

EQ24902 Deimos Coral and Environmental Survey

Equinor 2024 LCV Campaign
Call off Number: 4504326923



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Issued for Use

Revision 0



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1 INTRODUCTION

1.1 PROJECT DESCRIPTION

Reach Subsea have been contracted by Equinor Energy AS to conduct a series of work packages, which include Detailed Seabed Mapping, Route Surveys, Environmental Survey, Visual Inspections of contacts and structures and boulder removal during the 2024 LCV Survey Campaign.

This document describes the methodology and findings for work package EQ24902 Deimos Coral and Environmental Survey. The survey site lies approximately 148 km north of the Snøhvit and 260 km north-west from Hammerfest. The survey was to be conducted at the proposed well location within a 2 km radius circle, approximately 12.6 km² area. The survey was completed with a combination of the WROV and SROV depending on the weather conditions. Water depths encountered during the survey are approximately 300 m.

The purpose of this WP is to acquire data for environmental contractor for assessment of existence, if any, of red listed species or habitats of environmental concern (SHEC). Survey mapping is to be performed according to the requirements from the Norwegian Environment Agency.

Reach Subsea is the survey contractor assigned for collection of the data according to scope of work and report to Equinor according to data delivery specifications and requirements. An environmental specialist (consultant) is required to assess videos and stills to identify, classify and locate marine organisms which includes coral reefs and sponges and report to Equinor according to data delivery specifications.

An overview of the Deimos survey area location is presented in Figure 1-1.

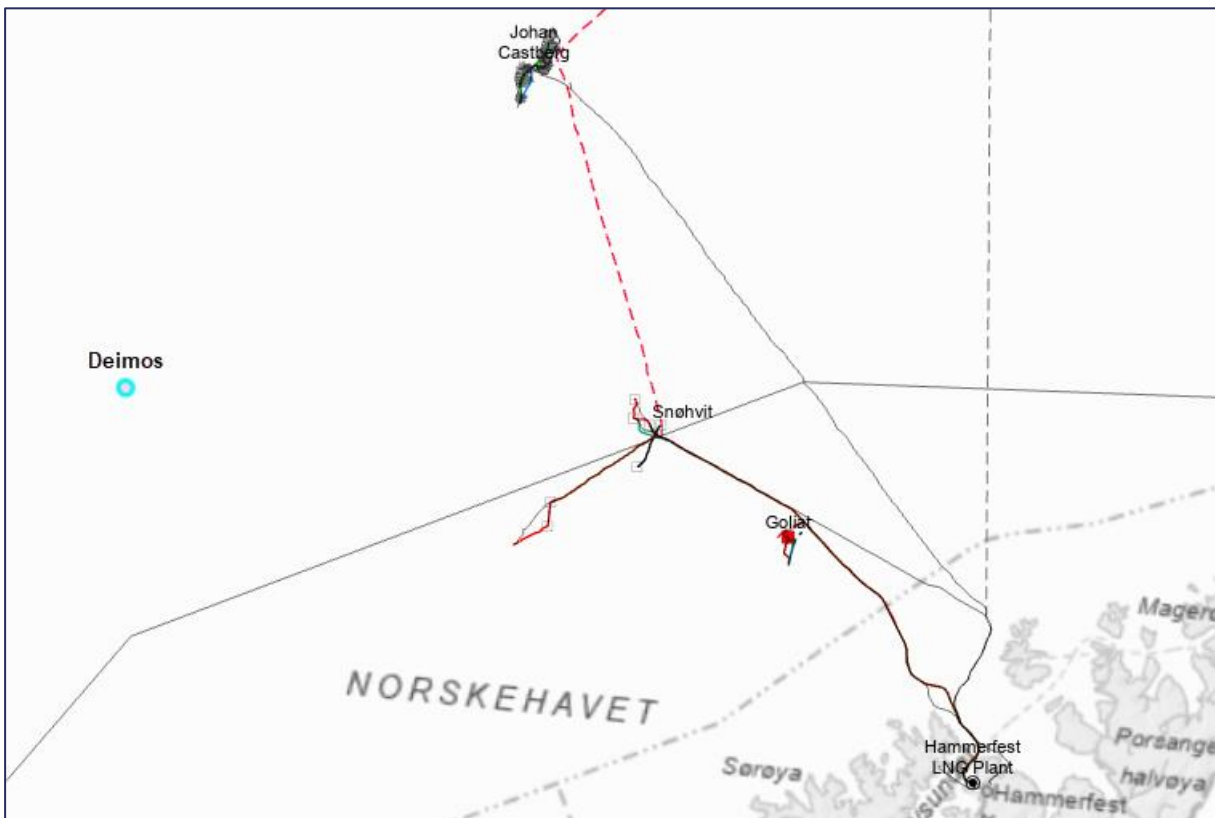


Figure 1-1 Overview of Deimos survey area

The project's details are summarised in Table 1-1.

Table 1-1 Project Details

Data Type	Description
Company	Equinor Energy AS
Project title:	Equinor 2024 LCV Campaign
Work Package ID	EQ24902
Work Package Title	EQ24902 Deimos Coral and Environmental Survey
Reach Project code:	REACH-600003-RE-037
Operation period:	01.09.2024 to 04.09.2024
Vessel(s):	M/V Viking Reach
Survey Type	Environmental Survey
Area	Norway – Norwegian Sea
Company document number	EQ24902-RE-01
Reach Project Manager	Johnny Stiansen
Work Pack Responsible (Equinor):	Radka Fuxova

1.2 DEFINITIONS AND ABBREVIATIONS

Table 1-2 Definitions and Abbreviations

Abbreviation	Definition	Abbreviation	Definition
CTD	Conductivity Temperature Depth Profiler	MRU	Motion Reference Unit
DGNSS	Differential Global Navigation Satellite System	M/V	Motor Vehicle
DNV	Det Norske Veritas	MSL	Mean Sea level (vertical datum)
DPR	Daily Progress Report	NCR	Non-Conformity Report
DTM	Digital Terrain Model	QC	Quality Control
DTU21	A geoid model developed at Danmarks Tekniske Universitet	PDF	Adobe Portable Document Format
DVL	Doppler Velocity Log	PPS	Pulse Per Second
ED50	European Datum 1950	ROV	Remotely Operated Vehicle
ENV	Environmental	RSS	Reach Subsea
EPSG	European Petroleum Survey Group	SD	Standard Deviation
FHR	First-Hand Report	SHEC	Species or habitats of environmental concern
GNSS	Global Navigation Satellite System	SOW	Scope of Work
HAZOP	Hazard and Operability Study	SSS	Sidescan sonar
		SVS	Sound Velocity Sensor
HD	High Definition	USBL	Ultra Short Baseline System
HSE	Health, Safety and Environment	UTC	Coordinated Universal Time
HSEQ	Health, Safety, Environment and Quality	UTM	Universal Transverse Mercator
INS	Inertial Navigation System	WGS84	World Geodetic System 1984
KP	Kilometre Post, used to describe distance along a route (design)	WP	Work Package (Equinor Supplied)
LCV	Light Construction Vessel	WROV	Work Class Remotely Operated Vehicle
m	Metre	SROV	Survey Class Remotely Operated Vehicle
MAC	Mobilisation and Calibration		
MBES	Multibeam Echosounder		

1.3 PROJECT REFERENCE DOCUMENTS

The documents used as references to this report are presented in Table 1-3 and any Field Memos issued during the survey are presented in Table 1-4.

Table 1-3 Reference Documents

Document number / name	Title	Author
REACH-600003-MDR-001	Project Master Document Register	Reach Subsea
REACH-600003-PLA-001	Project HSEQ Plan	Reach Subsea
REACH-600003-PLA-002	Emergency Response Plan	Reach Subsea
REACH-600003-CHA-001	Emergency Notification Flowchart	Reach Subsea
REACH-600003-LI-001	Project Equipment List	Reach Subsea
REACH-600003-LI-002	Project Personnel Plan	Reach Subsea
REACH-600003-RA-001	Project Risk Opportunity Register	Reach Subsea
REACH-600003-PRE-001	Project HAZOP Presentation/Kick Off Presentation	Reach Subsea
REACH-600003-PRE-002	Project HSEQ Familiarisation	Reach Subsea
REACH-600003-TN-001	Vessel Information Report	Reach Subsea
REACH-600003-MAC-001	Survey Mobilisation and Calibration Procedure	Reach Subsea
REACH-600003-RE-001	Mobilisation and Calibration Report	Reach Subsea
REACH-600003-TP-033	Task Plan EQ24902 Deimos Coral Environmental Survey	Reach Subsea
handbook-species-and-habitats-of-environmental-concern-2024-rev1	Handbook. species and habitats of environmental concern. Mapping, Risk Assessment, Mitigation and Monitoring.	Offshore Norge
EQ24902 Work Package	EQ24902 Deimos Coral Survey Rev3	Equinor
Environmental survey and delivery guideline_Equinor_rev3_27062024	Environmental survey and data delivery guideline	Equinor
Environmental Data flow Rev4	Environmental Data flow	Equinor
Survey_and_reporting_clarifications_Rev17	Survey_and_reporting_clarifications Rev17	Equinor
TR1007 v6.02	Specification for Subsea surveys	Equinor
TR1063 v3.2	Geographical information data formats	Equinor
TR1231 v4 03	Subsea Intervention Systems	Equinor
TR1251 v3 03	Seabed Intervention	Equinor
TR1714 v8.00	LCI Requirements for pipeline systems	Equinor
TR2217 v3.0	Ship and Maritime Requirements	Equinor
TR2234 v8.02	Data format specification for external survey of subsea pipelines and cables	Equinor
TR2396 v3.01	Station Keeping Systems	Equinor
GL0557 v2.01	Guideline for Subsea surveys	Equinor

Table 1-4 Memos and FHR Reports

Document number	Title	Author
No Field Memos or First-Hand Reports were issued during the course of the survey.		

1.4 SURVEY PARAMETERS

All coordinates presented in delivered files and in this report are presented in the International Spheroid, European Datum 1950 (ED 50 North of 62°), Universal Transverse Mercator (UTM) projection Zone 34 North, Central Meridian 21° East. More details are presented in Table 1 5.

Transformation of logged WGS84 positions to ED50 datum has been performed in accordance with EPSG Guidance Note “Geodetic Transformations Offshore Norway”. The transformation parameters were used as recommended by Equinor in “Datum Transformations between ED50 and WGS84 offshore Norway”. More details are shown in Table 1-5.

All water depths and times presented in delivered files and in this report are referred to Mean Sea Level (MSL), using Global Navigation Satellite System (GNSS) Tides and in Coordinated Universal Time (UTC).

All coordinates, drawings and grids in this document are in ED50 UTM 34 N.

Table 1-5 Survey Datum & Reporting Datum

Acquisition Survey Datum	World Geodetic System 1984 (EPSG: 6326)
Prime Meridian	Greenwich (8901)
Semi-major axis	6 378 137.000 m
Semi-minor axis	6 356 752.3142 m
Inverse Flattening (1/f)	298.257223563
Unit	International metre
Datum Shift Parameters	Transformation (WGS84 to ED50) EPSG: 1612
dX	+116.641 m
dY	+56.931 m
dZ	+110.559 m
rX	-0.893 sec.
rY	-0.921 sec.
rZ	+0.917 sec.
dS	+3.520 ppm
Reporting Survey Datum	ED50 (EPSG: 6230)
Spheroid	International 1924
Semi-Major Axis	6378388.000 m
Semi-Minor Axis	6356911.946 m
Inverse Flattening (1/f)	297
Eccentricity Squared (e2)	0.0067226700
Projection Parameters	UTM Zone 34 North
EPSG Code	16034
Zone	34 N
Central Meridian	21° 00' 00" E
Latitude origin	0
False Northing	0m
False Easting	500 000 m
Central Scale Factor	0.9996
Units	metres
Vertical Reference Frame	MSL
Height Model	DTU21

1.5 REVISION HISTORY

Table 1-6 Revision History

Rev.	Date	Description	Origin	Checked	Approved
0	2024.11.27	Issued for Use	KT	KS	KS
1	2024.10.09	Issued for Client Review	TD	TP	KS
-	2024.09.20	Issued for Internal Review	TD	TP	KS

Table 1-7 Change Log

Revision	Change	Page/Section
0	Comments addressed and Appendices updated.	Appendix A

Table 1-8 Document Control

Responsibility	Role	Name
Content	Senior Geophysicist	Tomasz Demkowicz
Check, Content	Offline Coordinator	Thomas Potter
Check, Approval	Project Report Coordinator	Kristoffer Stoddart
Approval	Project Manager	Johnny Stiansen

2 SURVEY DESCRIPTION

2.1 SCOPE OF WORK

The purpose for the survey is to acquire MBES, SSS and backscatter data within survey area for the proposed location of the drilling well.

The criteria for visual inspection of the coral structures:

- 1) Visual inspection of all coral structures, greater than 1 m in any direction, shall be conducted within 300 m radius zone of the well location.
- 2) Within 300 m to 500 m radius zone of the well locations, only chosen large coral structures shall be visually inspected. The choice of the coral reefs for visual inspection shall be done together with marine biologist at site/vessel and Equinor Vessel Representative. The main rule is that larger coral structures and structures closer to well location to be chosen.
- 3) One or two “best samples” of the coral reef to be chosen within entire survey area and visually inspected. This criterium can be skipped, if agreed with onsite.

Visual survey was to be carried out at the well location with a “bow-tie” survey pattern. The seabed was to be recorded and logged up to 250 metres from centre location in four directions, where two should be in parallel with and two perpendicular to the main current direction given in the fields or nearby fields Design Basis by Equinor. In total, one location was to be investigated, listed in detail in Table 2-1.

Table 2-1 Overview of two planned well locations

Location	Easting	Northing
7117/4-1 Deimos	361408.5	7954103.7

Still images are to be taken every 30 m at a minimum and any findings of interest. Visual recording and logging of positions were also done on the transect line (transit line of ROV between main cross lines).

A total of two straight line video transects of 500 metres each crossing over the well location. Run-lines example with “bow-tie” survey pattern and main current direction within Tromsøflaket are shown in Figure 2-1 and Figure 2-2, respectively.

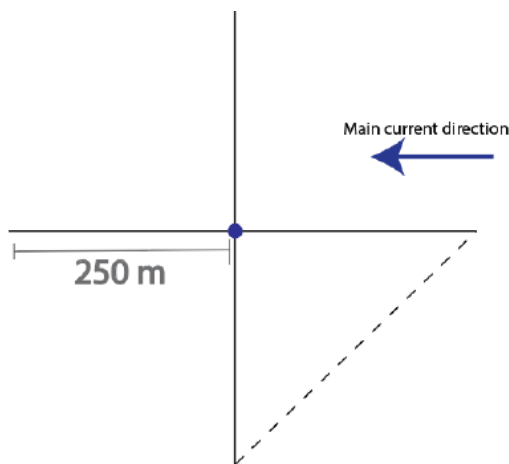


Figure 2-1 A “bow-tie” pattern was run for visual mapping around the wells.

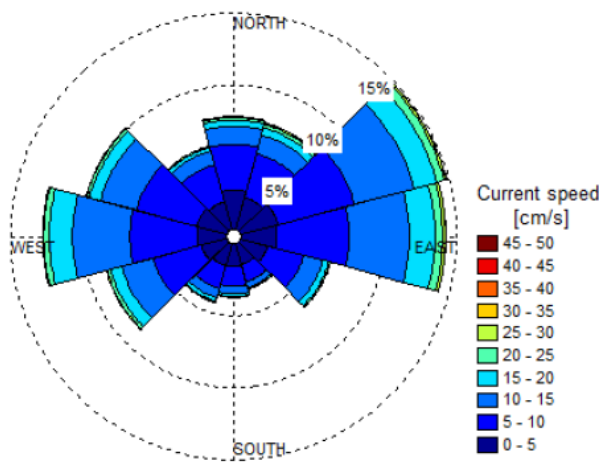


Figure 2-2 Main current direction (From Snøhvit, 5 metres above seabed)

Table 2-2 and Table 2-3 provide an overview of the general survey settings deployed during operations.

Table 2-2 Visual Settings EQ24902

Survey Settings	
Water depth (MSL)	272.8 m to 310.2 m
WROV altitude	1 m
Survey Speed	0.5 to 1.0 knots (WROV)
Survey Scope	Environmental Visual Inspection
Camera Settings	2 HD Camera (video and still) – stills taken every 12 seconds (resolution at 1280 x 720 pixel)
Laser Separation	10 cm
Focus of survey	Survey 250 m radius either side of centre well location in a 'bow-tie' line plan

Table 2-3 Coral High-Fly Survey Settings EQ24902

Survey Settings	
KP database	n/a
Survey speed	2.5 to 3.2 knots (SROV) / 0.5 to 1 knot (WROV)
Water depth (MSL)	Between 272.8 m to 310.2 m
Detailed mapping	MBES and SSS
Visual (optional)	Potential Corals within 300 m Only chose large corals between 300 m to 500 m One or two "best samples" of the coral reef, chosen at the discretion of the marine biologist.
No. of survey lines	48 total 1 bow-tie
Line spacing	75 m and 100 m
Focus of survey	MBES coverage
Survey altitude	16 to 20 m (MBES & SSS). As required to achieve good MBES coverage
MBES DTM grid	0.5 m
SSS range/contacts to detect	70 m / ≥ 1 m (Coral and Debris Only). No mosaic, only stripes and XTF to be delivered

2.2 DEVIATION FROM SOW

Deviations from the SOW are tabulated in Table 2-4.

Table 2-4 Deviations from Scope Of Work

Date	Site	Description
DD/MM/2024	Deimos	Outer swath of SSS data was not usable due to the flying height effectively achieving only a coverage of +/-60 m resulting in the nadir gap not being covered by the adjacent line. Focus of this survey was to achieve full MBES data coverage.

2.3 PERFORMED WORK

The M/V Viking Reach performed Coral and Environmental Survey at the Deimos proposed well location located in the Norwegian Sea. Performed work on site is tabulated in Table 2-5.

Table 2-5 Performed work on site.

Start Date	End Date	Site	Description
02/09/2024	02/09/2024	Deimos	MBES, SSS and backscatter survey using the WROV as the weather was beyond limits for the SROV
04/09/2024	04/09/2024	Deimos	Bow-tie visual survey over planned well locations

2.4 LINE PLAN DETAILS

Line plan for high-fly survey area is presented in Figure 2-3. East west orientated lines were used with a line spacing of 100 m and length of 4000 m. In the middle section of the survey area, a line spacing of 75 m is used, to ensure full data density.

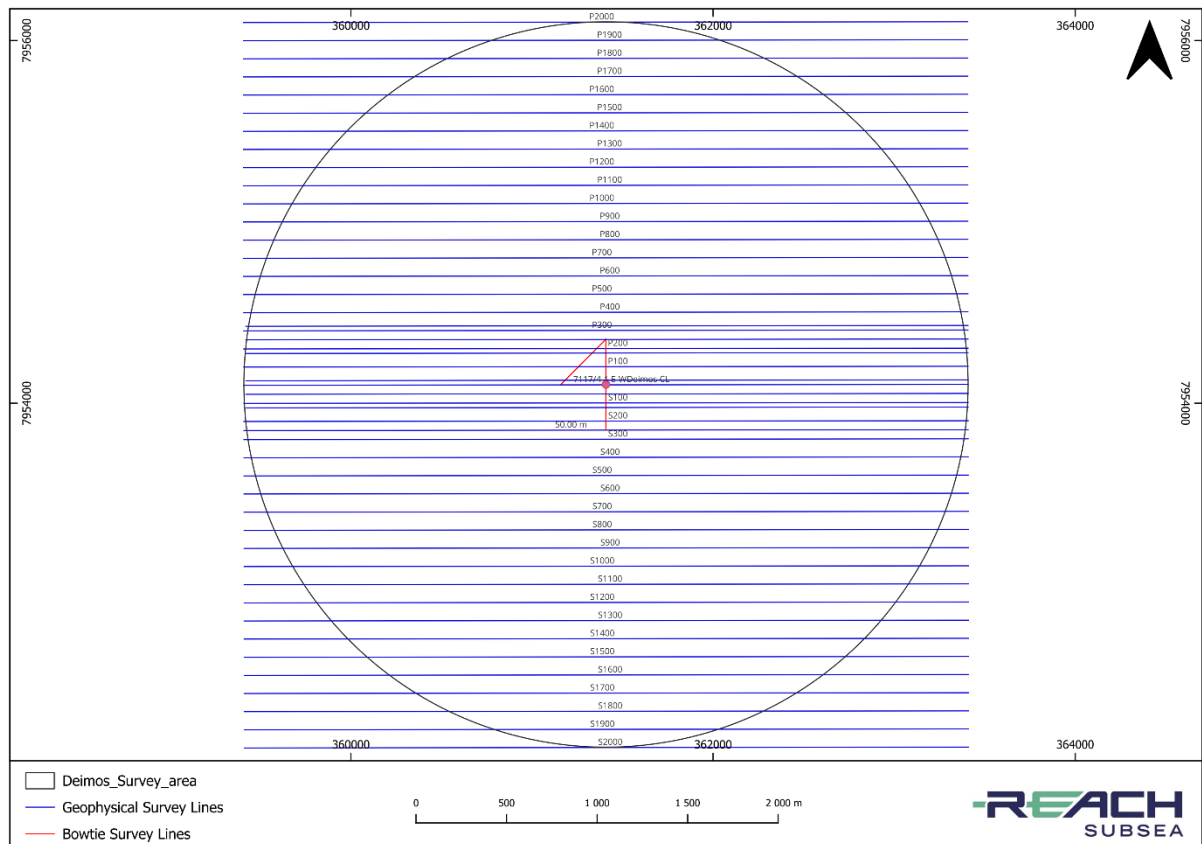


Figure 2-3 Geophysical survey line plan at Deimos

3 SURVEY RESULTS

This section presents the results from the acquired MBES, SSS and backscatter data and the subsequent visual inspections. The acquired data was post processed in a multitude of software. Multibeam echosounder data was handled within the EIVA processing Suite, whereas the sidescan data was processed within SonarWiz.

All Sensors were calibrated prior the start of the survey. The full Calibration Report at the start of the 2024 campaign (REACH-600003-RE-001 Mobilisation and Calibration Report).

3.1 OVERALL SUMMARY

The water depth for the Deimos Coral and Environmental Survey area ranges from 272.76 m located 480 m south of the proposed well location to 310.23 m in the northeast. The area is characterised by iceberg plough marks.

The survey area is mainly characterised by topographic features associated with glacial activity. Following the demise of the latest glaciation, icebergs were released and drifted across the North Atlantic following the prevailing currents. Iceberg plough marks were formed as the icebergs cut into the seafloor leaving a complex topography of ridges and channels. Depressions were also formed as a result of icebergs grounding and pivoting. No coral reefs were reported within the survey area. However, three targets, possible debris items (TAUN), were reported within the survey area.

3.2 BATHYMETRY

The MBES data over Deimos survey area was of high quality allowing a DTM of 0.5 m grid cell size. The seabed topography was very irregular this was due to shallow iceberg plough marks which were present across the entire survey area. A minimum water depth was observed 272.76 m located 480 m south of the proposed well centre. The maximum water depth was observed 310.23 m in the northeast part of the site. An overview of the bathymetric data is shown Figure 3-1.

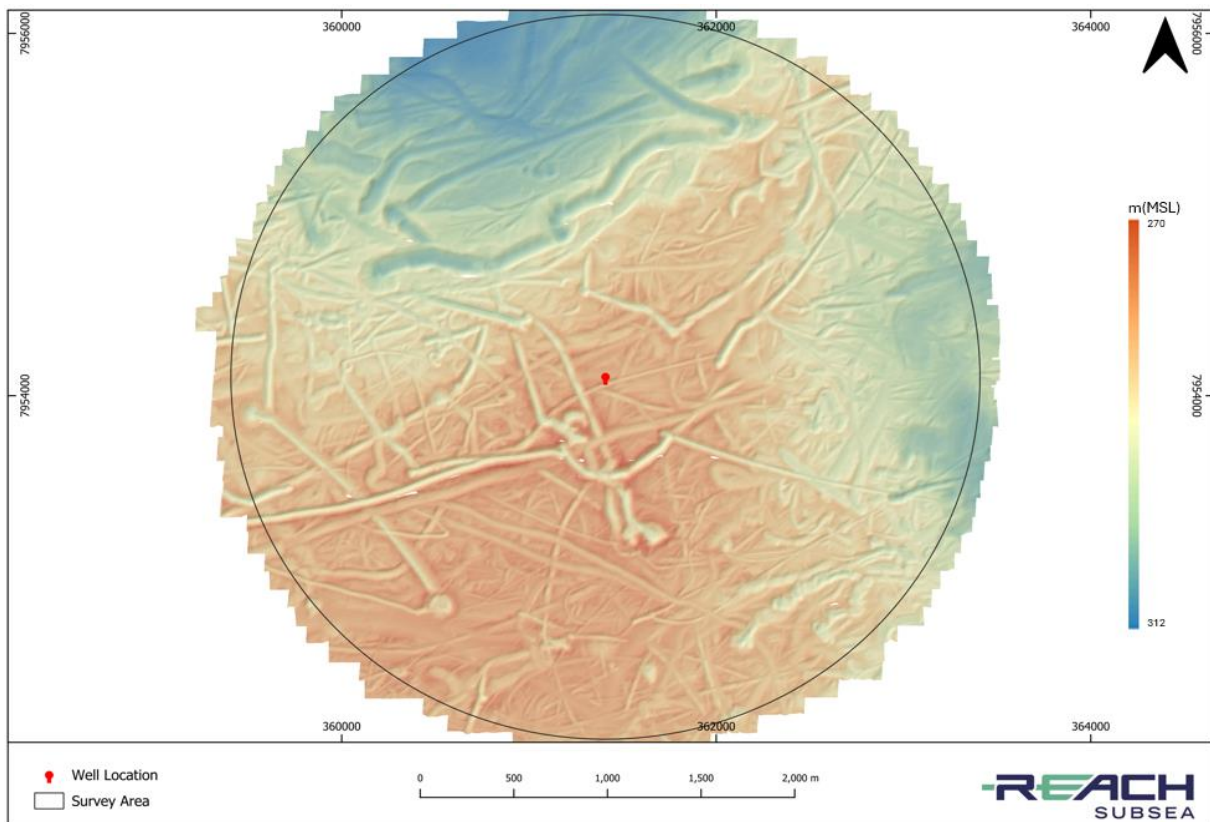


Figure 3-1 Deimos Coral and Environmental Survey - Bathymetric overview

3.3 SEABED FEATURES

The seabed topography of the site is mainly characterised by undulating plough marks, Figure 3-2, and this in turn influences the sonar reflectivity. In general, linear areas of high sonar reflectivity associated with the shoulders of iceberg plough marks typically indicate hard coarse sediments. Lower sonar reflectivity prevalent in the troughs of iceberg plough marks is interpreted as an infill of soft fine sediments.

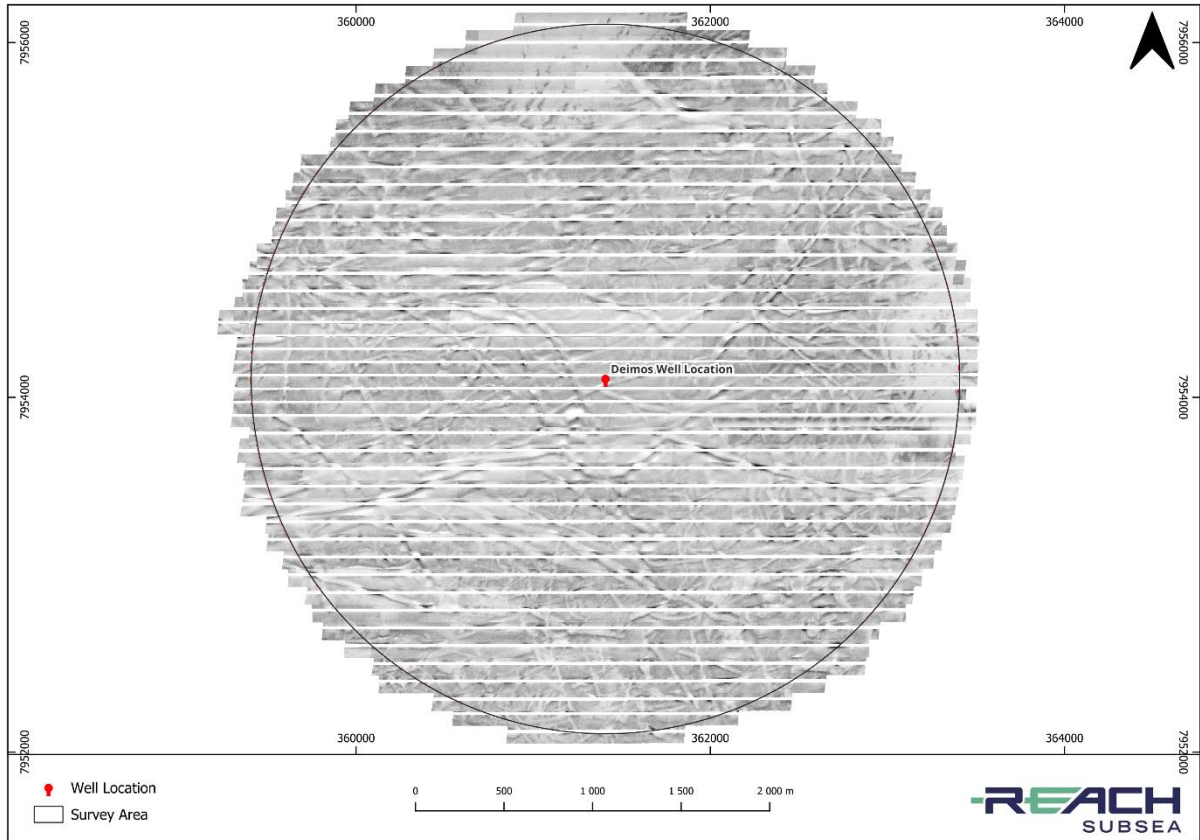


Figure 3-2 Sidescan Sonar overview

A total of three targets were detected using a combination of MBES and SSS data and are listed in Table 3-1 and presented in Figure 3-3. These three targets were all interpreted as possible debris, no possible coral reef areas were identified.

Table 3-1 Target ID - Summary

Target ID	Easting	Northing
S_EQ24531_0001	360702.37	7953170.51
S_EQ24531_0002	360144.57	7954382.63
S_EQ24902_0003	359664.79	7954666.99

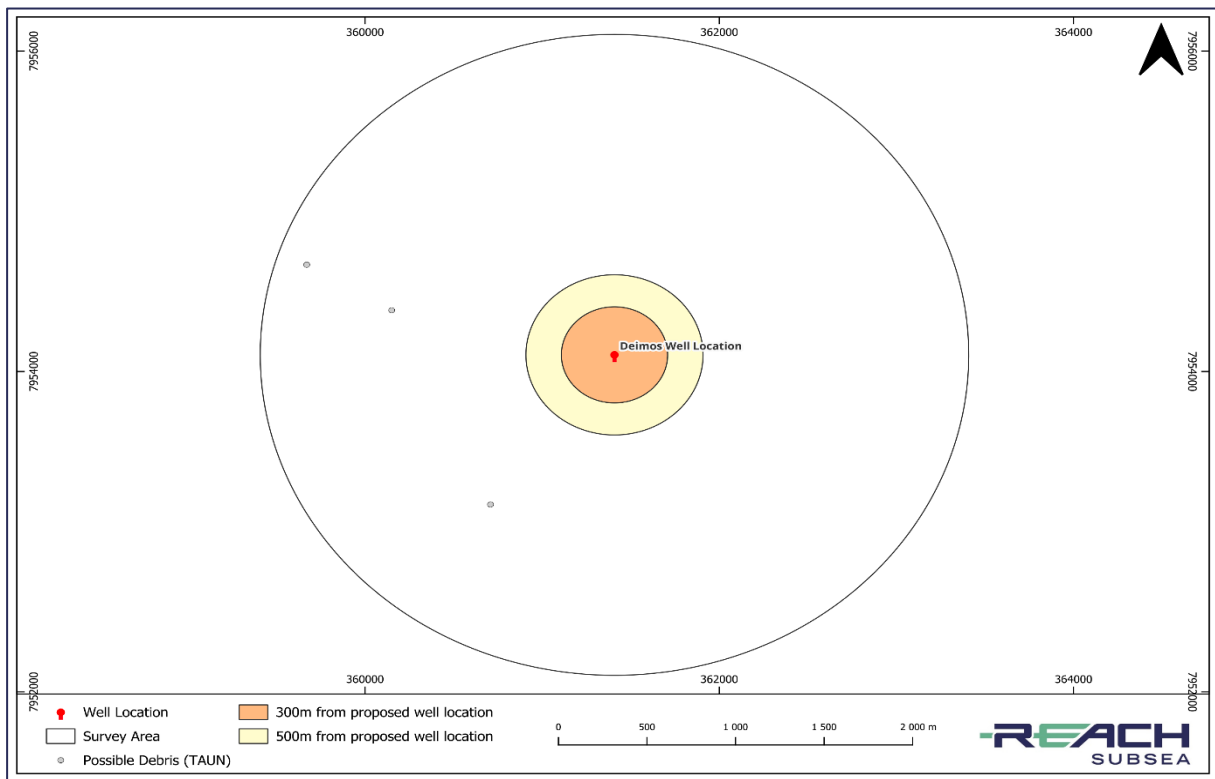


Figure 3-3 Distribution of possible debris (TAUN) in relation to proposed well location

3.4 BACKSCATTER DATA

The backscatter data was processed from the MBES Sensor and is presented on a line-by-line basis. Figure 3-4 provides an overview of the acquired backscatter data.

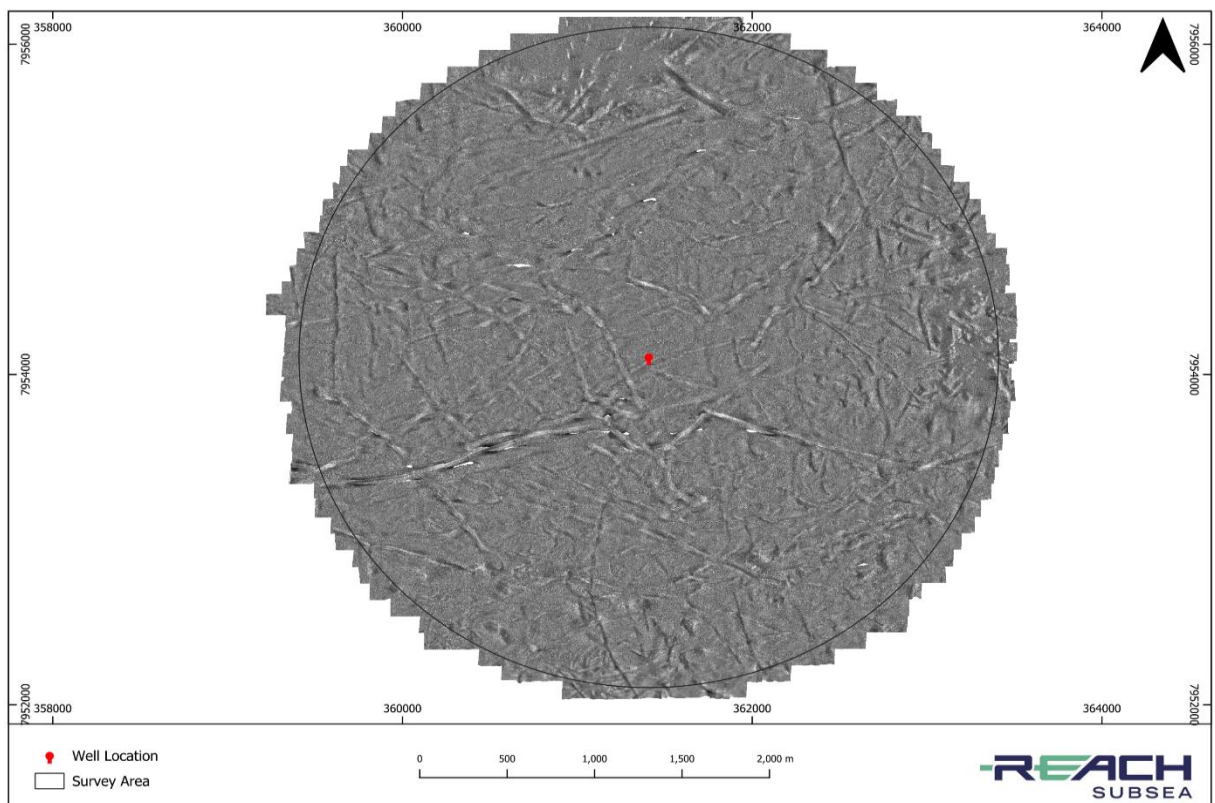


Figure 3-4 Backscatter Data Overview

3.5 SHALLOW GEOLOGY

No sub-bottom profiler was acquired as part of this work pack.

3.6 MARINE ORGANISMS VISUAL SURVEY

No possible coral reefs were detected during the geophysical survey. No video inspection was conducted.

Please note: Marine Organisms classifications were carried by an environmental consultant. The results of which are presented in an additional report.

3.7 BOW-TIE VISUAL SURVEY

The primary objective of the survey was to obtain visual imagery of the seafloor to facilitate environmental studies and the classification of marine organisms. The camera was mounted on an ROV, which traversed the survey area in a systematic pattern at the Template location.

To comply with the specified requirements of minimum one image every 30 metres, an image was extracted every 12-15 seconds from the camera feed. This selection process ensured a consistent sampling rate and provided a manageable dataset for analysis.

Marine Organisms classifications were carried by an environmental consultant based on the video and still images.

One bow-tie was completed, at the proposed Deimos Well Location. An Overview MBES images of each proposed well location are presented in, Figure 3-5. Video image examples are presented in Figure 3-6.

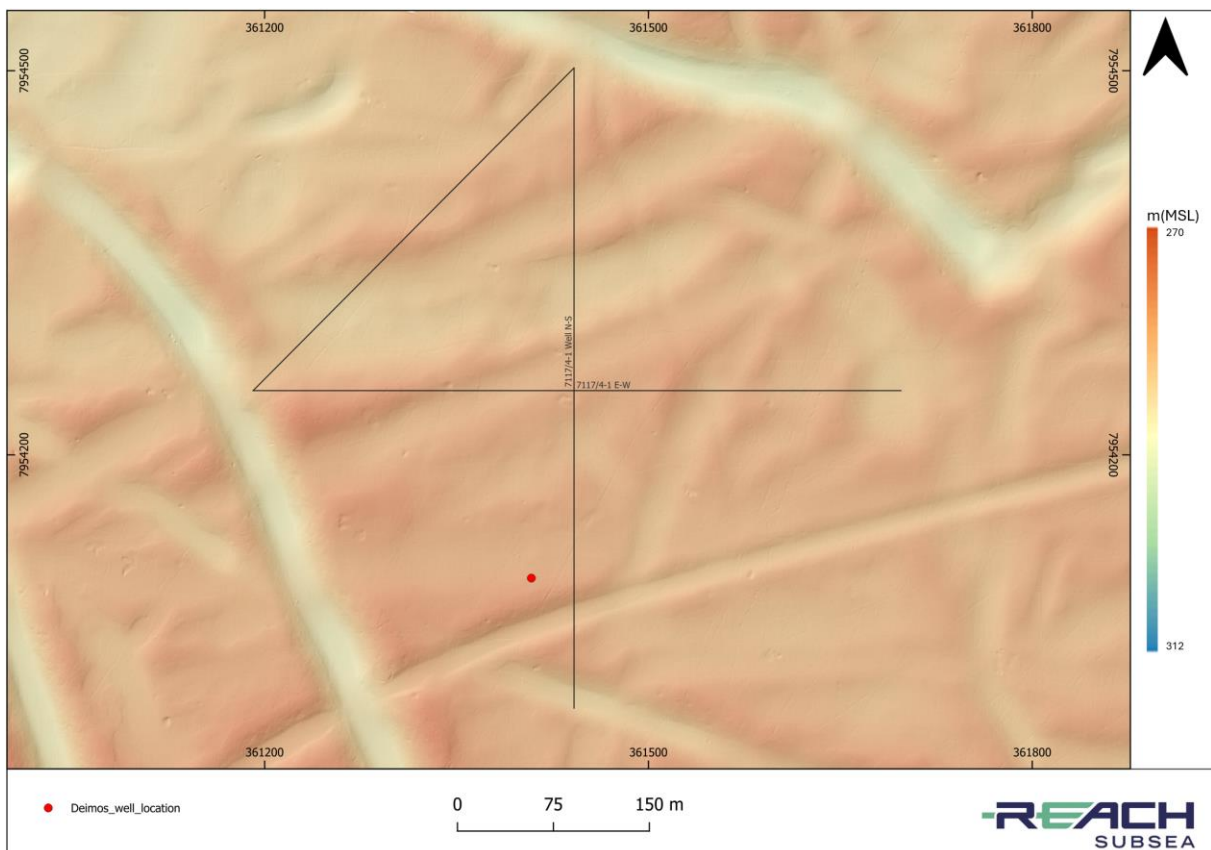


Figure 3-5 Bathymetric overview of Deimos Well Location



Figure 3-6 HD Camera image at bow-tie location 7117/4-1 Deimos

4 SURVEY OPERATIONS

4.1 PERFORMANCE

The survey operations were carried out as planned and following the industry best practices. Good communication was kept at all times between the different stations involved in the survey operation.

Non-Conformity Reports impacting the data acquisition are presented in Table 4-1 which were registered throughout the survey duration on M/V Viking Reach.

Table 4-1 Non-Conformity Reports

NCR ID	Date of Occurrence	Report Heading
1861	01.09.2024	EQ24901 - WROV Fibre failure

4.2 DATA QUALITY AND VISIBILITY

4.2.1 SURFACE POSITIONING

Veripos 1 and Veripos 2 operated as expected throughout the operation with each system was receiving independent corrections, and no dropouts were observed.

4.2.2 SUBSEA POSITIONING

Raw USBL positioning was as to be expected in deep water, the effect on the navigation was minimised by increasing the SD of the USBL weighting on the INS Position, where the INS operated more on dead reckoning and DVL than the USBL position.

4.2.3 ONLINE QC

Online monitoring of primary and secondary navigation was carried out at all times with the aid of comparison graphs and numerical values in the online navigation system. Tuning of equipment was maintained at all times to achieve the best results. Also checking the quality of still images with correct overlay.

4.2.4 MULTIBEAM ECHOSOUNDER

The MBES data was of good quality during the survey. The 0.5 m cell size resolution DTM was achieved except for a few acoustic shadows in areas of high topographic relief.

4.2.5 SIDESCAN SONAR

The sidescan sonar data was of very good quality and fit for purpose throughout the survey. Overall data coverage is good except for some increase noise to signal ratio on the outer ranges of the record.

4.2.6 VIDEO AND STILL

Video was carried out on Options Video logger using WROV centre HD camera and Gemini sonar. This was set up to take still HD both channels every 12 seconds to ensure we have a still image every 30 m. Further still images were taken as per environmental specialist's requests.

4.3 SPEED OF SURVEY

Survey speed was maintained below 1 knot, during visual inspection and 1 to 3 knots during survey.

4.4 TIME DATUM

Coordinated Universal Time (UTC) was used on all survey systems on board the vessel. The synchronisation of the vessel's onboard system was governed by the Pulse Per Second (PPS) issued by the primary positioning system. All displays, overlays and logbooks were annotated in UTC.

5 EQUIPMENT

Detailed information regarding vessel and ROV equipment can be found in the Mobilisation and Calibration Report (REACH-600003-RE-001).

5.1 VESSEL

M/V Viking Reach was mobilised for geophysical survey operations.



Figure 5-1 M/V Viking Reach

Viking Reach is a multifunctional DP2 subsea vessel from Eidesvik. The vessel was built in 2009 and holds a high standard of both onboard equipment and accommodation/office facilities. The vessel is equipped with a 70-tonne active heave compensated crane on the 625 m² large aft deck.

Vessel information is summarised in Table 5-1 below.

Table 5-1 Vessel Information

Information	Details
Vessel name	Viking Reach
MMSI	258 647 000
Call Sign	LARF7
IMO	9489651

An overview of the equipment permanently installed on the Viking Reach is listed in Table 5-2.

Table 5-2 Vessel Equipment

System	Type
2× DGNSS	Veripos LD900 receiver
2× Dynamic Positioning DGNSS & Gyro	Kongsberg Seapath 380 & 200
2× USBL positioning systems	Kongsberg HiPAP 501
6× Transponders	Kongsberg CNODE miniS
4× Motion Reference Unit (MRU)	3×Kongsberg MRU5+
1× Vessel Gyro	Anschutz Standard
1× Conductivity Temperature Depth Profiler (CTD)	SAIV SD204
1× Barometer	Vaisala
1× Multibeam Echosounder (MBES)	Kongsberg EM2040
1× Sound Velocity Sensor (SVS)	Valeport MiniSVS

5.2 SROV SURVEYOR 1

The equipment listed in Table 5-3 is mobilised on the SROV Surveyor 1.

Table 5-3 SROV Equipment

System	Type
1× Sidescan Sonar (SSS)	Edgetech 2205 (300/600 kHz) custom
1× Sub-bottom Profiler (SBP)	Edgetech 2205 (DW106) custom
2× Multibeam Echosounder (MBES)	Kongsberg EM2040D
1× Inertial Navigation System (INS)	Sonardyne Sprint G3
1× Doppler Velocity Log	Sonardyne Syrinx 600 kHz
1× Transponder	Kongsberg cNode MiniS
1× Responder	Kongsberg cNode MiniS
1× Sound Velocity Sensor	Valeport MiniSVS
2× Depth sensor	Valeport MiniIPS
1× Forward Looking Sonar	Tritech Gemini 720i
2× Altimeter	Tritech PA500
3x Still Image Camera	Cathx Ocean A1000
6x strobe flash	Cathx Ocean Ballast

5.3 WROV SUPPORTER 10

The equipment listed in Table 5-4 is mobilised on the WROV Supporter 10.

Table 5-4 WROV equipment

Sensor	Model
USBL Responder	Kongsberg CNODE Mini
USBL Transponder	Kongsberg CNODE Mini
Inertial Navigation System	Sonardyne Sprint
Sound velocity sensor	Valeport Mini SVS
Pressure Sensor	Valeport Mini IPS (300bar)
Conductivity and Temperature	Valeport mini CT
DVL	Sonardyne Syrinx
Obstacle avoidance sonar	Tritech Gemini 780
Camera (Video)	Options Video logger
Camera (Still)	Options centre HD and Gemini sonar

6 DATA INDEX

Table 6-1 and Table 6-2 describe the digital data that accompanies this report. Detailed items are listed in the Metadata sheet.

Table 6-1 Digital Data Index

Folder ID	File Type	Sub-Categories	Delivery Status
01_REPORT	(.pdf/.docx)		Azure File Storage
03_METADATA	(.xlsx)		Azure File Storage
04_GIS_DATA	(.gdb)	SSDM NMOUTLINE	Azure File Storage
05_KP_DATA	(.rlx)		Azure File Storage
06_DTM	(.xyz)		Azure File Storage
09_SITRAS_VIDEO	(.vtf)		Azure File Storage
10_NAVIMODEL	(.nmp)		Azure File Storage
11_STILLSOBS	(.jpg)		Azure File Storage
13_SSS	(.tif) (.xtf)	SSS Stripes XTF	Azure File Storage
18_VIDEO	(.mp4)		Azure File Storage
99_OTHER	(.ctd/.pdf)	CTD Data	Azure File Storage

Table 6-2 Chart Index

Chart Name	Type	KP Range	Scale
EQ24902-XY-01	North-Up Bathymetry	n/a	1:7000
EQ24902-XY-02	North-Up Shaded Relief	n/a	1:7000

A. CHARTS



EQ24902-XY-01_Rev 0.pdf



EQ24902-XY-02_Rev 0.pdf

B. TASK PLAN



REACH-600003-TP-0
33 EQ24902 Deimos

C. WORKPACK



EQ24902_Deimos_C
oral_Survey_Rev3.pdf

D. DPR



REACH-VIRE-600003REACH-VIRE-600003REACH-VIRE-600003REACH-VIRE-600003
-20240901-REV1.pdf-20240902-REV1.pdf-20240903-REV1.pdf-20240904-REV1.pdf

E. NON-CONFORMITY REPORT



NCR_1861.pdf