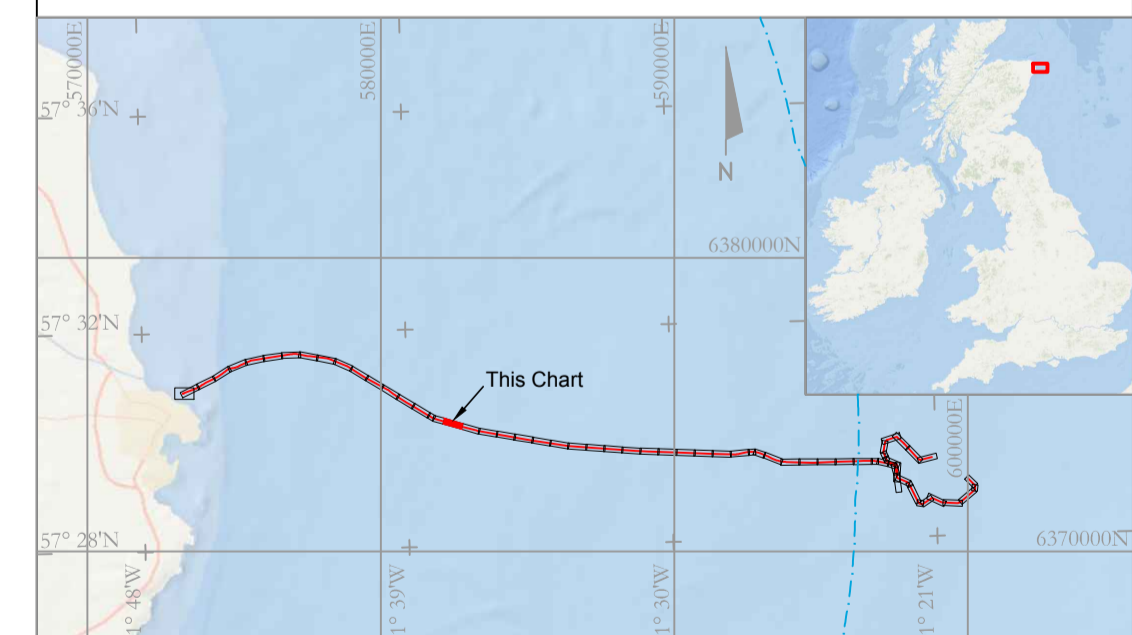
Contractor : **MMT**
 MMT
 Sven Kalifelts Gata 11
 SE-426 71 Västra Frölunda Tel: +46 31 762 03 00
 Sweden info@mmt.se

Survey date: April - May 2016 Project: 2016
 Horizontal Scale: 1:1000
 Profile Vertical Scale: 1:40

Title: **Alignment Chart**
 KP 9.757 - KP 10.413
 Export Cable H55 - Peterhead

Report No. ST16826
 Drawing No. 102264-STO-MMT-SUR-DWG-ALEXP017
 C178-MMT-G-YA-00018-01 A
 Client Drawing No. Revision

INDEX CHART



Statoil logo