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MED_AO6 AREA – OWF ZONES 1 TO 4 GEOTECHNICAL SURVEY

MED-TEC-00062_A_REV02 _FACTUAL REPORT - GEOTECHNICAL SURVEY - OWF ZONES 1 TO 4 AREAS

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ABBREVIATIONS

ADCP	Acoustic Doppler Current Profiler
ALARP	As Low as Reasonably Practicable
ASV	Assumed Sound Velocity
BSF	Below seafloor
cm	Centimetre
$CaC0_3$	Carbonate

ABBREVIATIONS

CID	Consolidated Isotopically drained
CIU	Consolidated Isotopically undrained
CRS	Constant Rate of Strain Oedometer
CoG	Centre of Gravity
CRP	Central Reference Point
CPT	Cone Penetration Test
CSP	Central Shot Point
DGEC	Direction générale de l'énergie et du climat (Client)
DNV	Det Norske Veritas (Client nominated consultant)
DP	Dynamic Positioning
DPR	Daily production report
DR	Relative Density
DS	Direct shear
DSS	Direct Simple Shear
FC	Fall Cone
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GRS	Geodetic Reference System
GSO	Geophysical Services Offshore
h	Hour
IMO	International Maritime Organization
J	Joule
JNCC	Joint Nature Conservation Committee
kHz	Kilohertz
kPa	Kilopascal
LAT	Low Astronomical Tide
LV	Lab Vane
m	Meters
min	Minutes
MBES	Multibeam echosounder

ABBREVIATIONS

MED_AO6	AO6 Offshore Windfarms in the Mediterranean
mm	Millimetre
MMD	Maximum & minimum
MPa	Megapascal
MRU	Motion Reference Unit
OCR	Overconsolidation Ratio
OWF	Offshore windfarm
PC	Pistoncore
POB	Personnel On Board
PAM	Passive Acoustic Monitoring
PP	Pocket penetrometer
PPSU	Pulse Power Supply Unit
QA-QC	Quality Assurance – Quality Control
RTE	Réseau de Transport d'Électricité
RTK	Real Time Kinematics
s	Second
SHOM	Service Hydrographique et Océanographique de la Marine
SN	Serial Number
SRB	Sulphate Reducing Bacteria
SRF	Ship's Reference Frame
SVP	Sound Velocity Profiler
SVS	Sound Velocity Sensor
Su	Undrained Shear strength
TA	Tecnoambiente
TBC	To be confirmed
TRT	Thermal Response Test
TV	Torvane
UHR	Ultra-High Resolution
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator

ABBREVIATIONS

VC	Vibrocore
WD	Water Depth
WGS84	World Geodetic System 1984
UU	Undrained Unconsolidated
UUR	Undrained Unconsolidated Remoulded
UXO	Unexploded ordnance
ZH	Hydrographic Zero or Hydrographic Datum

EXECUTIVE SUMMARY

TECNOAMBIENTE has been contracted by DGEC to undertake the geotechnical marine investigation for the four different proposed AO6 Offshore Windfarms (OWF).

The Offshore geotechnical survey was conducted by Tecnoambiente using the DP2 vessel Roxane Z in the Golf of Lion. The AO6 project is separated in four (4) different offshore windfarms: Zone 1, Zone 2, Zone 3 and Zone 4 OWF areas, consisting of seabed 200kN CPT up to 30m, 8-10 m barrel PC and 9 m barrel VC.

The number and coordinates of CPT, PC and VC locations acquired were specified by the client (DGEC) and its nominated consultant (DNV), final tests depth, penetration and samples recovery reached were dictated by the ground conditions.

This factual report presents the interpreted CPT data acquired for the 4 zones and the laboratory testing results, performed on Zone 1 and Zone 2 only. The data presented in the factual report supersedes the field data previously submitted in the operation report.

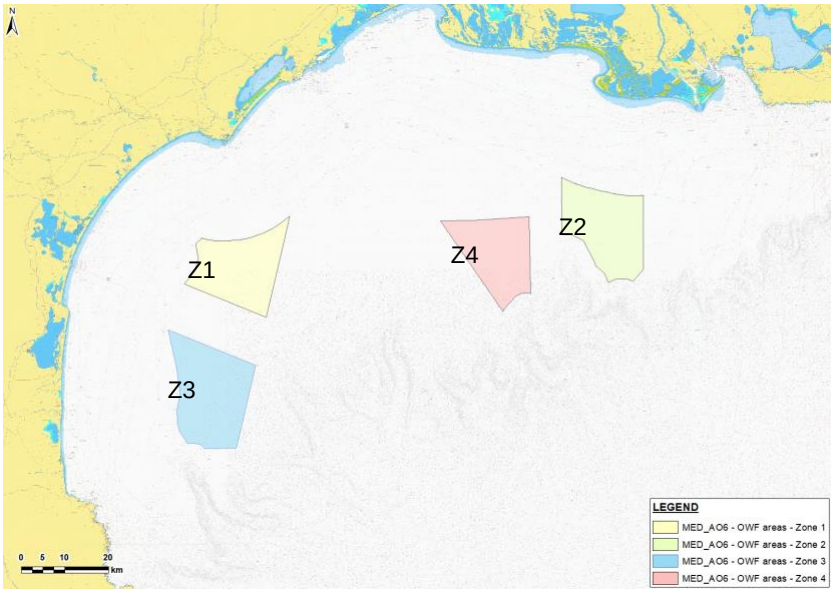


Figure 0-1 General view of the MED_AO6 project area with the four different offshore windfarm survey areas.

AO6 OWF Zone 1

A total of 12 CPTs locations have been acquired in Zone 1 (with additional 3 retests due to refusals). Additionally 4 PC and 2 VC locations were acquired in Zone 1.

The ground condition in OWF Zone 1 generally consist of extremely low strength silts and clays at seabed, becoming medium to high strength (locally sandy, locally very high strength) till the maximum depth of investigation or 30m BSF. These cohesive sediments are intercalated at variable depths with medium dense to dense (locally very dense and/or gravelly) silty sand layers with thickness typically in between 0.5 to 5m. At locations Z1_OWF_B08, Z1_OWF_B10, Z1_OWF_B13 and Z1_OWF_B14A the presence of dense to very dense silty sand (locally gravelly sand) is predominant generally for the first 12m BSF. It should be noted that locations Z1_OWF_B03_CPT and Z1_OWF_B07_CPT had refusal shallower than 20m BSF.

AO6 OWF Zone 2

A total of 12 CPT have been acquired in Zone 2. It should be noted that Z2_OWF_B13_CPT was aborted at 2.56m due to technical issues, subesequetly the CPT unit was redeplyed and Z2_OWF_B13_CPTa reaching target depth. Additionally, 4 PC locations were acquired (with 2 additional retests) and a total of 6 VC were also acquired in Zone 2 with one additional 1 retest. The ground conditions in OWF Zone 2 are fairly variable across the area with some locations namely Z2_OWF_B03, Z2_OWF_B04, Z2_OWF_B05, Z2_OWF_B11, consisting of extremely low strength silts and clays, becoming medium to high strength (locally very high strength) till the maximum depth of investigation of 30m BSF. These cohesive sediments are locally intercalated at different depth with medium dense to dense (up to very dense and/or gravelly) silty sands layers of variable thickness comprised in between 0.5 and 5m. At locations Z2_OWF_B01, Z2_OWF_B07, Z2_OWF_B09, Z2_OWF_B13, Z2_OWF_B14, Z2_OWF_B15, Z2_OWF_B18, Z2_OWF_B19 the presence of dense to very dense silty sand (locally gravelly sand) is generally predominant for the first 10-15m below seabed.

AO6 OWF Zone 3

A total of 10 CPTs have been acquired in Zone 3 with additional 3 retests due to refusals.
The ground conditions in OWF Zone 3 are considered to be fairly variable, consisting of mainly medium to very high strength clay and silt intercalated at different depths with medium dense to very dense sand (locally gravelly) with thickness generally comprised in between 0.5 and 5 m. Extremely low shear strength silty sandy clay is generally present at seabed.

At locations Z3_OWF_B04_CPT, Z3_OWF_B06A, Z3_OWF_B10B and Z3_OWF_B12 dense to very dense (locally gravelly) silty sands are predominant for the first 12m.

AO6 OWF Zone 4

A total of 10 CPT locations have been acquired in Zone 4 with 1 additional retest. It should be noted that Z4_OWF_B05B_CPT was aborted at 9.82 due to technical issues, subsequently Z4_OWF_B05B_CPTa reached target depth.

The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay with thickness variable in between 0.5 and 10m to the maximum investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed.

1. INTRODUCTION

1.1. PROJECT OVERVIEW

Tecnoambiente carried out a geotechnical survey at 4 different areas within the proposed MED_AO6 project located along the southeast coast of the French Mediterranean shore in the Gulf of Lion. Two reference ports were used as base during the surveys: Port-La-Nouvelle near Narbonne and Port -Saint-Louis du Rhône near Marseille. The geotechnical survey comprised 200kN seabed CPT, Piston corer (configured to 8-10m barrel in function of the ground conditions) and Vibrocorer with 9m barrel. The number and coordinates of CPT, PC and VC locations acquired were specified by the client (DGEC) and nominated consultant (DNV), final tests depth and samples recovery reached were dictated by the ground conditions.

The four areas surveyed are considered for separate offshore windfarm developments with surface extension and water depths as listed below:

- Windfarm (OWF) Zone 1 area 295.53 km2 Figure 1-1
  Bathymetric range: -68 m to -104 m (Vertical reference Bathyelli v2 ZH)

- Windfarm (OWF) Zone 2 area 311.73 km2 Figure 1-2
  Bathymetric range: -71 m to -128 m (Vertical reference Bathyelli v2 ZH)

- Windfarm (OWF) Zone 3 area 363.12 km2 Figure 1-3
  Bathymetric range: -83 m to -116 m (Vertical reference Bathyelli v2 ZH)

- Windfarm (OWF) Zone 4 area 267.35 km2 Figure 1-4
  Bathymetric range: -86 m to -113 m (Vertical reference Bathyelli v2 ZH)

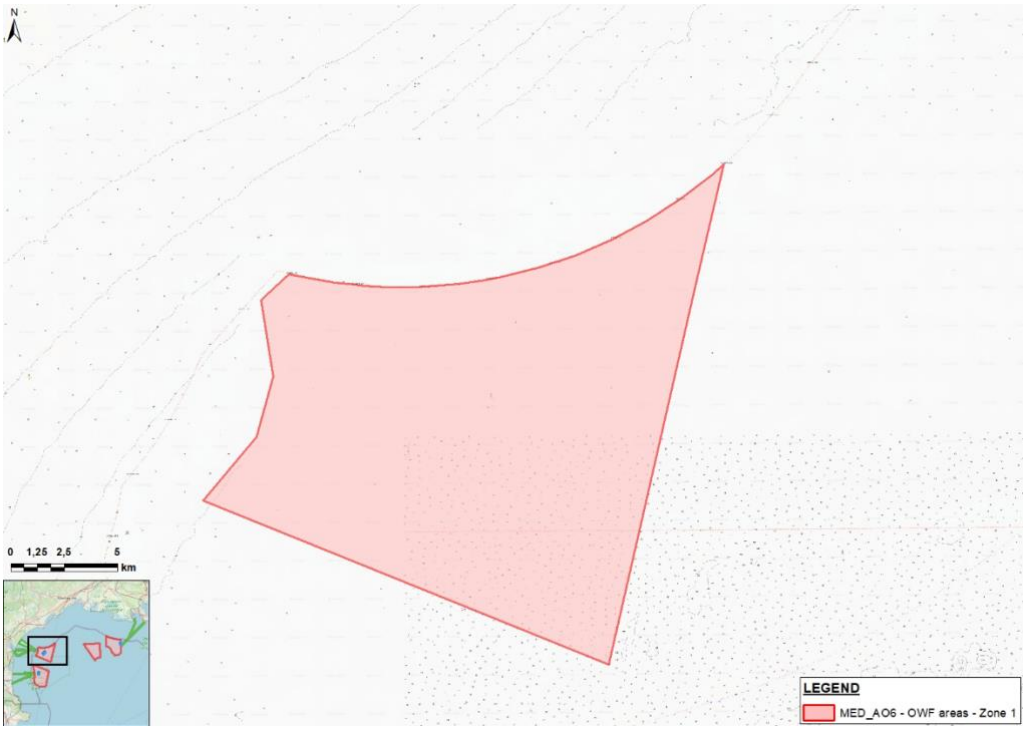


Figure 1-1: Windfarm area (OWF) in Zone 1.

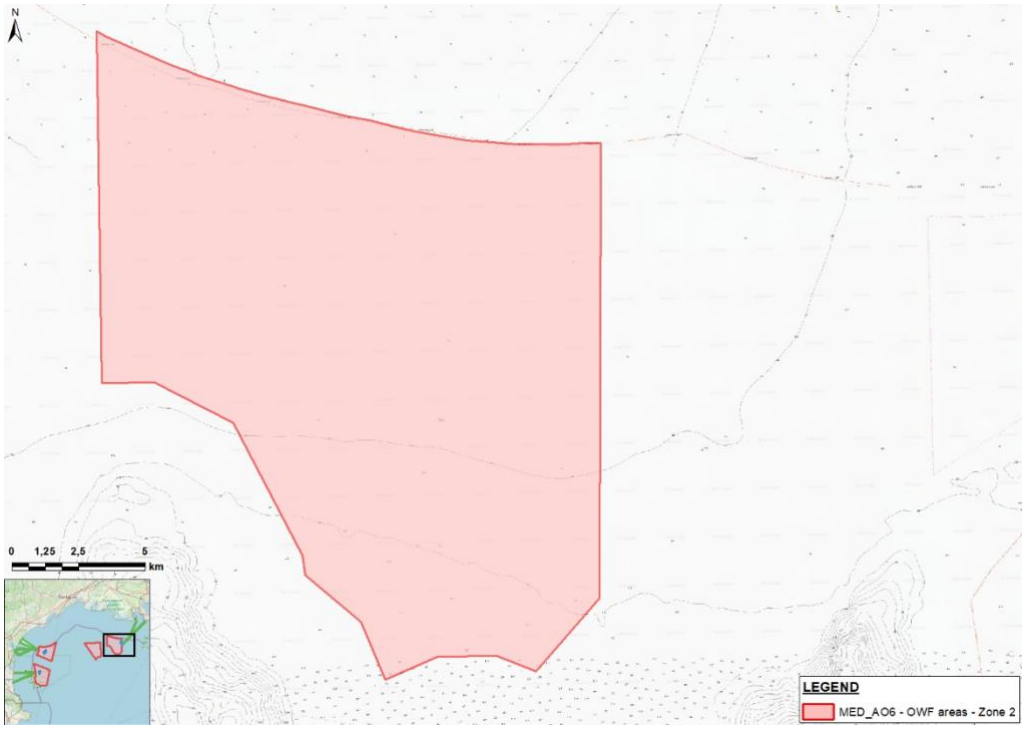


Figure 1-2: Windfarm area (OWF) in Zone 2.

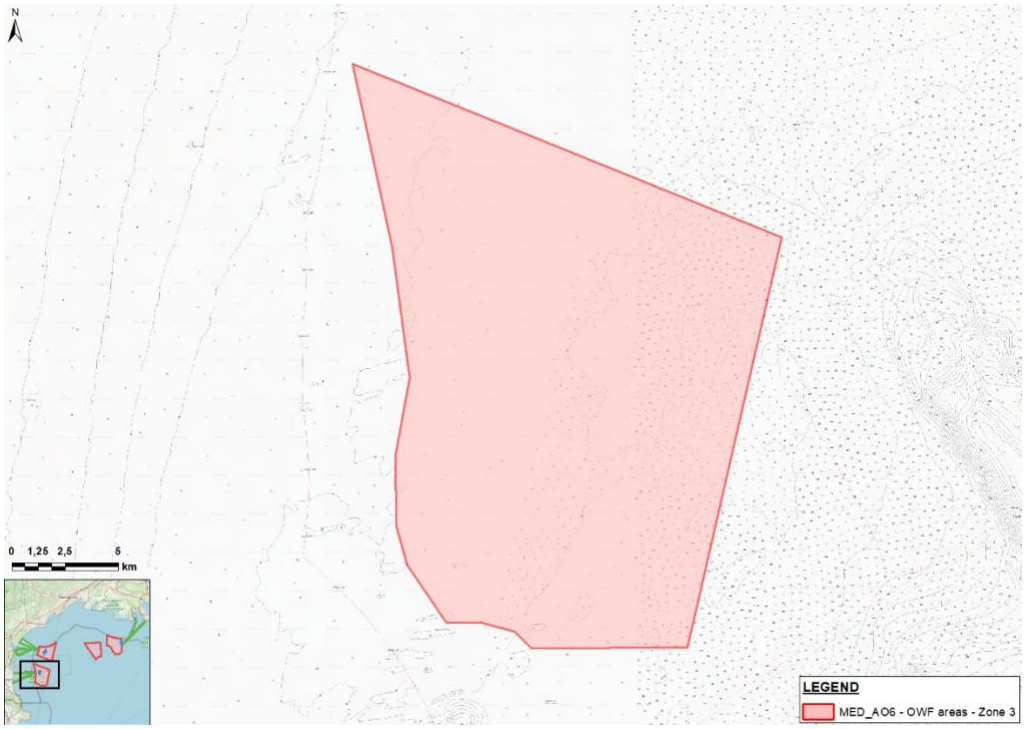


Figure 1-3: Windfarm area (OWF) in Zone 3.

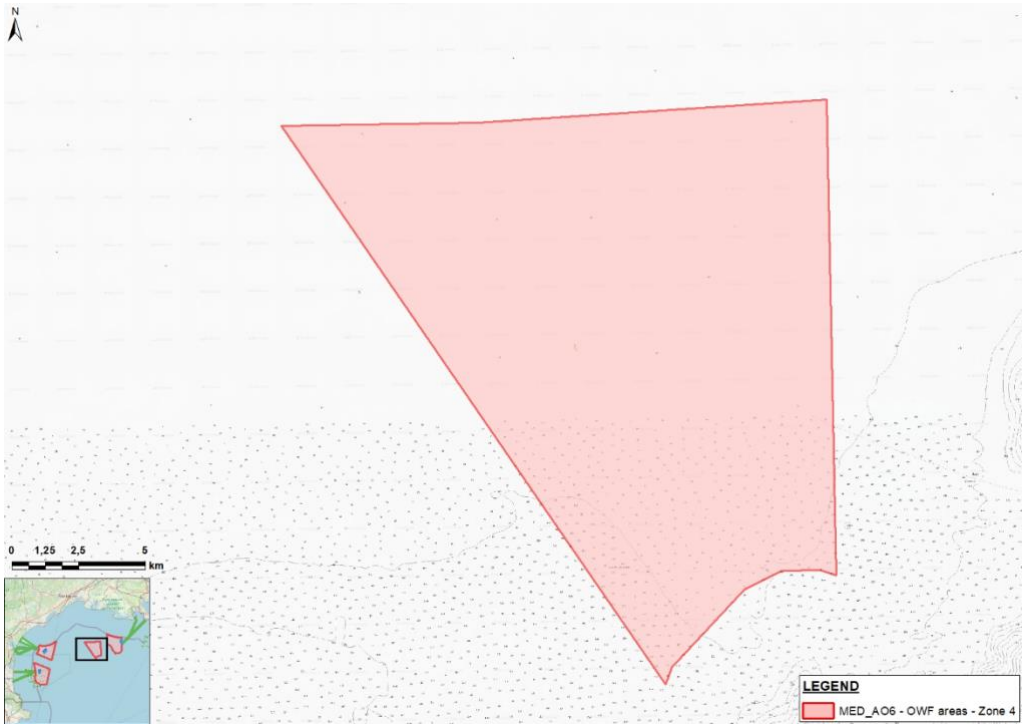


Figure 1-4: Windfarm area (OWF) in Zone 4.

1.2. GEODETIC PARAMETERS

1.2.1. Survey datum

Survey datum parameters are detailed in tables below.

Table 1: Datum parameters table.

DATUM	
Survey Datum:	WGS 84
Spheroid	GRS 1980
Semi-Major Axis (a)	6378137.000000000
Semi-Minor Axis (b)	6356752.314245179
Inverse Flattening (1/f)	1/298.257223563

Table 2: Projection parameters table.

PROJECTION	
Projection	UTM
False Easting	500000
False Northing	0
Latitude of Origin	0º00’00.000000’’
Central Meridian	3º00’00.000000’’
UTM Zone	31 N
Scale Factor on CM	0.9996
Units:	Meters

1.2.2. Vertical datum

The vertical datum used in the QINSy software is Bathyelli v2.0 ZH geoid published by the SHOM in 2019. The Bathyelli v2.0 ZH (SHOM 2019) is a surface based on the GRS 1980 spheroid, and it is a set of surfaces each of which defines the separation of one vertical datum from the WGS84 ellipsoid to the vertical maritime reference Hydrographic Datum or Hydrographic Zero. These ellipsoidal heights are given in meters.

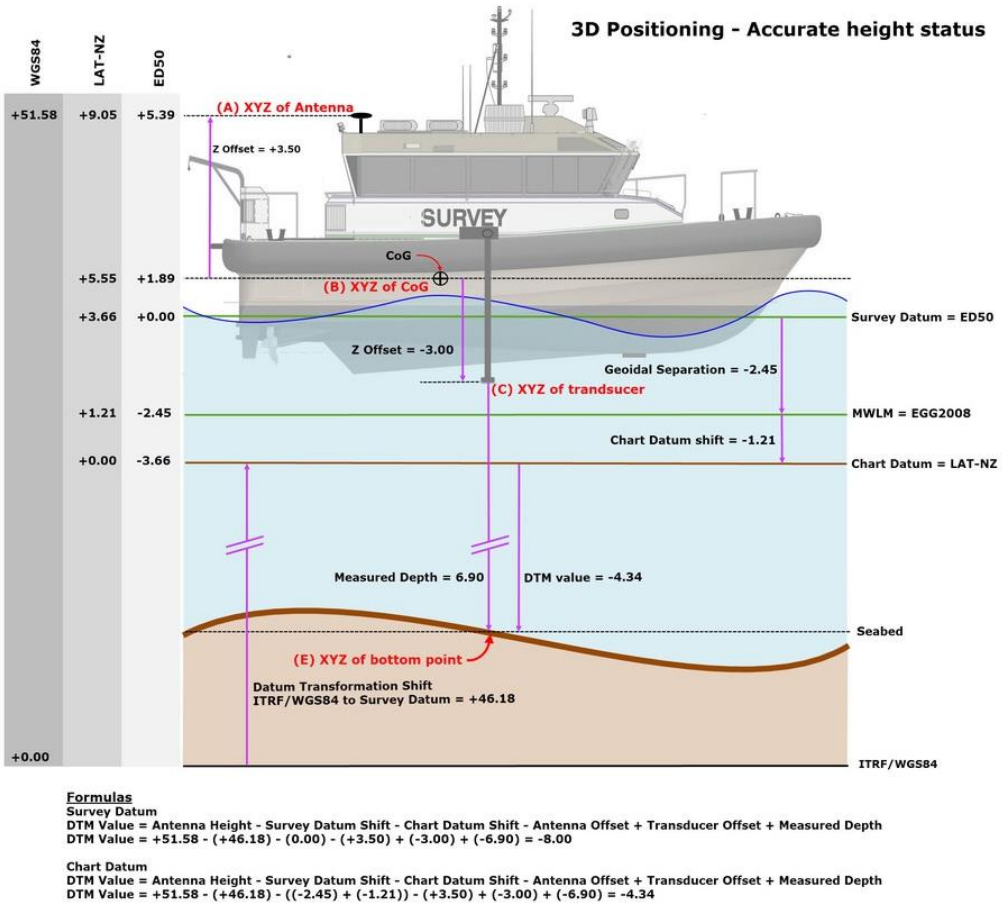
This geoid covers the intersection between the SHOM tidal model and the different tidal zones of France.

For informative purposes, the difference between the hydrographic zero and the LAT reference level was also specified. For the survey area MED_AO6 Z1 and Z3, these differences were calculated according to tidal observations of the Port-la-Nouvelle (43º01' N – 03º 04' E). The difference between the hydrographic zero and the LAT reference level for this port was 0.34 m, according to the study by SHOM "*Références Altimétriques Maritimes. Ports de France métropolitaine et d'outre-mer"* of 2019.

For the survey area MED_AO6 Z2 and Z4, the differences were calculated according to tidal observations of the port of Marseille (Corniche) (43º16' N – 05º 21' E). The difference between the hydrographic zero and the LAT reference level for this port was 0.27 m, according to the study by SHOM "*Références Altimétriques Maritimes. Ports de France métropolitaine et d'outre-mer"* of 2019.

1.2.3. Tidal reduction

In order to carry out the survey as accurately as possible, Tecnoambiente was receiving MarineStar PPP corrections by satellite signal. When using an accurate GNSS system the tidal corrections were carried out in real-time through QINSy computations, as it is shown in Figure 1-5: QINSy's method for accurate tide calculation.



Formulas
Survey Datum
DTM Value = Antenna Height - Survey Datum Shift - Chart Datum Shift - Antenna Offset + Transducer Offset + Measured Depth
DTM Value = +51.58 - (+46.18) - (0.00) - (+3.50) + (-3.00) + (-6.90) = -8.00

Chart Datum
DTM Value = Antenna Height - Survey Datum Shift - Chart Datum Shift - Antenna Offset + Transducer Offset + Measured Depth
DTM Value = +51.58 - (+46.18) - ((-2.45) + (-1.21)) - (+3.50) + (-3.00) + (-6.90) = -4.34

Figure 1-5: QINSy's method for accurate tide calculation.

2. SCOPE OF WORK

This Factual report summarises the offshore geotechnical data and the laboratory testing results, for the survey conducted by Tecnoambiente with the DP2 Roxane Z vessel in the Mediterranean AO6 Offshore Windfarm (OWF) areas located in the Gulf of Lion.

2.1. SURVEY PERIOD

The geotechnical survey operations were carried out between the 17th of March and the 27th of July 2023. Operations were conducted in all four zones simultaneously with acquisition planned in function of the weather conditions.

2.2. GEOTECHNICAL SURVEY PLAN

The geotechnical locations' coordinates along the AO6 offshore windfarm areas were determined in consultation with DNV and DGEC taking into account the expected ground conditions and UXO surveys. The geotechnical investigations were designed to support the interpretation of the geophysical survey as well as complete and improve the soil profiling in the zones to 30m below seabed. The previous geophysical survey was performed between November 2022 and February 2023 on board of the S/V Geofocus.

CPT were carried out at first, retests were instructed by the onboard client rep when needed. A selection of suitable PC locations was proposed by TA with PC barrel length and configuration was determined using the CPT data, on the basis that penetration of the PC would stop where CPT tip resistance exceed 1MPa (as ascertained in the field during operations). Additional VC locations were acquired where PC were not possible or did not reach the expected depth.

CPT, VC and PC operations were conducted in Z1 and Z2. However, in Z3 and Z4 only CPT operations were conducted. A combined total of 73 geotechnical sites have been investigated in the four zones of the offshore windfarm. Summary of performed works is presented in Table 3 and dedicated figures per zone are presented in Figure 2-1, Figure 2-2, Figure 2-3 and Figure 2-4.

Table 3: Summary of the number of geotechnical locations in MED AO6 OWF areas.

SUMMARY OF NUMBER OF GEOTECHNICAL LOCATIONS PER ZONE				
Operation Zone	**CPT**	**VC**	**PC**	**Total**
AO6 OWF Geotechnical locations Zone 1	13 (2 retest)	2	4	21
AO6 OWF Geotechnical locations Zone 2	12 (1 retest)	6 (1 retest)	4 (2 retest)	27
AO6 OWF Geotechnical locations Zone 3	10 (3 retest)	-	-	13
AO6 OWF Geotechnical locations Zone 4	10 (2 retest)	-	-	12
TOTAL				73

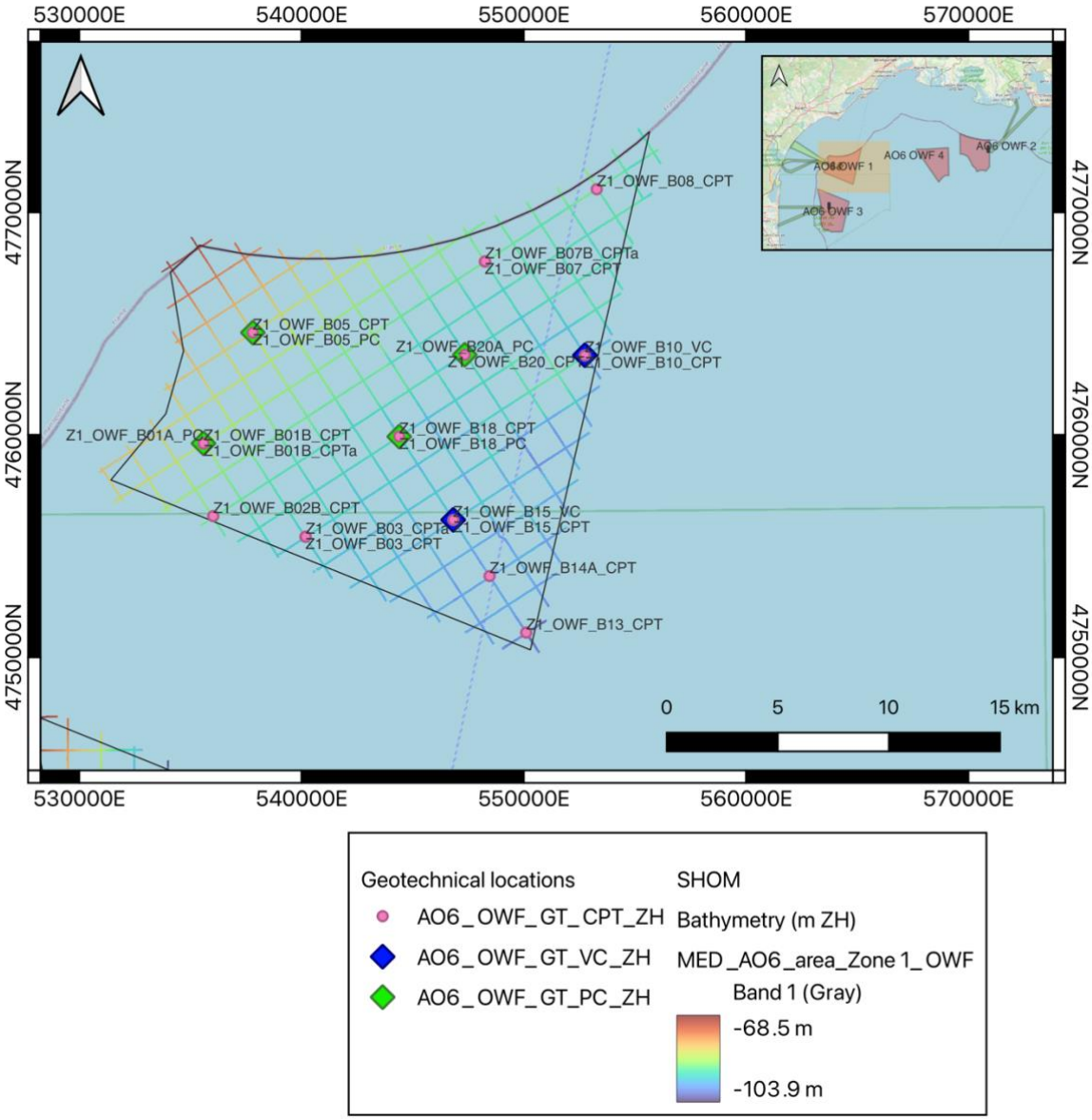


Figure 2-1: Geotechnical locations in the Windfarm area (OWF) in the MED_AO6 Zone 1.

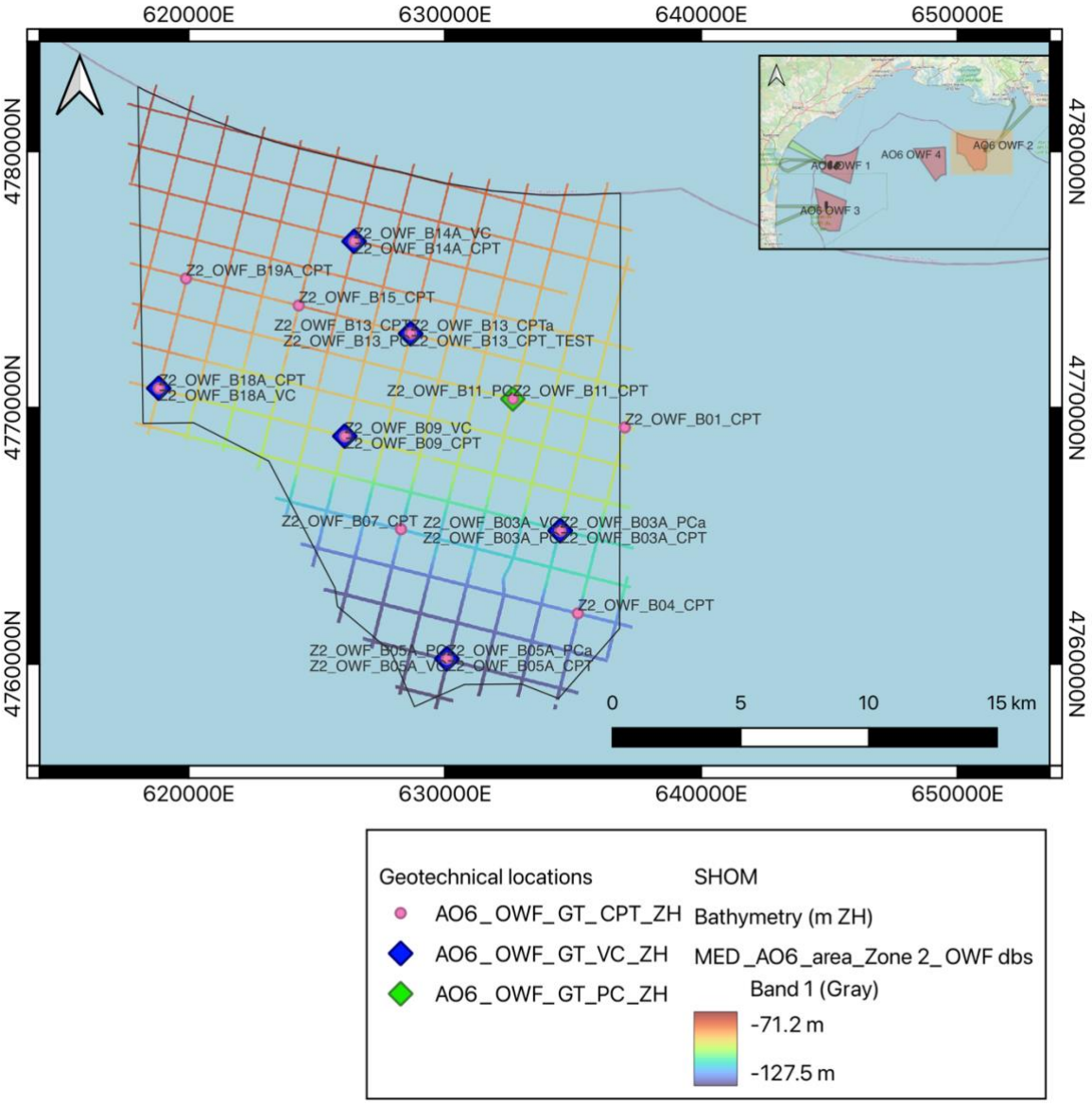


Figure 2-2: Geotechnical locations in the Windfarm area (OWF) in the MED_AO6 Zone 2.

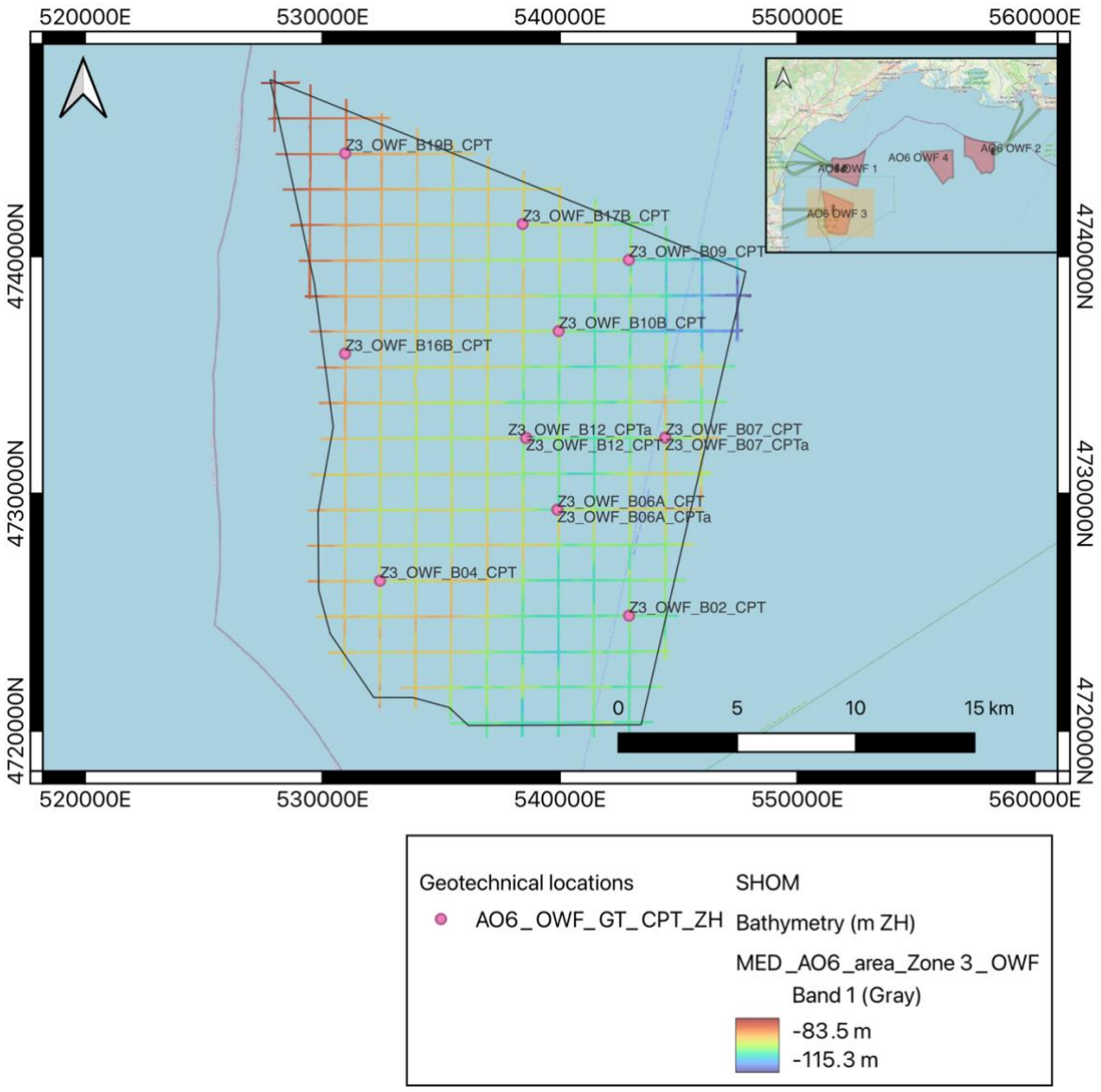


Figure 2-3 Geotechnical locations in the Windfarm area (OWF) in the MED_AO6 Zone 3.

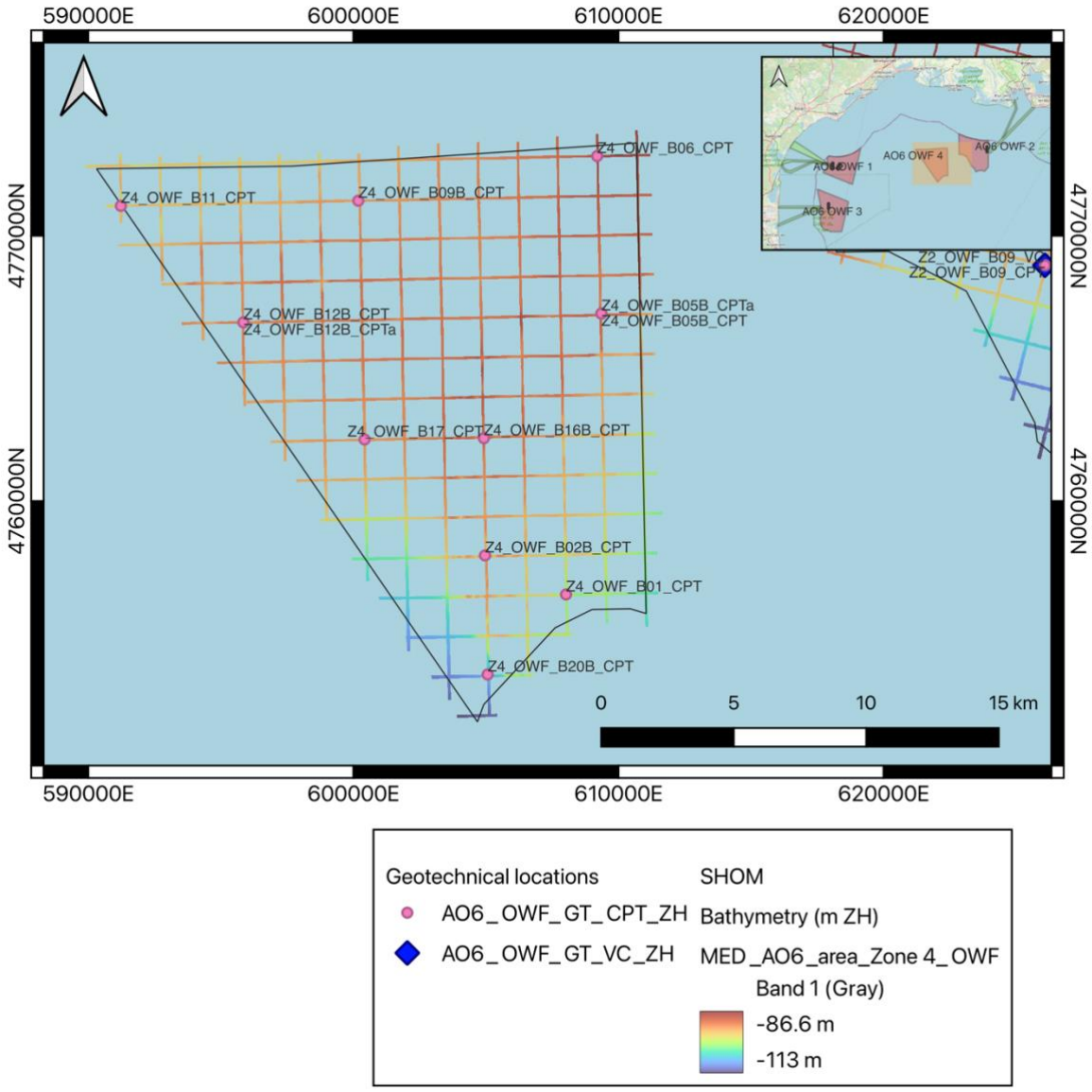


Figure 2-4 Geotechnical locations in the Windfarm area (OWF) in the MED_AO6 Zone 4.

2.3. GEOTECHNICAL LABORATORY TESTING

The following section presents the results and parameters recorded and obtained during the AO6 OWF Geotechnical Ground Investigation for Zone 1 and Zone 2 and subsequent onshore laboratory testing. Tests performed offshore during the geotechnical survey are summarized in Table 4.

Table 4 Summary of geotechnical tests performed offshore on the OWF Zone 1 and Zone 2.

Type	Test	Nº of tests performed		Total
		Zone 1	Zone 2	
Chemical	SRB	8	18	26
Undrained Shear Strength	Hand Torvane	14	15	29
	Pocket Penetrometer	8	13	21
Thermal	TRT	26	48	74

The onshore laboratory testing schedule was developed by TA lead geotechnical engineer in consultation with DNV and then approved by DGEC. The type and number of geotechnical testing has been adapted to the geological conditions encountered on the study area by RINA geotechnical laboratory engineers. Onshore geotechnical laboratory testing program is summarized in Table 5.

Table 5 Summary of onshore geotechnical laboratory testing program scheduled and performed.

Type	Test	Nº of tests planned	Nº of tests deleted	Nº of Results Z1	Nº of Results Z2	Lab. standard
Classification	EN-ISO soil description with PP and TV in cohesive material plus photograph	100	0	4xPC 2xVC	4xPC 6xVC	EN-ISO
	Water content	97	0	59	38	ISO 17892-1:2014

Type	Test	Nº of tests planned	Nº of tests deleted	Nº of Results Z1	Nº of Results Z2	Lab. standard
	Particle density	4	0	3	1	ISO 17892-2:2014 - Method 5.1
	Min. & Max. Density	21	3	2	16	ASTM D4254-16 - Method A
	Submerged Unit weight	97	1	58	38	ISO 17892-2:2014 - Method 5.1
	Atterberg limits	26	0	10	16	ISO 17892-12:2018
	PSD wet sieve (sedimentation if fines are more than 15%)	92	0	29	59	ISO 17892-4:2016
	Sedimentation	92	0	33	59	ISO 17892-4:2016
Strength	Lab Vane	28	2	13	13	ASTM D4648/D4648M-16
	Fall cone	32	1	14	17	ISO 17892-6:2017
	Pocket Penetrometer	55	0	22	28	ISO19901-8:2014
	Torvane test	55	0	22	28	ASTM D8121/D8121M - 19
	UU (Undrained Triaxial)	22	8	6	8	ISO 17892-8:2018
	UUr (Undrained Triaxial Remoulded)	9	0	4	5	ISO 17892-8:2018
	CIUc (Isotropically Consolidated Undrained Triaxial Compression (Ciu))	8	2	3	3	ISO 17892-9:2018
	DS (Direct Shear at (20,	21	1	4	16	ISO 17892-10:2018

Type	Test	N° of tests planned	N° of tests deleted	N° of Results Z1	N° of Results Z2	Lab. standard
	40 and 80 kPa)					
	CIDc (Isotropically Consolidated Drained Triaxial Compression)	10	2	1	7	ISO 17892-9:2018
	DSS (Direct Simple Shear)	10	2	6	2	ASTM D6528-17
	THIXO (Thixotropy)	9	1	3	5	ISO 19901-8:2014 - ISO 17892-6:2017
	Oedometer CRS	7	0	3	4	ASTM D4186 / D4186M-20
Chemical and thermal	$CaCO_3$	17	0	5	12	ISO 10693-14
	ORG	3	0	2	1	ASTM D2974-20 - Method C
	Thermal Conductivity	12	1	4	7	ASTM D 5334-22

All offshore CPT, VC and PC results were cross correlated with onshore lab results. A list of cross correlation method is presented below:

- Updated CPT descriptions with VC and PC lab soil description and strength results.
- Updated VC and PC soil description based on Particle size distribution (PSD), Attemberg limits and carbonate content.
- Updated CPT soil description based on undrained shear strength and relative density from shear strength parameters and direct shear test parameters.
- Shear strength index (PP, TV and derived from CPT) compared with Triaxial UU to select Nkt factors.
- Thermal Resistivity checked with Thermal Resistivity performed in the onshore lab.

As stated above, the comparison between field results and onshore lab results confirmed the validity of the latter on the samples tested, showing a generally good correlation.

Summary tables with results for the onshore and offshore testing are presented in Summary of ground conditions - Z4

The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay with thickness variable in between 0.5 and 10m to the maximum investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed (APPENDIX I – LAB RESULTS SUMMARIES – AO6 OWF ZONE 1 AND ZONE 2)

Onshore laboratory certificates and tests digital data are included in APPENDIX XIV – ONSHORE LAB RESULTS CERTIFICATES – AO6 OWF ZONE 1 AND ZONE 2.

3. METHODOLOGY

In this section there is a summary of the methodologies and data processing performed for the results of the onboard geotechnical survey tests and the onshore laboratory analyses.

3.1. CPT LOGS

The processing and interpretation of CPT data has been conducted by TA geotechnical engineers, using gINT software. Raw were processed and CPT plots and logs are presented with measured and derived parameters. Results of the relevant laboratory tests for the collocated VC and PC locations were provided for Zone 1 and Zone2.

The interpretation follows the recommendations of Lunne et al (1997), to derive (where appropriate) parameters including sediment type, friction ratio, pore pressure ratio, undrained shear strength and relative density. The CPT data is corrected for the 10 cm^2 cone sleeve/tip offset. In addition, a depth correction is applied to the data to take into account the 'air-gap' between the cone tip position within the Manta unit when the push is initiated, and the actual base level of the Manta seabed frame, i.e., the level at which the cone tip actually measures resistance

as it enters the seabed. Nkt factors used for the Su calculations are 15 and 20, selected based on UU and CIU strength tests results.

The derivation of relative density (Density Index) for a given granular soil is affected by inherent variability in factors which contribute to sand compressibility and material interaction with the penetrating cone, such as grain size, grain shape, mineralogy and their vertical and lateral distribution within the profile. Assignment on the CPT logs of a granular density description for a given strata is determined from the calculated Density Index (as per EN ISO 14688-2, 2018). The relative density trend lines shown on test plots are from the empirical calibration of Jamiolkowski et al. (2001). It must be pointed out that Density Index calculations often show a large variation and uncertainty when applied to marine granular sediments.

The final soil descriptions provided on the CPT logs are based on interpretation of the data, For Zone 1 and 2 cross correlations with available lab soil descriptions from PC and VC cores was also performed The descriptions of the materials encountered are in general accordance with EN ISO 14688.

3.2. VIBROCORE AND PISTON CORE LOGS

The vibrocore and the piston core logs include the final material descriptions that have been cross-correlated with the PSD, shear strength, plasticity from the Atterberg limits and carbonate concentration results obtained from the laboratory.

3.3. LABORATORY TESTING

During the survey for Zone 1 and Zone 2, vibrocores (VC) and piston cores (PC) were split into 1 m parts (when possible) and offshore in-situ measurements were taken (TRT and strength measurements with hand torvane and hand penetrometer when applicable). After offshore sampling, vibrocore and piston core samples were sealed with caps and duct tape and stored vertically in a container on the deck of the vessel.

At the end of the survey, the VC and the PC samples were transported onshore to RINA laboratory (Italy) in their dedicated storage crates. Following the receiving of the crates at the laboratory, samples were handled and processed as follow:

- The liner samples were cut open in a way to produce minimal disturbance to the enclosed sample. Samples with the presence of cohesive clay material were preserved for the laboratory strength testing.
- A colour photography was taken for all cut liners from a single vibrocore. The samples were laid out as industry standard format, with first liner (from seabed to 1.00 m) to the left, consecutive liner depths laid towards the right. The image was saved and renamed to match the unique location ID.
- Soil description: The vibrocore and piston core were logged with the descriptions of the materials encountered in accordance with EN ENSO 14688.
- Thermal Resistivity (TRT) measurements were performed in some samples.
- Small samples were taken from the samples in the designated depths to perform the geotechnical tests.

Afterwards, classification testing was undertaken at a range of depth intervals on most samples. The amount of geotechnical laboratory testing undertaken is in line with industry standards and has been adapted to the geological conditions encountered along the route.

Summary tables for all the relevant laboratory results are presented in Summary of ground conditions - Z4.

The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay with thickness variable in between 0.5 and 10m to the maximum investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed (APPENDIX I – LAB RESULTS SUMMARIES – AO6 OWF ZONE 1 AND ZONE 2).

Also, in Z2_OWF_B13_PC samples were composed of very low strength very closely spaced very thinly bedded very clayey, SILT (beds medium to coarse sand) hence deemed unsuitable by the lab for UU and DSS. However, LV and FC were performed instead.

In Z2_OWF_B11_PC samples were composed of very low strength medium spaced thinly bedded clayey, very sandy, SILT hence deemed unsuitable by the lab for CIU, UU and DSS. However, LV and FC were performed instead.

Certificate of the laboratory test together with digital data are presented in APPENDIX XIV – ONSHORE LAB RESULTS CERTIFICATES – AO6 OWF ZONE 1 AND ZONE 2

3.3.1. Classification tests

3.3.1.1. Water content

Water (moisture) content has been determined only in the lab onshore and has been determined from intact sediment samples taken directly from the split vibrocore and piston core samples using a thin-walled stainless steel cutting ring to ensure optimal sample quality and minimal disturbance, as well as consistency between samples. Water content was also determined on samples used for more advanced tests (such as Atterberg Limits, Min-Max Density, Triaxial UU and Shear Box). Whilst due care is taken to ensure an undisturbed sample is utilised for moisture content determination, it must be considered that the original in-situ moisture content, especially in granular material, could have been modified by the physical act of sampling (for example vibration and grain packing/pore space readjustment), together with the potential free drainage during sample transport and storage, prior to being tested.

3.3.1.2. Bulk and Dry Density

Natural bulk and dry densities were determined from intact samples taken directly from split vibrocore and piston core samples using a thin-walled stainless steel cutting ring to ensure optimal sample quality and minimal disturbance, as well as consistency between samples. Densities were

also determined on samples used for more advanced tests (such as Atterberg Limits, Triaxial UU and Shear Box).

3.3.1.3. Min and max density

Maximum Index Dry Density was measured with a vibrating table with surcharge.

3.3.1.4. Unit Weight

The unit weight, also known as the 'weight density', of a soil refers to its weight per cubic metre and is typically expressed as kilonewtons per cubic metre (kN/m3).

3.3.1.5. Atterberg Limits

The liquid (WL) and plastic (WP) limits were determined from the samples directly from the vibrocore and piston core liners (not-split), before further altering them in any way. The samples were removed from the liners as intact blocks (undisturbed) to ensure optimal sample quality and minimal disturbance. The plastic limit (wP) of a soil is the water content at which a soil ceases to be plastic when dried further. The plastic limit, together with liquid limit (wL) and plasticity index (wL – wP), are basic inputs to soil classification. These parameters provide fundamental insight into the behaviour of a soil and are correlated to a number of more advanced engineering parameters.

3.3.1.6. Particle Size Distribution

Particle Size Distribution (PSD) tests were performed on a range of sediment types from the samples, which together with the logging, provides a complete sediment description profile. The samples for PSD were taken over a representative range in any given strata. The fines component (<63mm fraction) was determined via sedimentation using the pipette method when specimen contains >15% of this fraction.

3.3.2. Strength tests

3.3.2.1. Index Shear Strength

Shear strength determinations were made during logging with a manual Torvane (TV) and pocket penetrometer (PP). The results are provided on the laboratory results. The TV and PP data from the offshore processing have also been reviewed and presented in the logs. As per project specifications, in addition, for soft clays (extremely to very low strengths), a lab vane and fall cone on intact and remoulded soils were carried out. The results are provided, as well, on the lab results.

3.3.2.2. Unconsolidated Undrained Triaxial (UU)

The unconsolidated undrained (UU) triaxial test provides a laboratory determination of undrained triaxial shear strength under compression loading. A cylindrical specimen, which can comprise undisturbed, re-compacted, remoulded, or reconstituted soil, is subjected to an isotropic stress under undrained conditions and thereafter is sheared under undrained conditions. The test allows the determination of shear strength and stress-strain relationships in terms of total stresses. The test was carried out as a single stage.

No drainage is permitted during the application of isotropic pressure and the axial load. Since pore-water pressures are not measured, the maximum obtained strength is expressed in terms of total stresses. The measured value corresponds to the shear strength of the soil at the in-situ conditions before any changes in void ratio and water content due to foundation installation.

3.3.2.3. Isotropically Consolidated Undrained Triaxial Compression (CIUc)

Consolidated undrained triaxial tests with pore pressure measurements are performed to determine shear strength characteristics, stress-strain strength relationships and dilatancy parameters of a soil specimen. The test is performed on intact 35mm specimens of cohesive soils. Specimens are saturated, consolidated (isotropically) and sheared in compression without

drainage at a constant rate of axial deformation (strain controlled). CIU tests are performed on a single specimen at in-situ stress conditions. The test is conducted in a triaxial cell, allowing application of a radial confining pressure and independent axial load. Pore water pressure in the sample is regulated through a back pressure system, which controls the effective stress in the specimen during consolidation phase, and subsequently measures changes in pore water pressure during shear.

3.3.2.4. Isotropically Consolidated Drained Triaxial Compression (CIDc)

Isotropically Consolidated Drained Triaxial Compression (CIDc) tests are performed to determine shear strength characteristics, stress-strain strength relationships and dilatancy parameters of a soil specimen. The test is performed on intact or reconstituted (remoulded) specimens of non-cohesive soils. Specimens are saturated, consolidated (isotropically) and sheared in compression with drainage at a constant rate of axial deformation (strain controlled). CID tests are performed on a set of three specimens to establish Mohr-Coulomb failure parameters over a stress range. The test is conducted in a triaxial cell, allowing application of a radial confining pressure and independent axial load. Pore water pressure in the sample is regulated through an automatic pressure/volume change control back pressure system (APC pump). The APC controls the effective stress in the specimen during consolidation phase, and the volume change which occurs during drained shear. The test is performed on cylindrical specimens from 35 mm diameter with height/diameter ratio between 2 and 3.

3.3.2.5. Direct Shear (DS)

The direct shear (DS) test is carried out to determine shear strength parameters of a consolidated soil sample in drained conditions. The test consists in monitoring the increase of shear stress along a plane determined by the configuration of the apparatus. The test may be performed on intact or remoulded specimens of either granular or cohesive soils, although the most common application is to free draining granular materials. The test is carried out on three reconstituted or intact specimens, each subject to a different vertical consolidation load, to determine the Mohr-Coulomb failure envelope and corresponding parameters. Testing follows ISO 17892-10. Direct

Shear testing was carried out on samples taken in granular strata from the vibrocores, selecting three sub-samples to provide peak friction angles and values of cohesion (kPa). The samples were tested under in-situ stress conditions, with stages at nominal 20, 40 and 80kPa.

3.3.2.6. Direct Simple Shear (DSS)

The direct simple shear (DSS) test measures the strength and stress-strain characteristics of soil subject to constant rate of simple shear deformation mode of loading after one-dimensional consolidation. The main result of the test is the undrained shear strength in DSS conditions (Su_{DSS}) with failure being taken at 20% of shear strain. DSS simulates plane strain mode of shearing for specimens in constant volume conditions. The test is performed on a cylindrical specimen placed in an apparatus where radial deformation is prevented by a soft membrane encased in stack of rigid Teflon coated rings.

3.3.3. Thixotropy (THIXO)

Thixotropy testing assesses a soil's reversible change in consistency under shear stress. It is typically conducted by subjecting a soil sample to repeated shearing and measuring its viscosity changes over time, helping to understand its fluid-like behaviour when disturbed and subsequent recovery to a more solid state when at rest.

3.3.4. Compressibility

3.3.4.1. Oedometer CRS

The Constant Rate of Strain (CRS) oedometer test allows determination of the rate and magnitude of consolidation of a laterally restrained soil specimen when it is drained axially and subjected to controlled deformation loading. The specimen is saturated using the back pressure method. The specimen is deformed axially at a constant rate while measuring the time, axial deformation, reaction force, chamber pressure, and base pressure. Results are processed to develop compressibility parameters, consolidation parameters and maximum past pressure. The test is

carried out on saturated undisturbed (intact) specimens of fine graded soils using an oedometer apparatus. The test specimen is placed between two porous stones and laterally confined by a rigid ring. Drainage is only allowed in the vertical direction from the top surface. Excess pore pressure developed during loading is measured at the bottom surface. Considering that the specimen is saturated and neglecting the compressibility of both the soil grains and the water, changes in volume recorded during compression result exclusively from the expelled pore water. As there is no radial strain, volume change and thus changes in void ratio can be determined by measuring the vertical displacement.

3.3.5. Chemical properties

3.3.5.1. Sulphide-reducing bacteria (SRB)

SRB detection tests were carried out offshore and were executed on the first liner of the samples, if suitable. The procedure was the following:

1. 2 ml of soil sample (mainly in water phase) are added into the surface of the gel in the test tubes (ECHA Sig Sulphide Test). The initial photograph is taken.

2. The tubes are incubated at 30 ºC in upright position.

3. Sulfate-reducing bacteria are present if the pouch begins to blacken. Population can be estimated by the time from inoculation to colour change by comparison as shown in Figure 3-1.



Figure 3-1: Example of estimation of population after 6 days from inoculation.

4. The pouch has to be controlled daily for 6 days after inoculation to check blackness.

5. After 6 days, the absence of blackening is a negative result.

6. The estimated population is given in CFU/ml as a preliminary result and then converted to CFU/g for soils.

Very high levels of sulphide already present in samples may cause an immediate positive (i.e. a black line at the gel surface). This does not necessarily mean that viable SRB are present although this is the probable source of the sulphide. If viable SRB are present, the black colour will spread during incubation.

The pouch can darken after more than one week after inoculation. This means that the population of sulphide-reducing bacteria is very low, but not completely non-existing (below 1 CFU/g).

SRB results are included in Summary of ground conditions – Z4. The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay

with thickness variable in between 0.5 and 10m to the maximum investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed (APPENDIX I – LAB RESULTS SUMMARIES – AO6 OWF ZONE 1 AND ZONE 2).

3.3.6. Calcium Carbonate Content

The purpose of this test is to determine the percentage of calcium carbonate contained in a soil. The test is carried out using a calcimeter, i.e. a hermetically sealed plexiglass container fitted with a pressure gauge to measure the gaseous pressure inside the closed container. A predetermined quantity of soil and hydrochloric acid are placed inside the calcimeter and, once the container is closed, they are brought into contact. The pressure inside the calcimeter is measured by means of a pressure gauge.

3.3.7. Organic content

This test was planned to determine the organic content as the mass loss on ignition (in %). The purpose of this test is the determination of the percentage of organic matter contained in a soil. This procedure follows ASTM D2974 Method C.

3.3.8. Thermal properties

Thermal conductivity (TC) relates the heat flux through a material to the applied temperature gradient. Thermal conductivity of soil is a key input to design of buried cables. Conductivity parameters are needed in all cases where dissipation of heat through subsoil is considered in design. The thermal conductivity of a soil depends on the individual thermal conductivities of its solid, liquid and gaseous components, their volume proportions and their arrangement or structure. Generally, solids conduct heat better than liquids, and liquids better than gases. An increase in moisture content causes an increase in conductivity up to the point of saturation. For saturated, unfrozen soils, the conductivity decreases with decrease in density. Therefore, it follows that the denser a soil, the higher will be its composite thermal conductivity. Typical values of thermal conductivity for soil are of the order of 0.25 W/mK to 2.5 W/mK (Mitchell and Soga,

2005). Thermal conductivity tests are carried out according to ASTM D5334. Thermal conductivity is determined by a variation of the line source test method. A needle probe with a large length to diameter ratio simulates conditions of an infinitely long, infinitely thin heating source. The probe consists of a heating element and a temperature measuring element and is inserted into the specimen. A known current and voltage are applied to the probe and the temperature rise with time is recorded. Thermal conductivity is obtained from an analysis of the temperature time series data during the heating cycle. The test may be performed on undisturbed samples or remoulded specimens. In the case of undisturbed samples, the test may be performed by inserting the needle directly into the specimen without removing from liner (e.g., VC or PC samples).

Three measurements for unit were collected (over a period of approximately 120 s each). The final result is the average value of two sets of three measurements on the same depth (a total of six measurements).

Offshore measurements are obtained as Thermal conductivity (W/(m·k)). In the onshore data processing, values are transformed to Thermal Resistivity values ((m·k)/W) and undergo a quality check for discarding possible inconsistent results.

The evaluation of the resulting dataset indicated satisfactory equipment performance during testing. All Thermal Resistivity values are considered valid and inside the standard interval values.

Testing was not conducted in soils with conditions unsuitable for insertion or were complete contact between the probe and the surrounding material was insufficient. This case just occurred in one liner with the presence of gravels (Zone 1 liner 4 of location Z1_OWF_B10_VC).

Thermal resistivity results, along with the offshore result are included in the Summary of ground conditions - Z4.

The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay with thickness variable in between 0.5 and 10m to the maximum

investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed (APPENDIX I – LAB RESULTS SUMMARIES – AO6 OWF ZONE 1 AND ZONE 2).

4. GEOTECHNICAL RESULTS

This report includes the final CPT test with engineering description that has been cross-correlated with the results from the vibrocore and the piston core. The vibrocore and piston core sample descriptions have been updated following the laboratory testing results and EN-ISO 14688-1:2018, EN-ISO 14689-1:2018 and EN-ISO 14688-2:2018 specifications cross correlated with the strength tests, plasticity from Atterberg limits and carbonate content.

Acquired CPT, Vibrocore and Piston core acquired are presented in the following sections and are organized by OWF Zones 1 to 4.

4.1. DATA QUALITY

The geotechnical data acquired fulfilled the industry standard requirements in terms of quality and frequency of testing within the investigated areas for an initial characterisation of the AO6 OWF development.

For Zone 1 and Zone 2 CPT derived soil interpretation has been updated with the laboratory soil description and very good correlation is found among the co-located PC, VC and CPT locations, with minor discrepancies due to soil variability. PP, TV and Thermal resistivity values measured offshore are consistent with values obtained from the onshore laboratory testing. Data from the oedometers indicated sample quality to be excellent for the PC and fair for the VC.

4.2. MED_AO6 OWF ZONE 1

4.2.1. CPT - Z1

A total of 12 CPTs locations have been acquired in Zone 1 (with additional 3 retests due to refusals). Average CPT penetration was of 25.74 m, with maximum penetration of 30.87 m and a minimum penetration of 18.26 m. CPT plots are presented in APPENDIX V – CPT DATA - AO6

OWF ZONE 1, water depths were derived from the MBES survey data acquired by TA during the previous geophysical and UXO survey.

CPT logs with interpreted soil description, combined with VC and PC where these are available, are included in APPENDIX II – COMBINED CPT LOGS - AO6 OWF ZONE 1.

All CPT digital and processed data are provided in APPENDIX XV – CPT DIGITAL DATA.

The coordinates, locations ID, penetration and water depths (m ZH) are included in Table 6.

Table 6 CPT geotechnical points from AO6 OWF Zone 1 geotechnical survey.

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) - MBES (m)	Penetration (m)
Z1_OWF_B01B_CPT	CPT	535595.02	4759617.32	-85.11	26.55
Z1_OWF_B01B_CPTa	CPT	535590.89	4759605.9	-85.01	20.73
Z1_OWF_B02B_CPT	CPT	536024.66	4756343.19	-88.90	28.29
Z1_OWF_B03_CPT	CPT	540173.2	4755417.32	-93.90	24.24
Z1_OWF_B03_CPTa	CPT	540185.64	4755420.06	-93.96	19.98
Z1_OWF_B05_CPT	CPT	537802.22	4764592.9	-82.35	25.71
Z1_OWF_B07_CPT	CPT	548245.88	4767784.63	-89.34	18.26
Z1_OWF_B07B_CPTa	CPT	548259.43	4767796.5	-89.37	19.48
Z1_OWF_B08_CPT	CPT	553283.12	4771040.14	-88.86	23.79
Z1_OWF_B10_CPT	CPT	552748.23	4763567.91	-95.47	30.64
Z1_OWF_B13_CPT	CPT	550109.22	4751107.06	-99.94	30.1
Z1_OWF_B14A_CPT	CPT	548461.56	4753650.04	-96.38	28.93

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) - MBES (m)	Penetration (m)
Z1_OWF_B15_CPT	CPT	546832.01	4756171.29	-94.30	27.96
Z1_OWF_B18_CPT	CPT	544394.81	4759927.8	-94.02	30.54
Z1_OWF_B20_CPT	CPT	547350.77	4763598.43	-93.54	30.87

4.2.2. Vibrocorer and Piston corer sampling - Z1

A total of 4 PC locations were acquired in Zone 1. The average PC sample recovery was 4.25 m, with a maximum recovery of 5.95 m and a minimum recovery of 2.12 m. A total of 2 VC locations were also acquired in Zone 1. The average VC sample recovery was 7.72 m, with a maximum recovery of 8.28 m and a minimum recovery of 7.16 m.

Water depths for PC and VC were updated from the MBES survey data acquired by TA. VC processed vibrocore logs are included in APPENDIX III – VC LOGS - AO6 OWF ZONE 1.

PC processed logs are included in APPENDIX IV – PC LOGS - AO6 OWF ZONE 1.

All VC and PC laboratory offshore and onshore lab tests data is provided in Summary of ground conditions - Z4.

The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay with thickness variable in between 0.5 and 10m to the maximum investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed (APPENDIX I – LAB RESULTS SUMMARIES – AO6 OWF ZONE 1 AND ZONE 2).

The location, penetration, recovery and water depths (m ZH) of every performed VC and PC are included in Table 7.

Table 7 VC and PC geotechnical points from AO6 OWF Zone 1 geotechnical survey.

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) - MBES (m)	Penetration (m)	Recovery (m)	Recovery (%)
Z1_OWF_B01A_PC	PC	535587.67	4759613.72	-85.09	5.4	4.9	91%
Z1_OWF_B05_PC	PC	537809.48	4764591.61	-82.39	7.8	5.95	76%
Z1_OWF_B18_PC	PC	544394.51	4759917.16	-93.86	3.05	2.12	70%
Z1_OWF_B20A_PC	PC	547344.34	4763598.69	-93.55	4.7	4.05	86%
Z1_OWF_B10_VC	VC	552748.92	4763576.47	-95.45	5.8	7.16	123%
Z1_OWF_B15_VC	VC	546825.15	4756175.46	-94.29	9	8.28	92%

It should be noted that location Z1_OWF_B10_VC had recovery of 123% due to the presence of fine sands flowing into the barrel due to the prolonged vibration while the VC could penetrate no further at approximately 5.8m.

4.2.3. Summary of ground conditions - Z1

The ground condition in OWF Zone 1 generally consist of extremely low strength silts and clays at seabed, becoming medium to high strength (locally sandy, locally very high strength) till the maximum depth of investigation or 30m BSF. These cohesive sediments are intercalated at variable depths with medium dense to dense (locally very dense and/or gravelly) silty sand layers with thickness typically in between 0.5 to 5m. At locations Z1_OWF_B08, Z1_OWF_B10, Z1_OWF_B13 and Z1_OWF_B14A the presence of dense to very dense silty sand (locally gravelly sand) is predominant generally for the first 12m BSF. It should be noted that locations Z1_OWF_B03_CPT and Z1_OWF_B07_CPT had refusal shallower than 20m BSF.

4.3. MED_AO6 OWF ZONE 2

4.3.1. CPT - Z2

A total of 12 CPT have been acquired in Zone 2. Average CPT penetration has been of 27.51 m, with maximum penetration of 30.00 m and a minimum penetration 27.32m BSF.

It should be noted that Z2_OWF_B13_CPT was aborted at 2.56m due to technical issues, subsequently the CPT unit was redeployed and Z2_OWF_B13_CPTa reaching target depth.

CPT plots are presented in APPENDIX V – CPT DATA - AO6 OWF ZONE 1, water depths were derived from the MBES survey data acquired by TA during the previous geophysical and UXO survey.

CPT logs with interpreted soil description, combined with VC and PC where these are available, are included in APPENDIX II – COMBINED CPT LOGS - AO6 OWF ZONE 1.

All CPT digital and processed data is provided in APPENDIX XV – CPT DIGITAL DATA.

The locations, penetration and water depth (m ZH) of every performed CPT in Zone 2 are included in Table 8.

Table 8 CPT geotechnical points from AO6 OWF Zone 2 geotechnical survey.

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Penetration (m)
Z2_OWF_B01_CPT	CPT	637024.84	4769227.74	-95.10	29.94
Z2_OWF_B03A_CPT	CPT	634504.84	4765192.27	-108.99	29.62
Z2_OWF_B04_CPT	CPT	635190.67	4761968.41	-119.80	30
Z2_OWF_B05A_CPT	CPT	630077.47	4760196.74	-125.57	29.83

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Penetration (m)
Z2_OWF_B07_CPT	CPT	628284.57	4765251.63	-114.24	29.84
Z2_OWF_B09_CPT	CPT	626098.61	4768886.32	-94.14	29.8
Z2_OWF_B11_CPT	CPT	632657.34	4770337.94	-94.42	29.76
Z2_OWF_B13_CPT	CPT	628660.88	4772895.5	-88.05	2.56* *test aborted
Z2_OWF_B13_CPTa	CPT	628669.72	4772887.26	-88.04	29.79
Z2_OWF_B14A_CPT	CPT	626463.06	4776487.28	-80.82	29.67
Z2_OWF_B15_CPT	CPT	624295.46	4773987.6	-83.46	27.32
Z2_OWF_B18A_CPT	CPT	618838.51	4770756.04	-89.37	29.83
Z2_OWF_B19A_CPT	CPT	619896.41	4775039.43	-83.40	29.87

4.3.2. Vibrocorer and Piston corer sampling - Z2

A total of 4 PC locations were acquired in Zone 2 with 2 additional retests. The average PC sample recovery was 3.22 m, with a maximum recovery of 4.10 m and a minimum recovery of 2.73 m. A total of 6 VC were also acquired in Zone 2 with one additional 1 retest. The average VC sample recovery was 7.40 m, with a maximum recovery of 8.58 m and a minimum recovery of 3.97 m. Water depths for PC and VC were updated from the MBES survey data acquired by TA.

VC processed vibrocore logs are included in APPENDIX VII – VC LOGS - AO6 OWF ZONE 2. PC processed logs are included in APPENDIX VIII – PC LOGS - AO6 OWF ZONE 2.

All VC and PC laboratory offshore and onshore summary data is provided in APPENDIX I – LAB RESULTS – AO6 OWF ZONE 1 and ZONE 2. The locations, penetration, recovery, and water depth (m ZH) of every performed VC and PC are included in Table 9.

Table 9 VC and PC geotechnical points from AO6 OWF Zone 2 geotechnical survey.

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Actual Penetration (m)	Recovery (m)	Recovery (%)
Z2_OWF_B03A_PC	PC	634495.33	4765188.57	-109.29	4.95	3.38	68%
Z2_OWF_B03A_PCa	PC	634508.24	4765200.42	-108.89	5	3.23	65%
Z2_OWF_B05A_PC	PC	630072.42	4760202.97	-125.56	2.8	2.73	98%
Z2_OWF_B05A_PCa	PC	630079.15	4760201.4	-125.58	3.5	2.86	82%
Z2_OWF_B11_PC	PC	632650.31	4770339.21	-94.41	5	4.1	82%
Z2_OWF_B13_PC	PC	628652.03	4772877.67	-88.01	4.85	3	62%
Z2_OWF_B03A_VC	VC	634501.96	4765196.31	-109.02	9	8.58	95%
Z2_OWF_B05A_VC	VC	630074.78	4760190.00	-125.57	3.97	5	126%
Z2_OWF_B05A_VCa	VC	630082.98	4760192.86	-125.58	6.3	8.2	130%
Z2_OWF_B09_VC	VC	626091.29	4768887.04	-94.11	9	7.66	85%
Z2_OWF_B13A_VC	VC	628664.11	4772888.32	-88.03	9	7.4	82%
Z2_OWF_B14A_VC	VC	626455.26	4776488.91	-80.81	7.5	7.56	101%
Z2_OWF_B18A_VC	VC	618830.83	4770755.18	-89.39	8.05	8.42	105%

It should be noted that Z2_OWF_B05A_VC and Z2_OWF_B05A_VCa had recoveries up to 130% due to the natural expansion of high plasticity clay into the barrel while the VC was not penetrating deeper.

4.3.3. Summary of ground conditions - Z2

The ground condition in OWF Zone 2 are fairly variable across the area with some locations namely Z2_OWF_B03, Z2_OWF_B04, Z2_OWF_B05, Z2_OWF_B11, consisting of extremely

low strength silts and clays, becoming medium to high strength (locally very high strength) till the maximum depth of investigation of 30m BSF. These cohesive sediments are locally intercalated at different depth with medium dense to dense (up to very dense and/or gravelly) silty sands layers of variable thickness comprised in between 0.5 and 5m.

At locations Z2_OWF_B01, Z2_OWF_B07, Z2_OWF_B09, Z2_OWF_B13, Z2_OWF_B14, Z2_OWF_B15, Z2_OWF_B18, Z2_OWF_B19 the presence of dense to very dense silty sand (locally gravelly sand) is generally predominant for the first 10-15m below seabed.

4.4. MED_AO6 OWF ZONE 3

4.4.1. CPT - Z3

A total of 10 CPTs have been acquired in Zone 3 with additional 3 retests due to refusals. Average CPT penetration has been of 23.85 m, with maximum penetration of 30.41 m and a minimum penetration of 10.81 m at location Z3_OWF_B06A_CPTa, no additional penetration was obtained at this location. CPT data plots are provided in APPENDIX XI – CPT DATA - AO6 OWF ZONE 3. Water depths were updated from the MBES survey data acquired by Tecnoambiente.

CPT processed logs with soil description and derived parameters are included in APPENDIX X – CPT LOGS - AO6 OWF ZONE 3. All CPT digital and processed data is provided in APPENDIX XV – CPT DIGITAL DATA.

The locations, penetration and water depth (m ZH) of every performed CPT in Zone 3 are included in Table 10.

Table 10 CPT geotechnical points from AO6 OWF Zone 3 geotechnical survey.

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Penetration (m)
Z3_OWF_B02_CPT	CPT	542916.24	4724851.18	-100.92	25.12

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Penetration (m)
Z3_OWF_B04_CPT	CPT	532420.52	4726323.57	-96.59	29.82
Z3_OWF_B06A_CPT	CPT	539895.75	4729322.42	-103.84	10.95
Z3_OWF_B06A_CPTa	CPT	539897.74	4729312.85	-103.75	10.81
Z3_OWF_B07_CPT	CPT	544441.62	4732360.75	-98.85	26.6
Z3_OWF_B07_CPTa	CPT	544440.47	4732355.59	-98.83	26.32
Z3_OWF_B09_CPT	CPT	542910.17	4739851.35	-102.04	30.1
Z3_OWF_B10B_CPT	CPT	539952.73	4736847.78	-101.59	29.53
Z3_OWF_B12_CPT	CPT	538575.51	4732342.03	-100.12	21.49
Z3_OWF_B12_CPTa	CPT	538576.28	4732345.76	-100.09	21.09
Z3_OWF_B16B_CPT	CPT	530948.94	4735899.4	-93.01	30.41
Z3_OWF_B17B_CPT	CPT	538433.7	4741362.31	-98.18	25.39
Z3_OWF_B19B_CPT	CPT	530959.69	4744344.74	-89.77	22.48

4.4.2. Summary of ground conditions - Z3

The ground conditions in OWF Zone 3 are considered to be fairly variable, consisting of mainly medium to very high strength clay and silt intercalated at different depths with medium dense to very dense sand (locally gravelly) with thickness generally comprised in between 0.5 and 5 m. Extremely low shear strength silty sandy clay is generally present at seabed.

At locations Z3_OWF_B04_CPT, Z3_OWF_B06A, Z3_OWF_B10B and Z3_OWF_B12 dense to very dense (locally gravelly) silty sands are predominant for the first 12m.

4.5. MED_AO6 OWF ZONE 4

4.5.1. CPT - Z4

A total of 10 CPT locations have been acquired in Zone 4 with 1 additional retest. It should be noted that Z4_OWF_B05B_CPT was aborted at 9.82 due to technical issues, subsequently Z4_OWF_B05B_CPTa reached target depth. Average CPT penetration has been of 23.63 m, with maximum penetration of 29.91 m and a minimum penetration of 11.23 m. All CPT data plots are provided in APPENDIX XIII – CPT DATA - AO6 OWF ZONE 4. Water depths were updated from the MBES survey data previously acquired by TA.

CPT processed logs with interpreted soil description are included in APPENDIX XII – CPT LOGS - AO6 OWF ZONE 4.

All CPT digital and processed data is provided in APPENDIX XV – CPT DIGITAL DATA.

The locations, penetration and water depth (m ZH) of every performed CPT in Zone 4 are included in Table 11.

Table 11 CPT geotechnical points from AO6 OWF Zone 4 geotechnical survey.

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Penetration (m)
Z4_OWF_B01_CPT	CPT	608023.9	4756472.12	-99.57	29.84
Z4_OWF_B02B_CPT	CPT	604966.32	4757946.06	-93.48	28.87
Z4_OWF_B05B_CPT	CPT	609356.13	4767063.14	-90.23	9.82
Z4_OWF_B05B_CPTa	CPT	609357.65	4767069.74	-90.27	29.91
Z4_OWF_B06_CPT	CPT	609199.29	4773006.06	-87.83	19.88
Z4_OWF_B09B_CPT	CPT	600185.17	4771320.46	-93.36	20.95

Point ID	Type	Actual E (m)	Actual N (m)	Water Depth (ZH) – MBES (m)	Penetration (m)
Z4_OWF_B11_CPT	CPT	591227.81	4771127.56	-96.07	11.23
Z4_OWF_B12B_CPT	CPT	595852.07	4766736.2	-91.84	17.91
Z4_OWF_B12B_CPTa	CPT	595850.64	4766733.06	-91.86	20.51
Z4_OWF_B16B_CPT	CPT	604923.8	4762366.32	-89.53	29.71
Z4_OWF_B17_CPT	CPT	600421.96	4762317.84	-93.01	28.53
Z4_OWF_B20B_CPT	CPT	605066.05	4753455.1	-107.00	28.81

4.5.2. Summary of ground conditions - Z4

The ground conditions in OWF Zone 4 are considered to be variable, consisting of mainly dense to very dense (locally gravelly) silty sands intercalated at various depths with layers of medium to very high strength silty clay with thickness variable in between 0.5 and 10m to the maximum investigate depth of 30m BSF: Extremely low shear strength silty sandy clay is generally present at seabed.

APPENDIX I – LAB RESULTS SUMMARIES – AO6 OWF ZONE 1 AND ZONE 2

This appendix is provided separately as a compressed folder

APPENDIX II – COMBINED CPT LOGS - AO6 OWF ZONE 1

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

... becoming extremely low to low shear strength below 3.70m

... very loose slightly clayey silty sand below 4.2m

4,4m Low to medium shear strength silty CLAY

7,0m Medium shear strength sandy CLAY with partings of very loose sand

8,3m Loose to medium dense silty SAND

... clayey sand between 8.94m - 9.00m

9,2m Medium to high shear strength slightly sandy CLAY

PC

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	17/04/2023
		Water Depth	-85,11 m ZH
		Coordinates	E 535595,02m; N 4759617,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

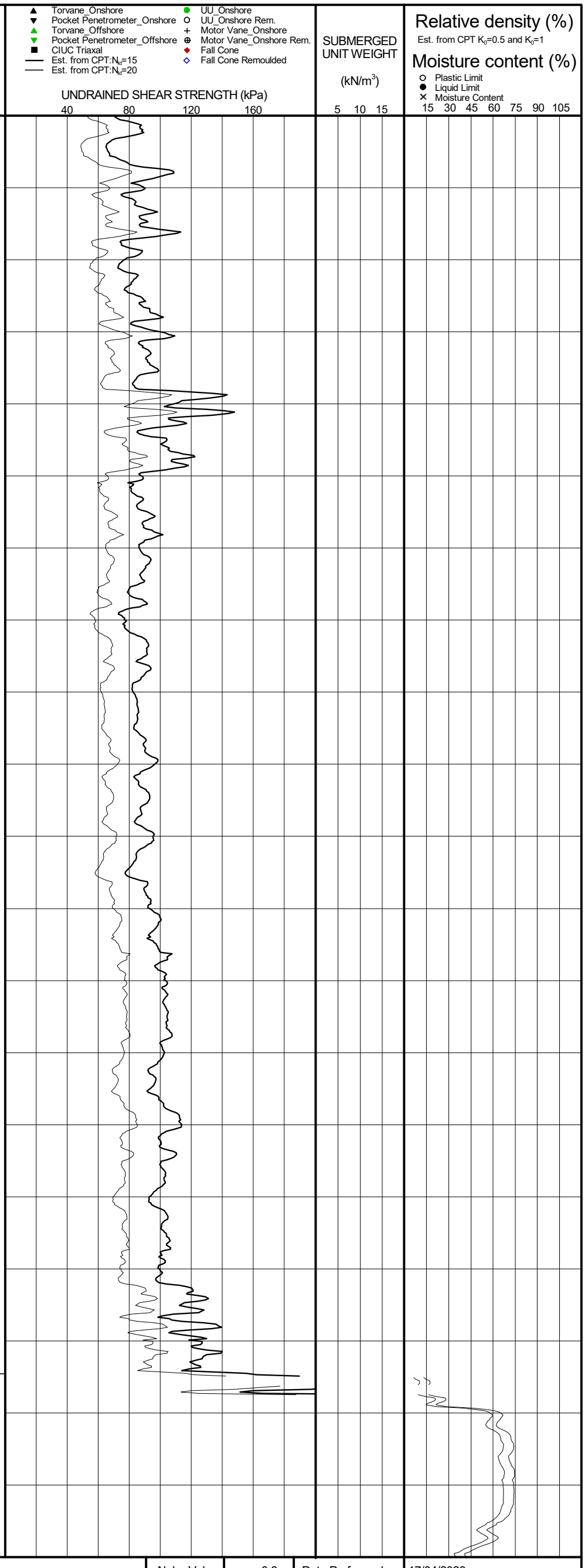
Z1_OWF_B01B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					9,2m Medium to high shear strength slightly sandy CLAY *(continued)*
11	36				
12	40				
13	44				
14	48			CPT	
15	52				
16	56				
17	60				
18	64				18,7m Medium dense to dense silty SAND ... clayey sand between 18.83m - 18.86m
19					



COMBINED CPT/VC LOG

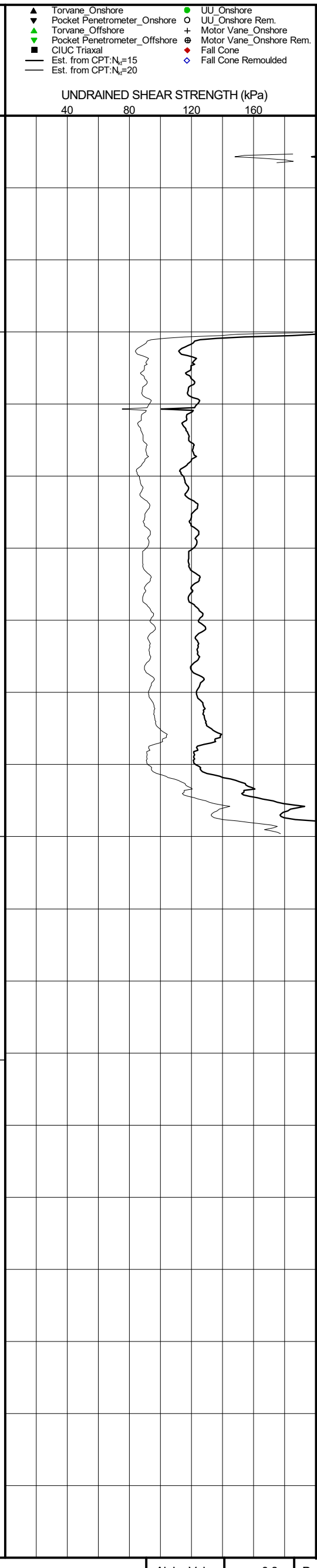
Z1_OWF_B01B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

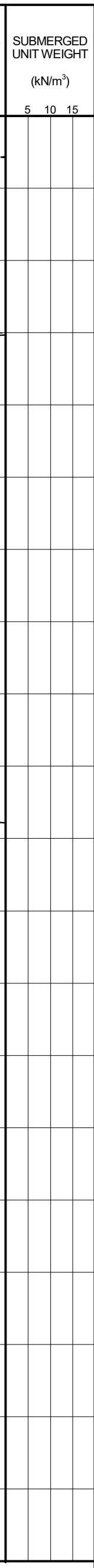
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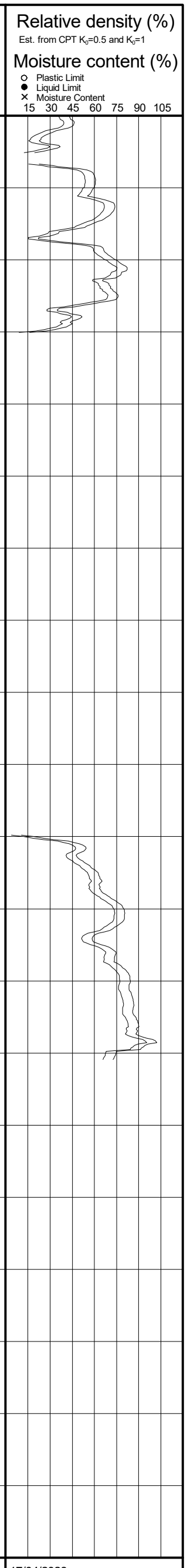
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Alpha Value	0.8	Date Performed	17/04/2023
		Water Depth	-85,11 m ZH
		Coordinates	E 535595,02m; N 4759617,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				18,7m Medium dense to dense silty SAND *(continued)* ... clayey sand between 20.27m - 20.32m
22	72				21,5m High shear strength slightly sandy CLAY
23	76			CPT	
24	80				
25	84				25,0m Medium dense to dense silty SAND ... dense to very dense below 26.4m
26	88				Termination depth 26.55m. Test ended due to Operational Issues Approx. Settlement 0.75m. Final PC Depth 4.90m.
27	92				
28	96				
29					







COMBINED CPT/VC LOG

Z1_OWF_B01B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	17/04/2023
		Water Depth	-85,11 m ZH
		Coordinates	E 535595,02m; N 4759617,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

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DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

... becoming extremely low to low shear strength below 3.70m
... very loose slightly clayey silty sand below 3.85m

4,1m Low to medium shear strength silty CLAY

7,1m Medium shear strength sandy CLAY with partings of very loose to loose sand

8,0m Loose to medium dense silty SAND

... sandy clay between 8.30m - 8.40m

8,9m Medium to high shear strength slightly sandy CLAY

SAMPLE NO: PC

CPT

UNDRAINED SHEAR STRENGTH (kPa)
Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B01B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-85,01 m ZH
		Coordinates	E 535590,89m; N 4759605,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

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DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): Plastic Limit; Liquid Limit; Moisture Content — 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

CPT

8,9m Medium to high shear strength slightly sandy CLAY *(continued)*

18,0m High shear strength sandy CLAY interbedded with very loose silty SAND

18,8m Medium dense to dense silty SAND

... becoming medium dense to dense below 19.75m

COMBINED CPT/VC LOG

Z1_OWF_B01B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-85,01 m ZH
		Coordinates	E 535590,89m; N 4759605,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

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DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
				CPT	18,8m Medium dense to dense silty SAND *(continued)*
21	68				Termination depth 20.73m. Test ended due to Rods Buckling Approx. Settlement 0.75m. Final VC Depth 4.90m.
22	72				
23	76				
24	80				
25	84				
26	88				
27	92				
28	96				
29					

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B01B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-85,01 m ZH
		Coordinates	E 535590,89m; N 4759605,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

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Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): Plastic Limit; Liquid Limit; Moisture Content — 15 30 45 60 75 90 105

m: 1 2 3 4 5 6 7 8 9 — ft: 4 8 12 16 20 24 28 32

CPT

0,0m Extremely low shear strength clayey SILT

4,1m Low to medium shear strength slightly sandy CLAY with occasional partings of very loose to medium dense sand

7,2m Very loose to loose silty SAND interbedded with medium to high shear strength sandy CLAY

7,8m Medium to high shear strength slightly sandy CLAY

COMBINED CPT/VC LOG

Z1_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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Alpha Value	0.8
Date Performed	18/04/2023
Water Depth	-88,90 m ZH
Coordinates	E 536024,66m; N 4756343,19m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22598 / 001

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): Plastic Limit; Liquid Limit; Moisture Content — 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

7,8m Medium to high shear strength slightly sandy CLAY *(continued)*

CPT

18,9m Very loose silty SAND interbedded with high shear strength sandy CLAY

19,2m Medium dense to dense silty SAND
... loose between 19.23m - 19.27m

COMBINED CPT/VC LOG

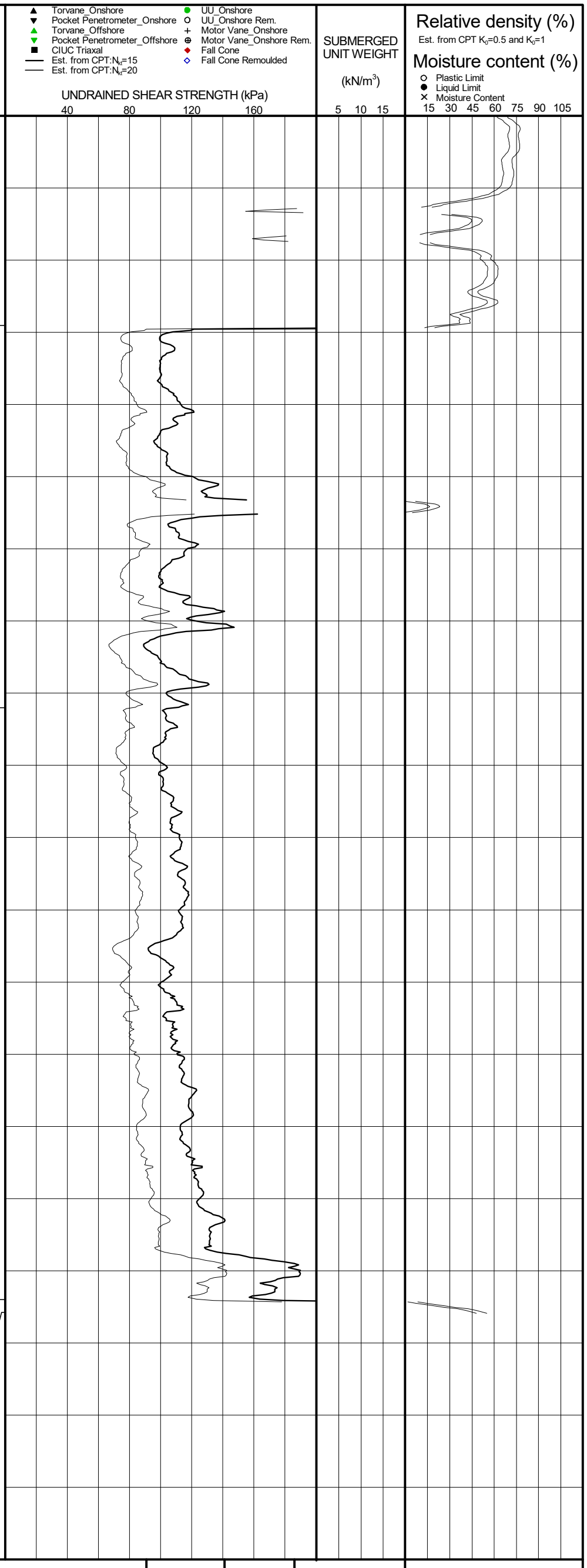
Z1_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-88,90 m ZH
		Coordinates	E 536024,66m; N 4756343,19m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				19,2m Medium dense to dense silty SAND *(continued)* ... clayey sand between 20.60m - 20.90m
22	72				21,5m High shear strength sandy CLAY with occasional partings of very loose to loose sand
23	76				
24	80			CPT	24,1m High shear strength slightly sandy CLAY
25	84				
26	88				
27	92				... becoming high to very high shear strength below 27.90m
28	96				28,2m Medium dense silty SAND Termination depth 28.29m. Test ended due to Rods Buckling Approx. Settlement 0.69m
29					



COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-88,90 m ZH
		Coordinates	E 536024,66m; N 4756343,19m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

Z1_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
0					0,0m Extremely low shear strength slightly clayey SILT
1	4				1,7m Very low to low shear strength silty CLAY ... becoming low to medium shear strength below 2.25m
2	8				
3	12				3,1m Medium shear strength slightly sandy CLAY
4	16				4,5m Medium to high shear strength sandy CLAY
5	20			CPT	5,0m Dense to very dense silty SAND
6					5,9m High to very high shear strength sandy CLAY
					6,2m Medium to high shear strength slightly sandy CLAY with occasional sand partings
7	24				
8	28				
9	32				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

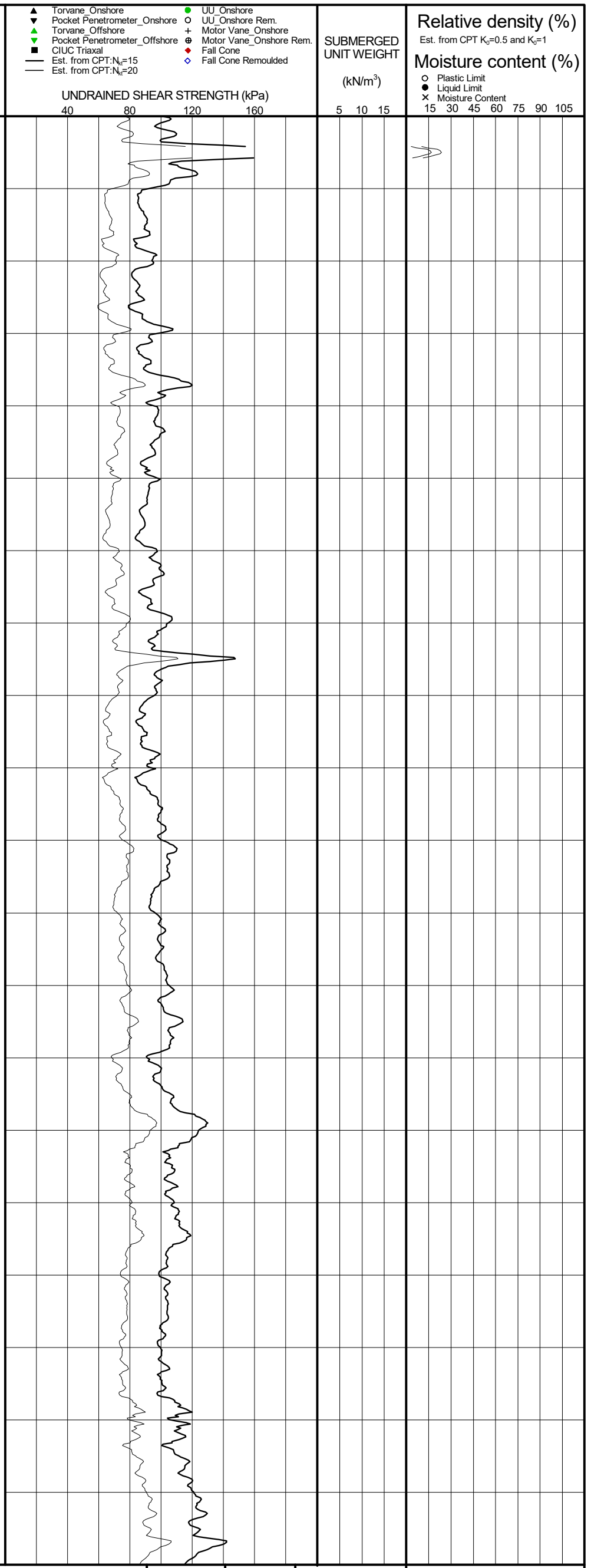
Z1_OWF_B03_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-93,90 m ZH
		Coordinates	E 540173,2m; N 4755417,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					6,2m Medium to high shear strength slightly sandy CLAY with occasional sand partings *(continued)*
11	36				
12	40				
13	44				
14	48				
15	52			CPT	
16	56				
17	60				
18	64				
19					



COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-93,90 m ZH
		Coordinates	E 540173,2m; N 4755417,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

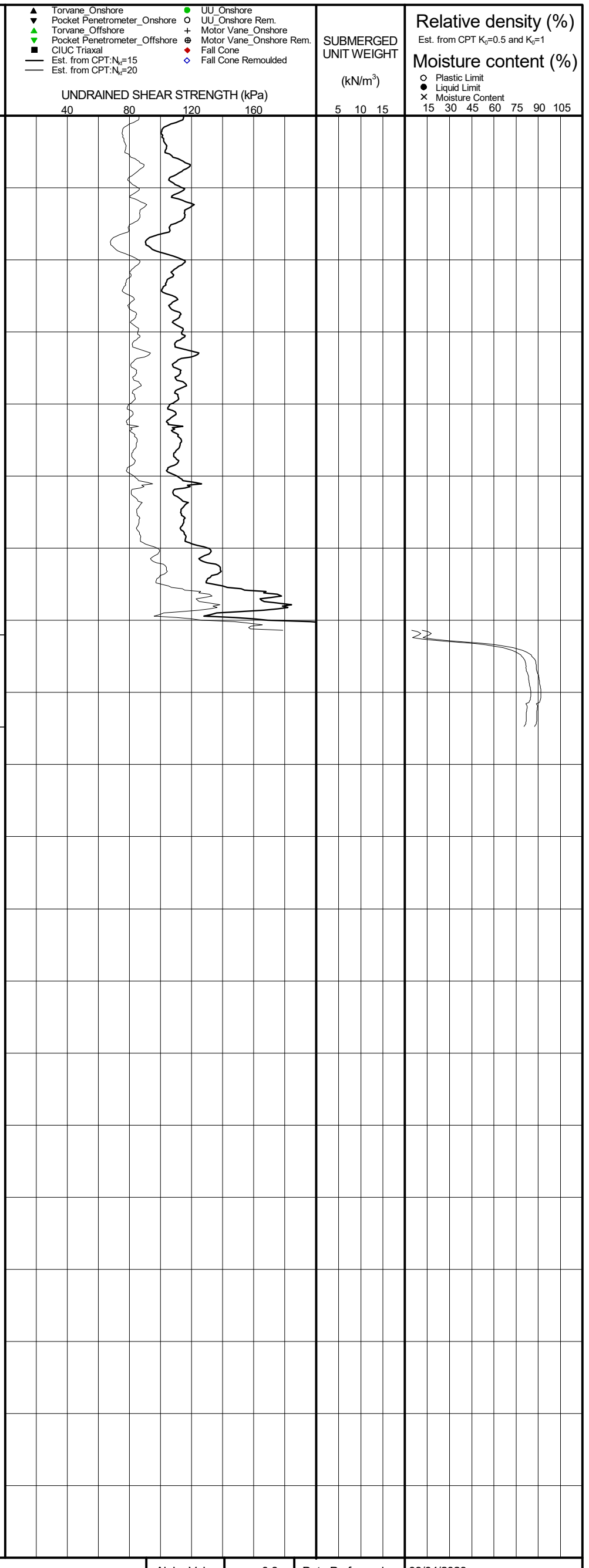
Z1_OWF_B03_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				6,2m Medium to high shear strength slightly sandy CLAY with occasional sand partings *(continued)*
22	72			CPT	
23	76				... becoming high to very high shear strength sandy clay below 23.25m
24					23,6m Dense to very dense SAND
	80				Termination depth 24.24m. Test ended due to Operational Issues Approx. Settlement 0.58m
25					
26	84				
27	88				
28	92				
29	96				



SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B03_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-93,90 m ZH
		Coordinates	E 540173,2m; N 4755417,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly clayey SILT

1,1m Very low to low shear strength silty CLAY

... becoming low to medium shear strength below 1.70m

3,1m Medium shear strength slightly sandy CLAY

4,4m High to very high shear strength sandy CLAY

4,6m Medium dense to very dense silty SAND

5,6m Very high shear strength sandy CLAY

5,9m Medium to high shear strength slightly sandy CLAY with occasional sand partings

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B03_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	10/04/2023
		Water Depth	-93,96 m ZH
		Coordinates	E 540185,64m; N 4755420,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					5,9m Medium to high shear strength slightly sandy CLAY with occasional sand partings *(continued)*
11	36				
12	40				
13	44				
14	48				
15				CPT	
	52				
16					
17	56				
18	60				
19	64				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	10/04/2023
		Water Depth	-93,96 m ZH
		Coordinates	E 540185,64m; N 4755420,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

Z1_OWF_B03_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Termination depth 19.98m. Test ended due to Maximum Cone Inclination Approx. Settlement 0.47m
21	68				
22	72				
23	76				
24	80				
25	84				
26	88				
27	92				
28	96				
29					

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B03_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	10/04/2023
		Water Depth	-93,96 m ZH
		Coordinates	E 540185,64m; N 4755420,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

4,8m Low to medium strength clayey SILT with laminations of very loose to loose sand

5,5m Medium shear strength silty CLAY

6,3m Medium to high shear strength sandy silty CLAY

7,3m Medium shear strength silty CLAY

7.65m - 7.9m sandy

from 7.95m high shear strength

8,2m Very loose to loose silty SAND

8,9m Medium dense silty SAND

9,3m Medium to high shear strength silty CLAY with occasional sand partings

SAMPLE NO: PC

CPT

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B05_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

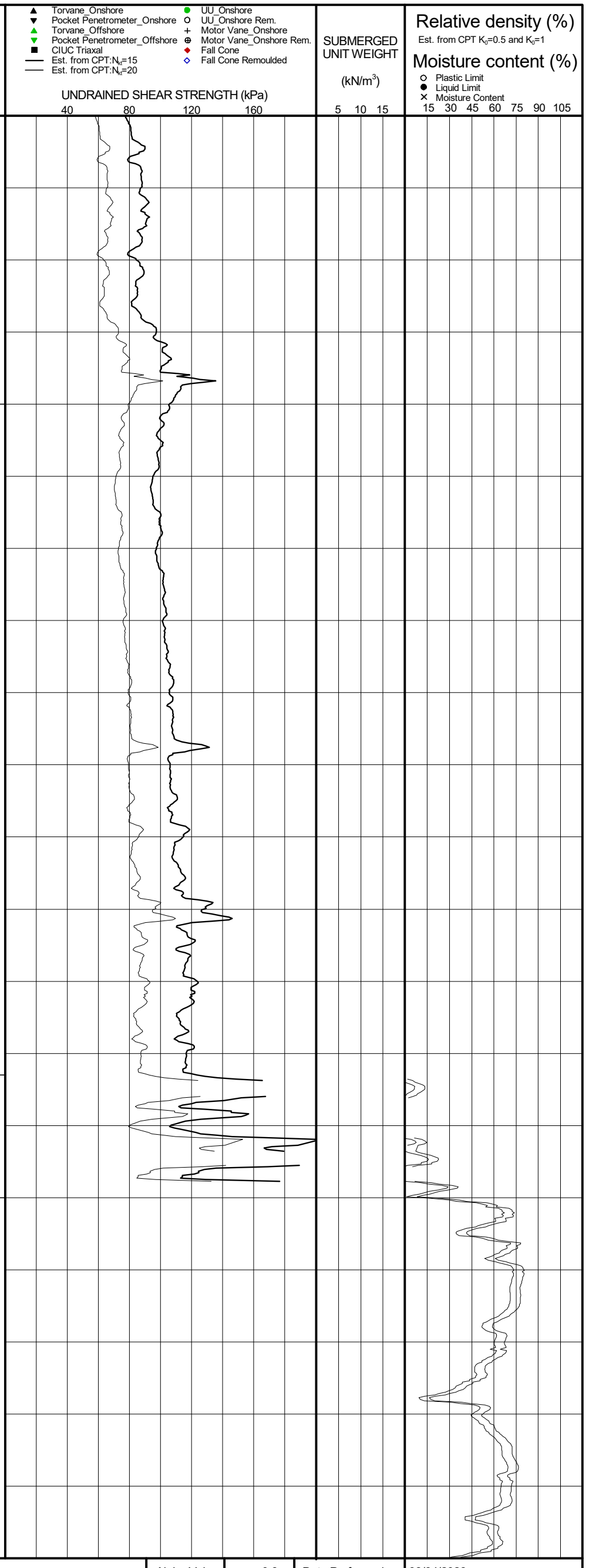
Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-82,35 m ZH
		Coordinates	E 537802,22m; N 4764592,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				9,3m Medium to high shear strength silty CLAY with occasional sand partings *(continued)*
12	40				12,0m High shear strength silty CLAY
13	44				from 14.35m with occasional sand partings
14	48				
15	52			CPT	
16	56				16,7m High to very high shear strength sandy CLAY
17	60				17,5m Medium dense to dense silty SAND
18	64				18.9m - 19.0m very loose to loose clayey
19					



COMBINED CPT/VC LOG

Z1_OWF_B05_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-82,35 m ZH
		Coordinates	E 537802,22m; N 4764592,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					20,1m High to very high shear strength sandy CLAY
					20,5m High shear strength CLAY
21	68				
					21,6m High to very high shear strength silty CLAY
22	72				
					22,5m Medium dense silty SAND
23	76			CPT	
					23,1m High to very high shear strength silty CLAY
					23,4m High shear strength CLAY
24	80				
					24,8m High to very high shear strength sandy CLAY
25					
					25,4m Dense to very dense SAND
	84				
26					Termination depth 25.71m. Test ended due to rods buckling Approx. Settlement 0.73m. Final PC Depth 5.95m.
	88				
27					
28	92				
29	96				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B05_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-82,35 m ZH
		Coordinates	E 537802,22m; N 4764592,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly clayey SILT

1,4m Loose to medium dense silty SAND

2,1m Low to medium shear strength sandy CLAY

3,7m Medium shear strength silty CLAY

6,9m High shear strength silty CLAY interbedded with very loose to medium dense silty SAND

7,8m Medium to high shear strength slightly sandy CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-89,34 m ZH
		Coordinates	E 548245,88m; N 4767784,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22599 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

7,8m Medium to high shear strength slightly sandy CLAY *(continued)*

11,6m High shear strength silty CLAY interbedded with very loose to loose silty SAND

13,0m Medium to high shear strength sandy CLAY

Termination depth 18.26m. Test ended due to Operational Issues
Approx. Settlement 0.82m

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8
Date Performed	04/04/2023
Water Depth	-89,34 m ZH
Coordinates	E 548245,88m; N 4767784,63m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22599 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

... becoming sandy below 1.2m

1,5m Medium dense silty SAND

1,8m Low to medium shear strength silty CLAY

... becoming medium to high shear strength sandy clay below 6.55m

6,8m Loose to medium dense clayey SAND

7,3m Medium to high shear strength slightly sandy CLAY

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B07B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

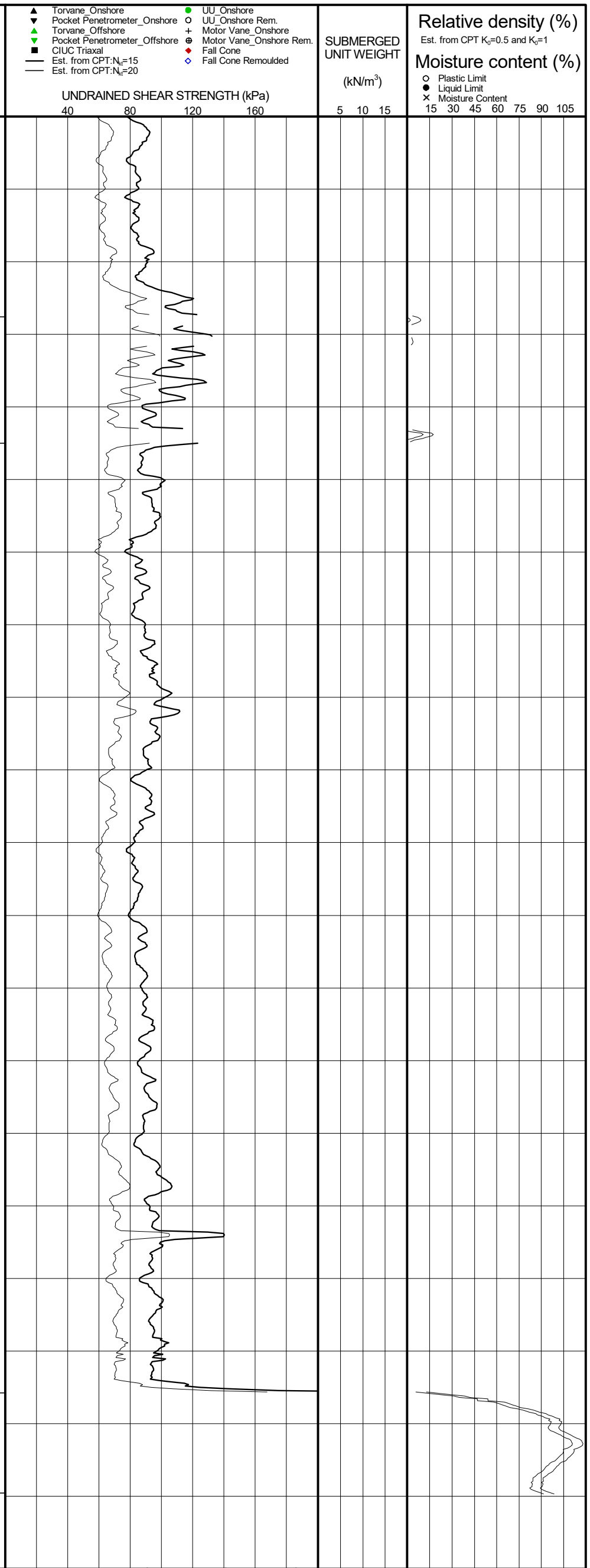
Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 548259,43m; N 4767796,5m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				7,3m Medium to high shear strength slightly sandy CLAY *(continued)*
12	40				11,4m Medium to high shear strength sandy CLAY with occasional sand partings
13	44				12,3m Medium to high shear strength slightly sandy CLAY
14	48			CPT	
15					
16	52				
17	56				
18	60				
19	64				18,8m Dense to very dense silty SAND
					Termination depth 19.48m. Test ended due to Rods Buckling Approx. Settlement 0.67m



COMBINED CPT/VC LOG

Z1_OWF_B07B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 548259,43m; N 4767796,5m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low to very low strength clayey SILT

0,7m Loose to medium dense silty SAND

1,0m Dense to very dense slightly gravelly silty SAND

3,9m Medium dense to dense slightly gravelly silty SAND

6,1m High shear strength silty CLAY interbedded with medium dense silty SAND

6,8m High shear strength silty CLAY

7,5m Dense silty SAND

8,3m Very loose to loose sandy SILT

8,9m High shear strength sandy CLAY

CPT

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8
Date Performed	04/04/2023
Water Depth	-88,86 m ZH
Coordinates	E 553283,12m; N 4771040,14m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22597 / 001

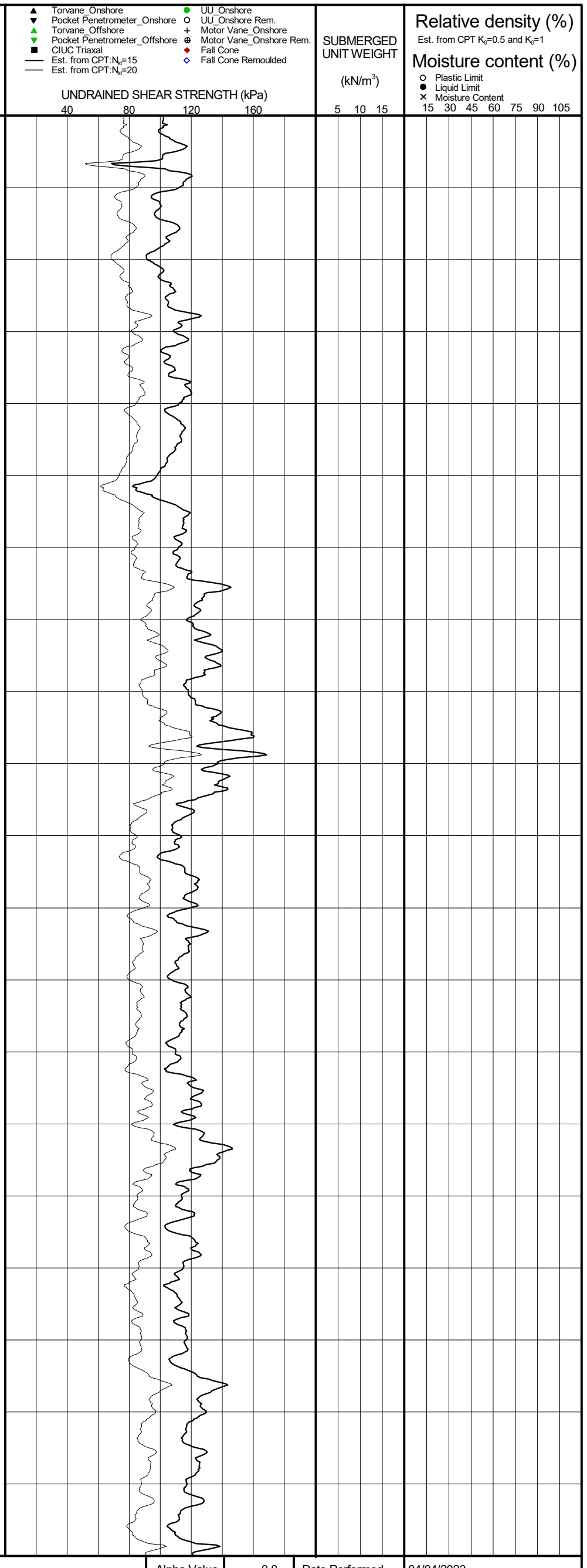
Z1_OWF_B08_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					8,9m High shear strength sandy CLAY *(continued)*
11	36				
12	40				
13	44				
14	48				
15	52			CPT	
16	56				
17	60				
18	64				
19					



SUBMERGED UNIT WEIGHT (kN/m³)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B08_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

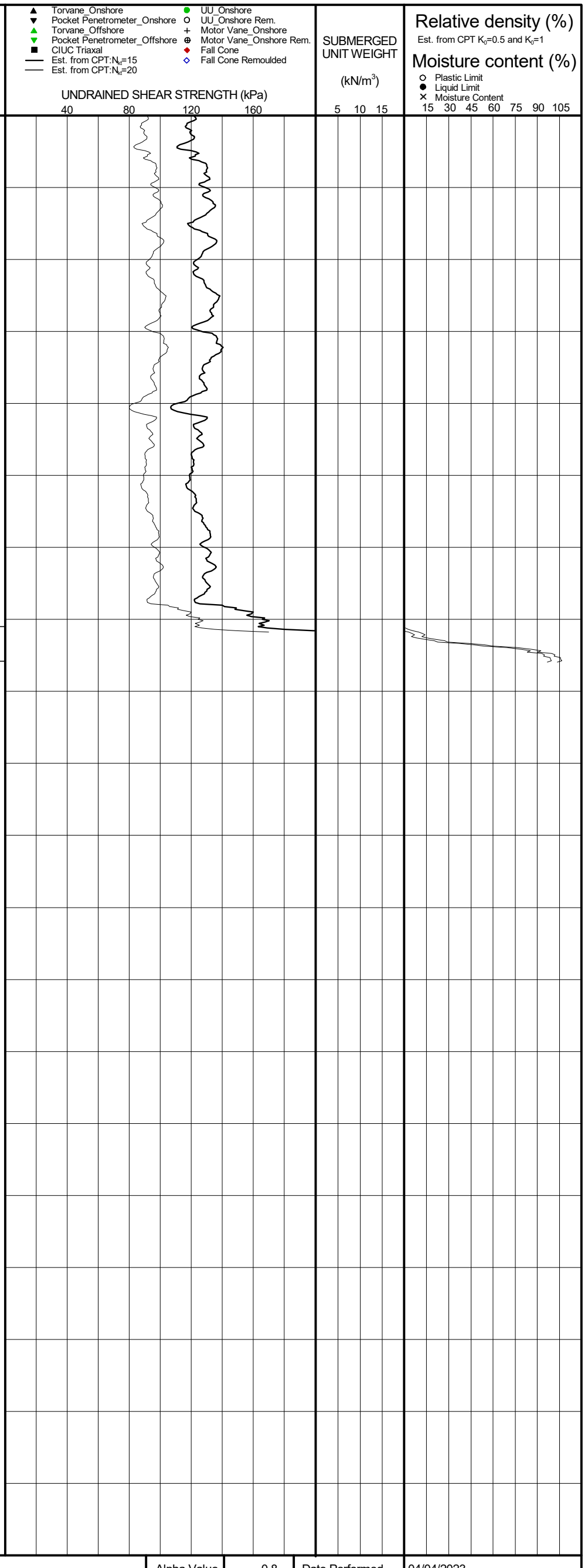
Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-88,86 m ZH
		Coordinates	E 553283,12m; N 4771040,14m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				8,9m High shear strength sandy CLAY *(continued)*
22	72			CPT	
23	76				23,6m Dense to very dense SAND
24	80				Termination depth 23.79m. Test ended due to rods buckling Approx. Settlement 0.79m
25	84				
26	88				
27	92				
28	96				
29					



COMBINED CPT/VC LOG

Z1_OWF_B08_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-88,86 m ZH
		Coordinates	E 553283,12m; N 4771040,14m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,5m Very low to low shear strength sandy SILT

... becoming medium shear strength below 0.79m

1,0m Very dense slightly silty slightly gravelly SAND

... medium dense to dense down to 1.20m

3,1m Very dense SAND

... dense to very dense below 4.55m

7,6m Medium dense to dense gravelly silty SAND

9,4m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND

VC

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

▲ Torvane_Onshore ▼ Pocket Penetrometer_Onshore ▲ Torvane_Offshore ▼ Pocket Penetrometer_Offshore ■ CIUC Triaxal — Est. from CPT:N_{kt}=15 — Est. from CPT:N_{kt}=20 ● UU_Onshore ○ UU_Onshore Rem. + Motor Vane_Onshore ⊕ Motor Vane_Onshore Rem. ◆ Fall Cone ◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa) 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3) 5 10 15

Relative density (%) Est. from CPT K_0=0.5 and K_0=1

Moisture content (%) ○ Plastic Limit ● Liquid Limit × Moisture Content 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

9,4m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND *(continued)*

10,6m Medium high to high shear strength slightly sandy CLAY

... high shear strength between 13.1m -14.4m

CPT

... high shear strength between 16.95m -18.0m

COMBINED CPT/VC LOG

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

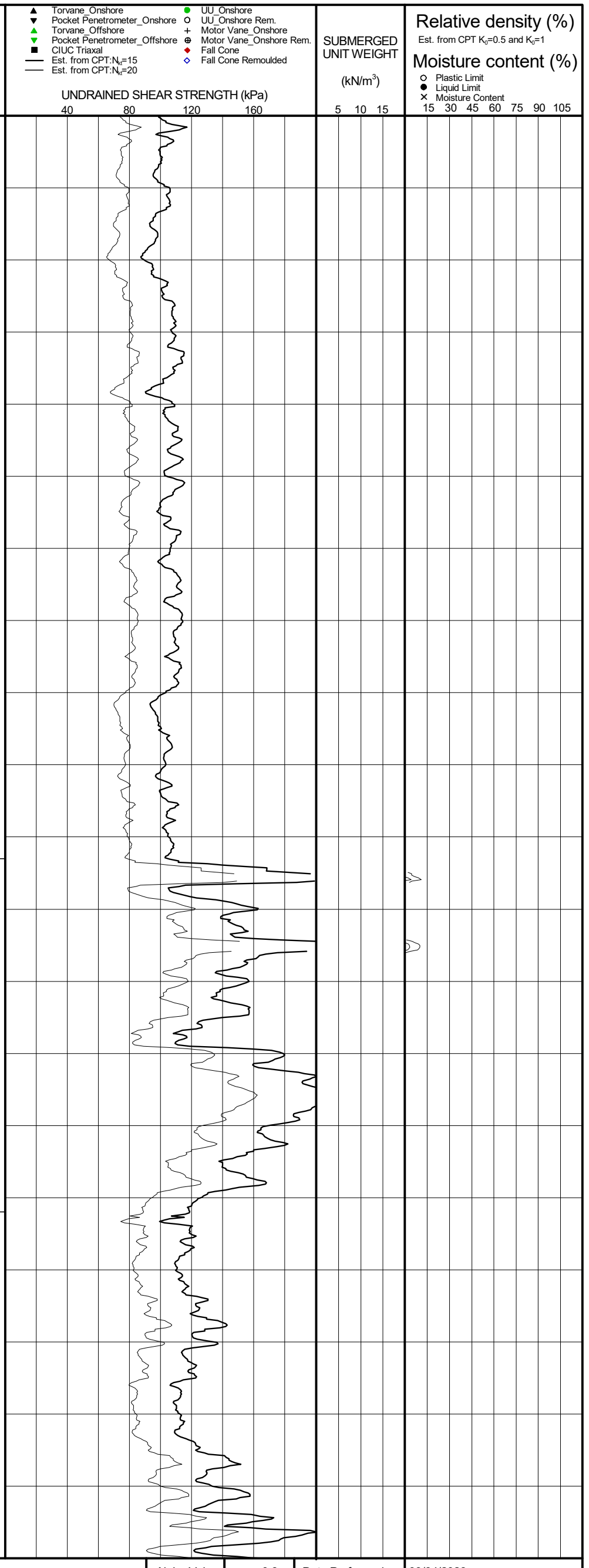
Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				10,6m Medium high to high shear strength slightly sandy CLAY *(continued)*
22	72				
23	76				
24	80				
25	84			CPT	25,2m High to very high shear strength slightly gravelly sandy CLAY
26	88				
27	92				27,6m High shear strength sandy CLAY
28	96				... becoming slightly gravelly below 29.3m
29					



COMBINED CPT/VC LOG

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

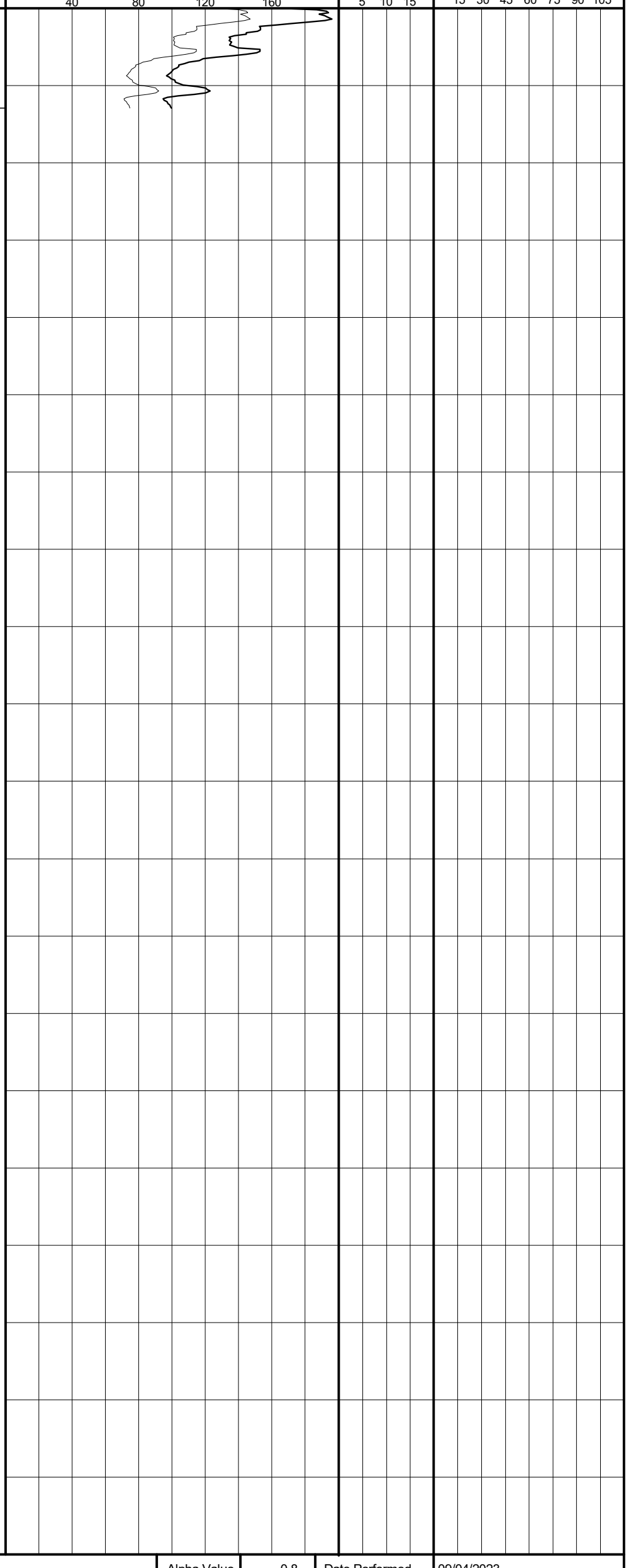
Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
				CPT	27,6m High shear strength sandy CLAY *(continued)*
	100				
31					Termination depth 30.64m. Test ended due to Target Depth reached Approx. Settlement 0.50m. Final VC Depth 5.46m.
	104				
32					
	108				
33					
34	112				
35	116				
36					
	120				
37					
	124				
38					
39	128				



SUBMERGED UNIT WEIGHT (kN/m³)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

... becoming very low to low shear strength below 0.75m

0,9m Loose to very loose silty SAND interbedded with low shear strength CLAY

... interbedded with high shear strength clay below 1.91m

... interbedded with low shear strength clay below 3.81m

4,4m Medium to high shear strength sandy CLAY

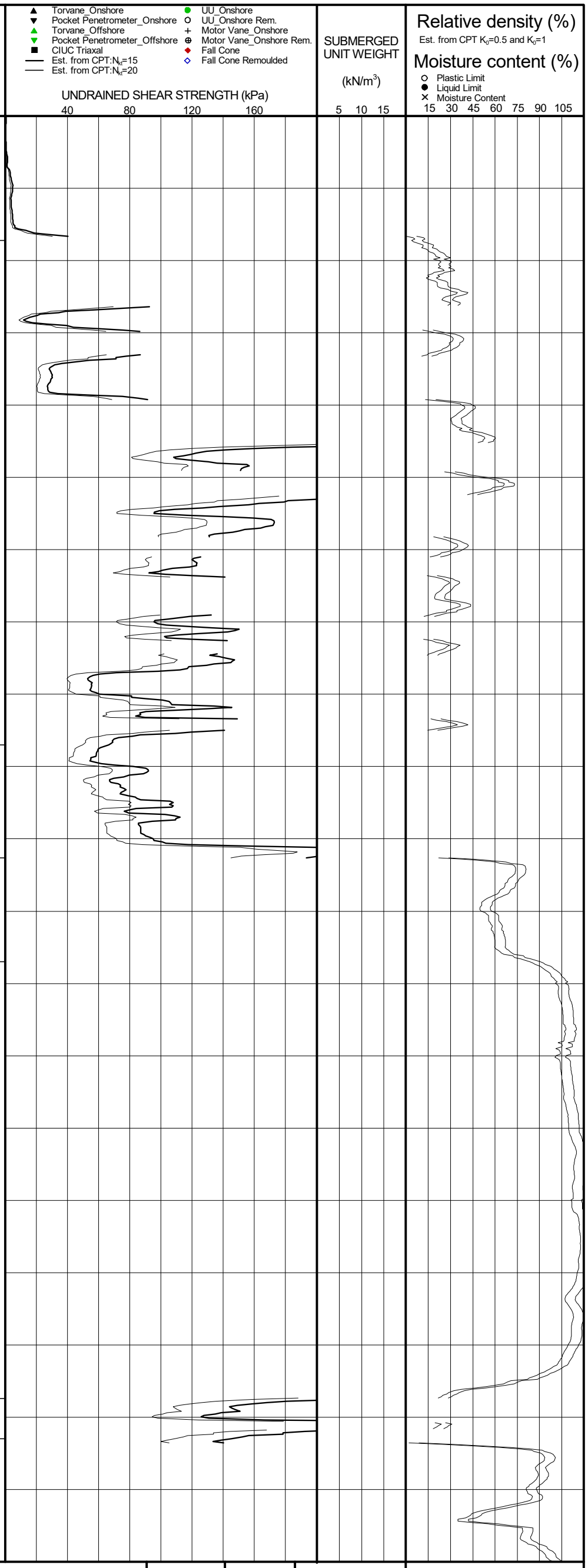
5,1m Medium dense to dense gravelly SAND

5,9m Very dense silty SAND

8,9m High shear strength sandy CLAY

9,2m Dense to very dense slightly gravelly silty SAND

CPT



COMBINED CPT/VC LOG

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					9,2m Dense to very dense slightly gravelly silty SAND *(continued)*
11	36				10,9m Medium to high shear strength silty CLAY interbedded with very loose silty SAND
12	40				
					12,6m Medium to high shear strength silty CLAY with sand partings
13	44				
14	48				
15				CPT	
	52				
16					16,1m High shear strength sandy CLAY ... interbedded with very loose silty sand between 16.20m - 16.90m
17	56				
					17,4m High shear strength silty CLAY
18	60				17,9m High to very high shear strength silty CLAY interbedded with very loose to loose silty SAND
19					
	64				19,3m High shear strength silty CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

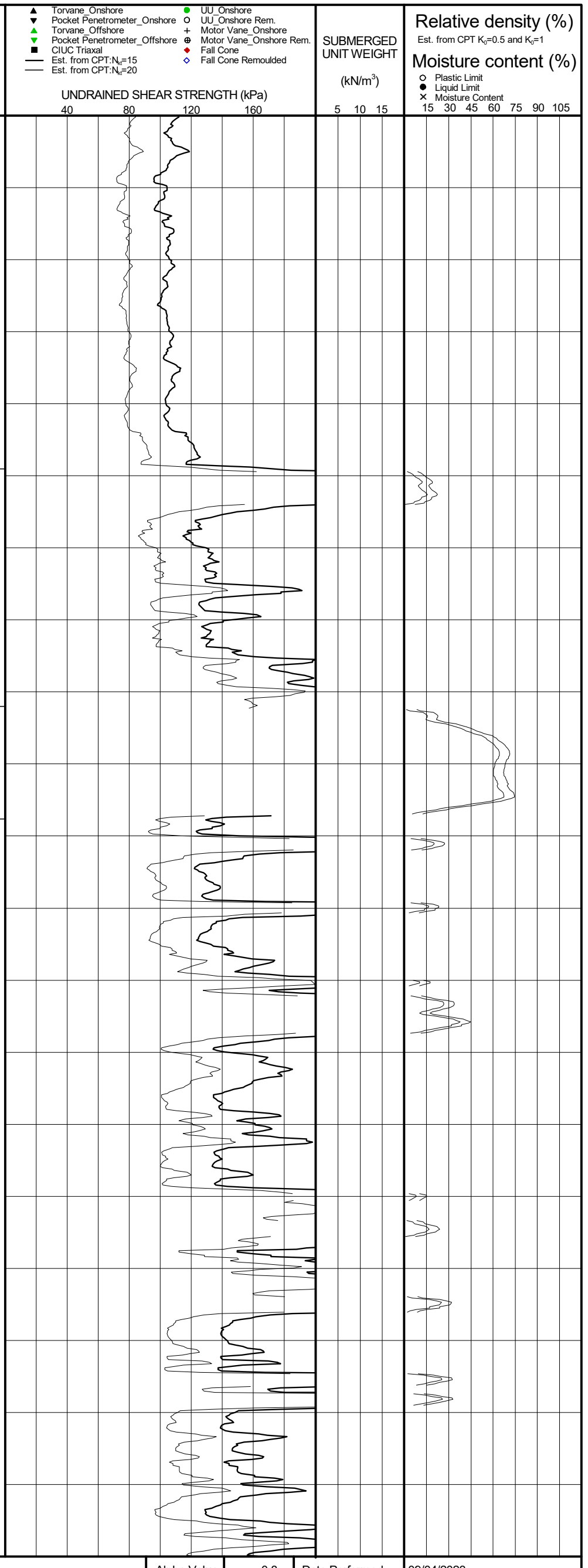
Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				19,3m High shear strength silty CLAY *(continued)*
22	72				
23	76				22,5m High shear strength sandy CLAY ... very loose to loose sand between 22.45m - 22.70m
24	80				24,1m Medium dense to dense SAND
25	84			CPT	24,9m High to very high shear strength silty CLAY interbedded with very loose to loose silty SAND
26	88				
27	92				
28	96				
29					



COMBINED CPT/VC LOG

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

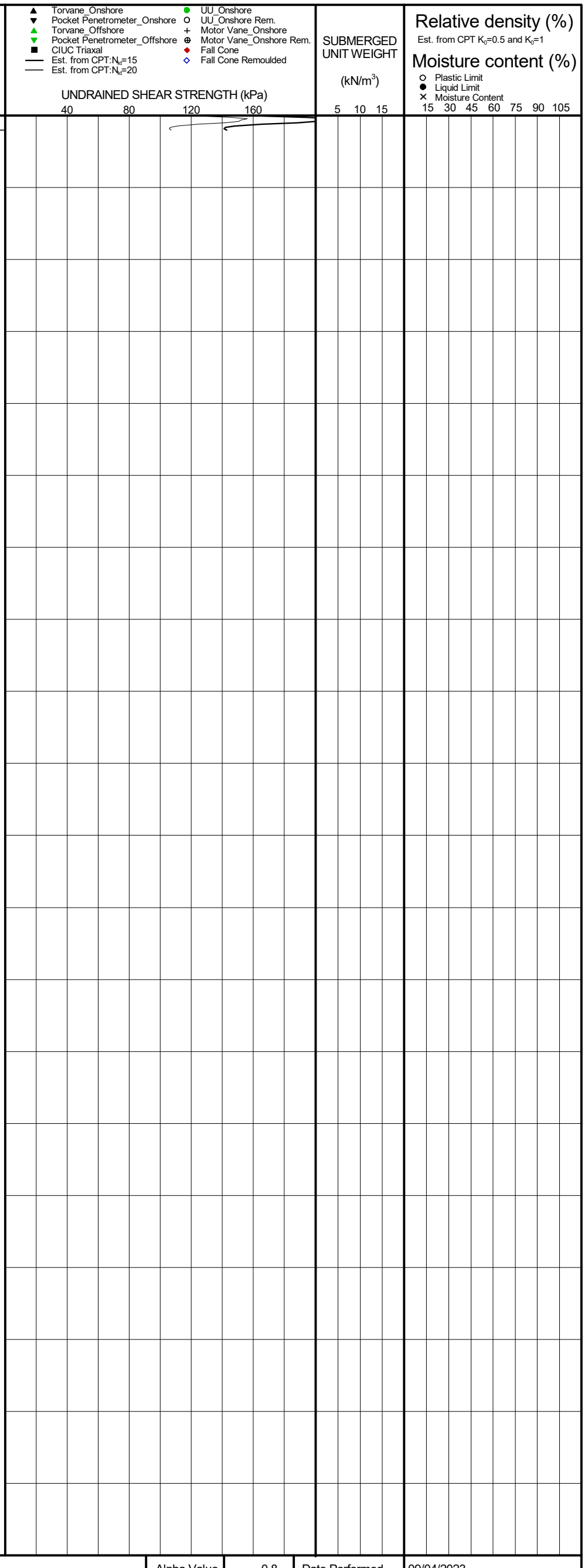
Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
				CPT	Termination depth 30.10m. Test ended due to Target Depth reached Approx. Settlement 0.58m
31	100				
32	104				
33	108				
34	112				
35	116				
36	120				
37	124				
38					
39	128				



SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

0,8m Very low to medium shear strength sandy CLAY

1,2m Medium dense silty SAND

1,7m Low to medium shear strength slightly sandy CLAY

3,9m Medium dense to dense silty SAND
.... becoming loose clayey sand between 4.05m - 4.15m

5,3m Very dense silty SAND

.... becoming loose to medium dense clayey sand between 7.90m - 8.08m

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-96,38 m ZH
		Coordinates	E 548461,56m; N 4753650,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				5,3m Very dense silty SAND *(continued)*
					11,2m High shear strength sandy CLAY interbedded with loose to medium dense clayey SAND
12	40				12,1m Dense to very dense clayey SAND
					.... becoming loose to medium dense clayey sand between 12.50m - 12.80m
13	44				.... becoming medium dense below 13.40m
14					13,7m Dense to very dense silty SAND
	48				
15				CPT	
	52				
16					16,0m Medium dense to dense slightly clayey SAND
17	56				.... becoming very loose to loose clayey sand between 17.40m - 17.50m
18	60				
19					18,8m High shear strength sandy CLAY
	64				19,2m Medium dense to dense clayey SAND

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

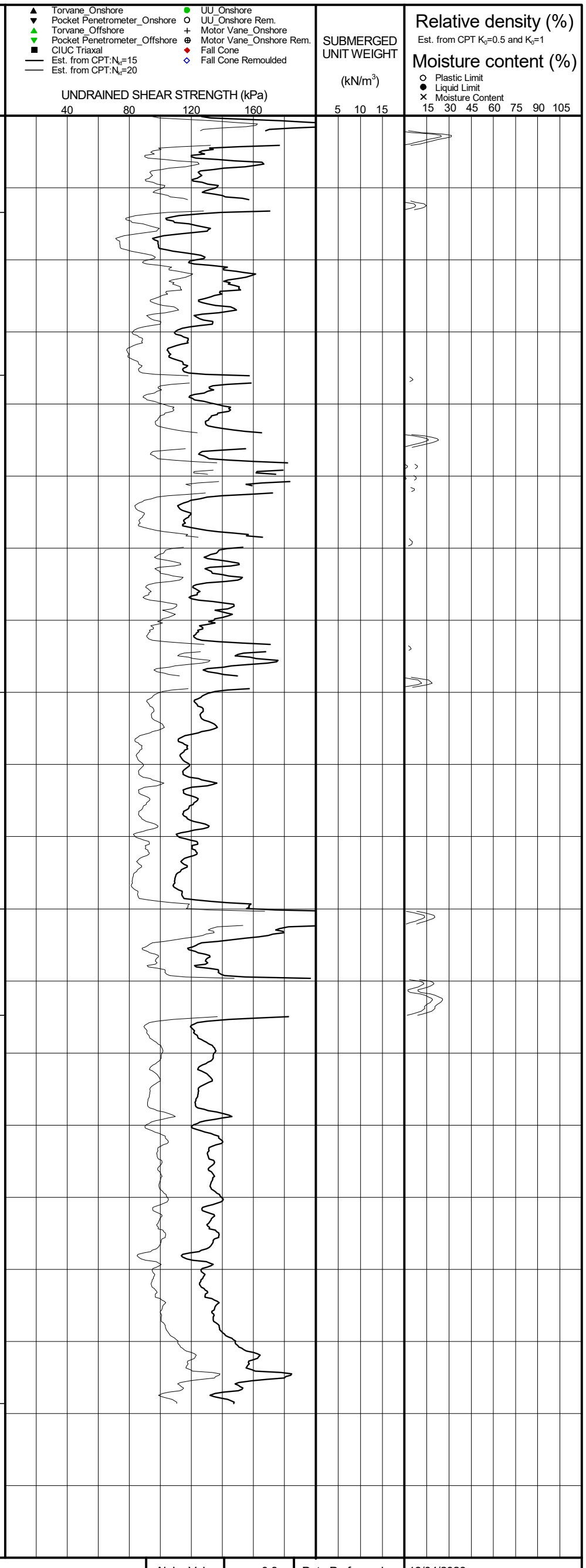
Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-96,38 m ZH
		Coordinates	E 548461,56m; N 4753650,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				19,8m High shear strength sandy CLAY interbedded with very loose to loose clayey SAND *(continued)*
					20,7m High shear strength sandy CLAY
22	72				21,8m High shear strength sandy CLAY interbedded with very loose to loose clayey SAND
23	76				
24	80			CPT	24,0m High shear strength slightly sandy CLAY
25					
	84				25,5m High shear strength sandy CLAY interbedded with very loose to loose clayey SAND
26					
	88				26,2m High shear strength slightly sandy CLAY
27					
28	92				
29	96				Termination depth 28.93m. Test ended due to Maximum Cone Inclination Approx. Settlement 0.67m



COMBINED CPT/VC LOG

Z1_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-96,38 m ZH
		Coordinates	E 548461,56m; N 4753650,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly clayey sandy SILT

... becoming very low to low shear strength below 0.98m

1,1m Medium dense sandy SILT

1,7m Low to medium shear strength slightly clayey slightly sandy SILT

2,3m Low to medium shear strength slightly sandy clayey SILT

3,3m Medium to high shear strength sandy SILT with sand partings

5,0m Loose to medium dense slightly gravelly silty SAND

5,7m Medium to high shear strength sandy SILT

... becoming high to very high shear strength below 6.55m

7,1m Very dense SAND

... dense between 8.12m - 8.52m

SAMPLE NO: VC

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-94,30 m ZH
		Coordinates	E 546832,01m; N 4756171,29m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): Plastic Limit; Liquid Limit; Moisture Content — 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

7,1m Very dense SAND *(continued)*

10,5m High to very high shear strength very sandy CLAY interbedded with very loose to loose silty SAND

16,2m High shear strength slightly sandy CLAY

COMBINED CPT/VC LOG

Z1_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-94,30 m ZH
		Coordinates	E 546832,01m; N 4756171,29m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					16,2m High shear strength slightly sandy CLAY *(continued)*
21	68				
22	72				
23	76				
24	80			CPT	
25	84				
26	88				... becoming very high shear strength below 26.55m
27					26,7m Very dense slightly gravelly silty SAND
28	92				Termination depth 27.96m. Test ended due to Maximum Thrust Approx. Settlement 0.70m. Final VC Depth 6.28m.
29	96				

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-94,30 m ZH
		Coordinates	E 546832,01m; N 4756171,29m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength sandy CLAY

0,5m Extremely low shear strength slightly sandy clayey SILT

1,1m Very low to low shear strength slightly clayey sandy SILT

... becoming medium shear strength below 1.95m

2,4m Medium shear strength clayey SILT interbedded with very loose to loose silty SAND

3,3m Very dense slightly gravelly silty SAND

7,1m Medium high to high shear strength sandy CLAY with occasional partings of very loose sand

SAMPLE NO: PC

CPT

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B18_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

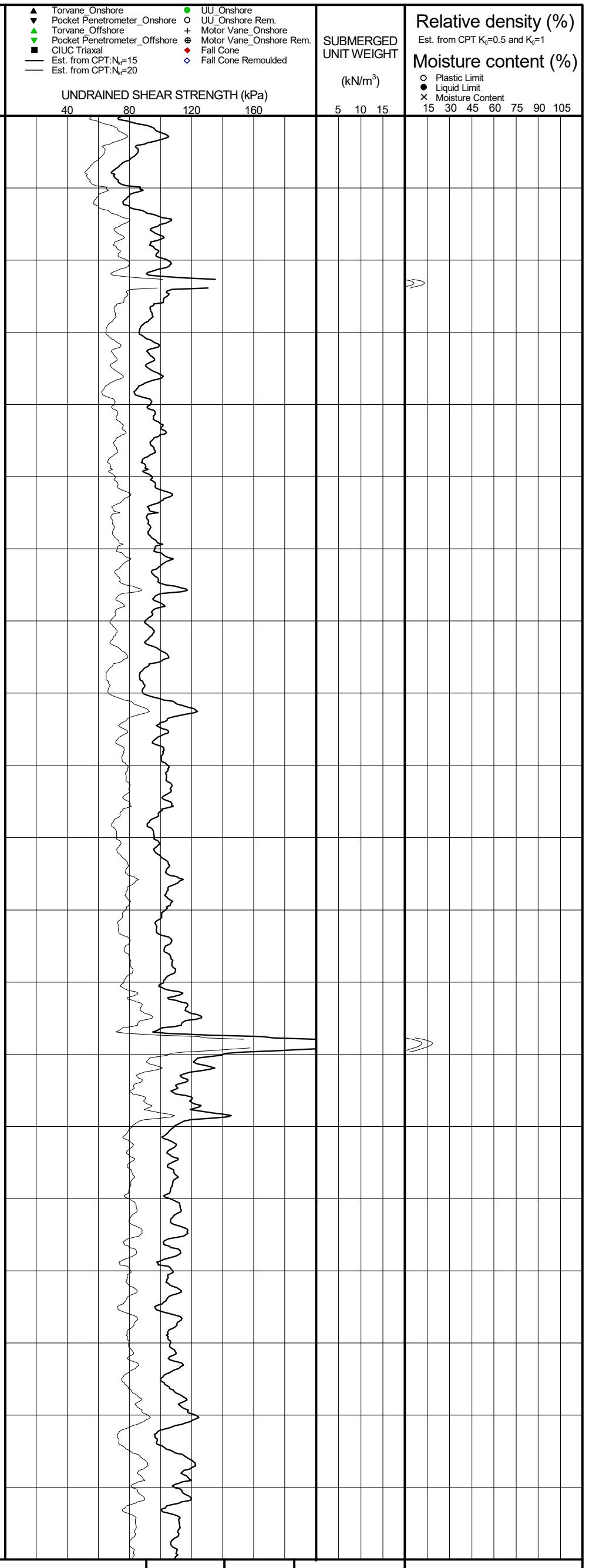
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		Water Depth	-94,02 m ZH
		Coordinates	E 544394,81m; N 4759927,8m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				7,1m Medium high to high shear strength sandy CLAY with occasional partings of very loose sand *(continued)*
12	40				
13	44				
14	48				... becoming high shear strength below 14.0m
15	52			CPT	
16	56				
17	60				
18	64				
19					



COMBINED CPT/VC LOG

Z1_OWF_B18_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-94,02 m ZH
		Coordinates	E 544394,81m; N 4759927,8m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

7,1m Medium high to high shear strength sandy CLAY with occasional partings of very loose sand *(continued)*

25,4m High shear strength silty CLAY interbedded with very loose to medium dense silty SAND

26,6m High shear strength sandy CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

21 68
22 72
23 76
24 80
25 84
26 88
27 92
28 96
29

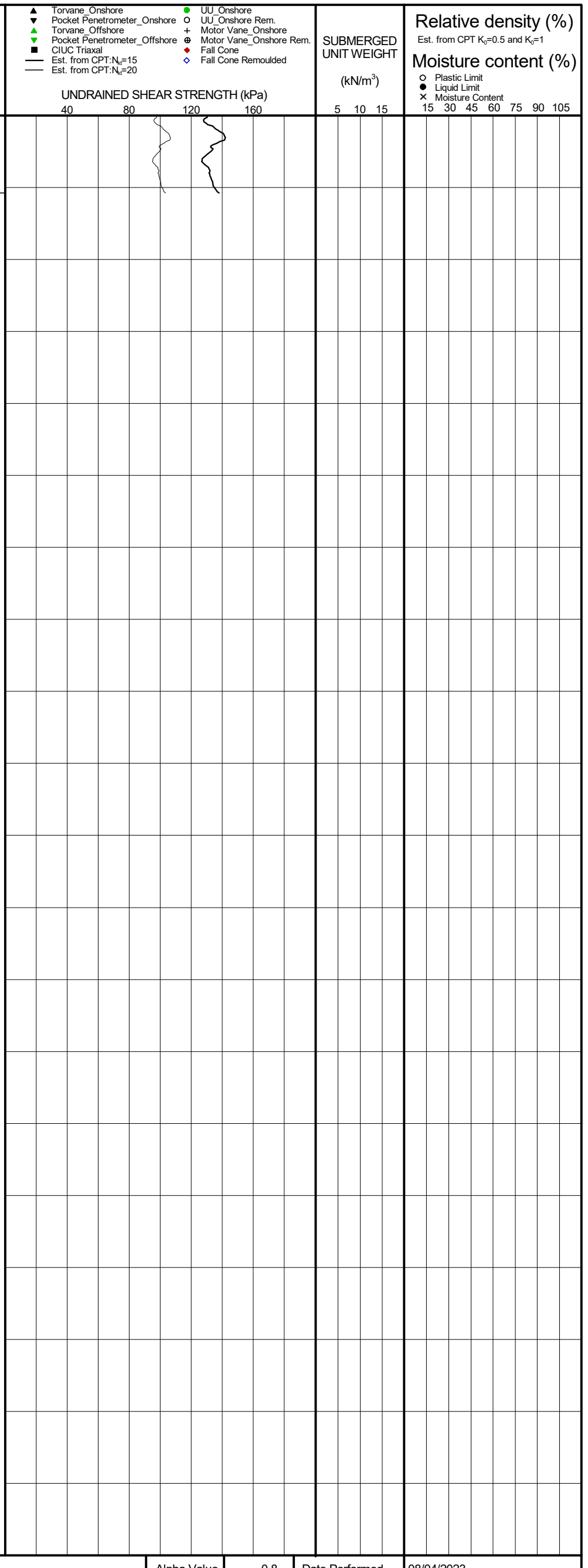
COMBINED CPT/VC LOG

Z1_OWF_B18_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-94,02 m ZH
		Coordinates	E 544394,81m; N 4759927,8m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
				CPT	26,6m High shear strength sandy CLAY *(continued)*
	100				
31					Termination depth 30.54m. Test ended due to Target Depth reached Approx. Settlement 0.69m. Final PC Depth 2.12m.
	104				
32					
	108				
33					
34	112				
35	116				
36					
	120				
37					
	124				
38					
39	128				



SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B18_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-94,02 m ZH
		Coordinates	E 544394,81m; N 4759927,8m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

1,2m Very low to low shear strength slightly sandy clayey SILT

1,7m Low to medium shear strength slightly sandy clayey SILT

4,4m Dense to very dense slightly gravelly silty SAND
... loose down to 4.75m
... becoming sandy clay between 4.75m - 4.82m

6,3m Medium high to high shear strength slightly sandy CLAY

6,8m Dense to very dense silty SAND

7,4m Medium high to high shear strength slightly sandy CLAY with occasional partings of very loose sand

SAMPLE NO: PC

CPT: CPT

UNDRAINED SHEAR STRENGTH (kPa)

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

SUBMERGED UNIT WEIGHT (kN/m^3)

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-93,54 m ZH
		Coordinates	E 547350,77m; N 4763598,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

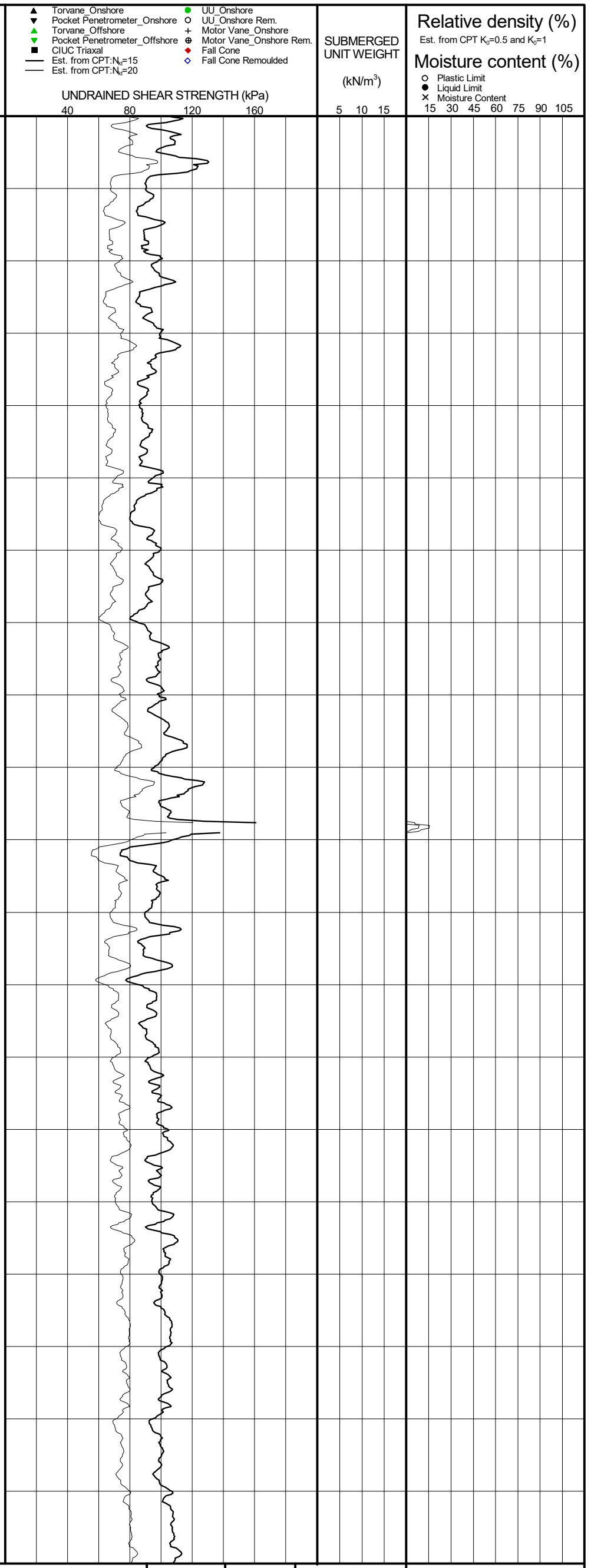
Z1_OWF_B20_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
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Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					7,4m Medium high to high shear strength slightly sandy CLAY with occasional partings of very loose sand *(continued)*
11	36				
12	40				
13	44				
14	48				
15				CPT	
16	52				
17	56				
18	60				
19	64				



SUBMERGED UNIT WEIGHT (kN/m³)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-93,54 m ZH
		Coordinates	E 547350,77m; N 4763598,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

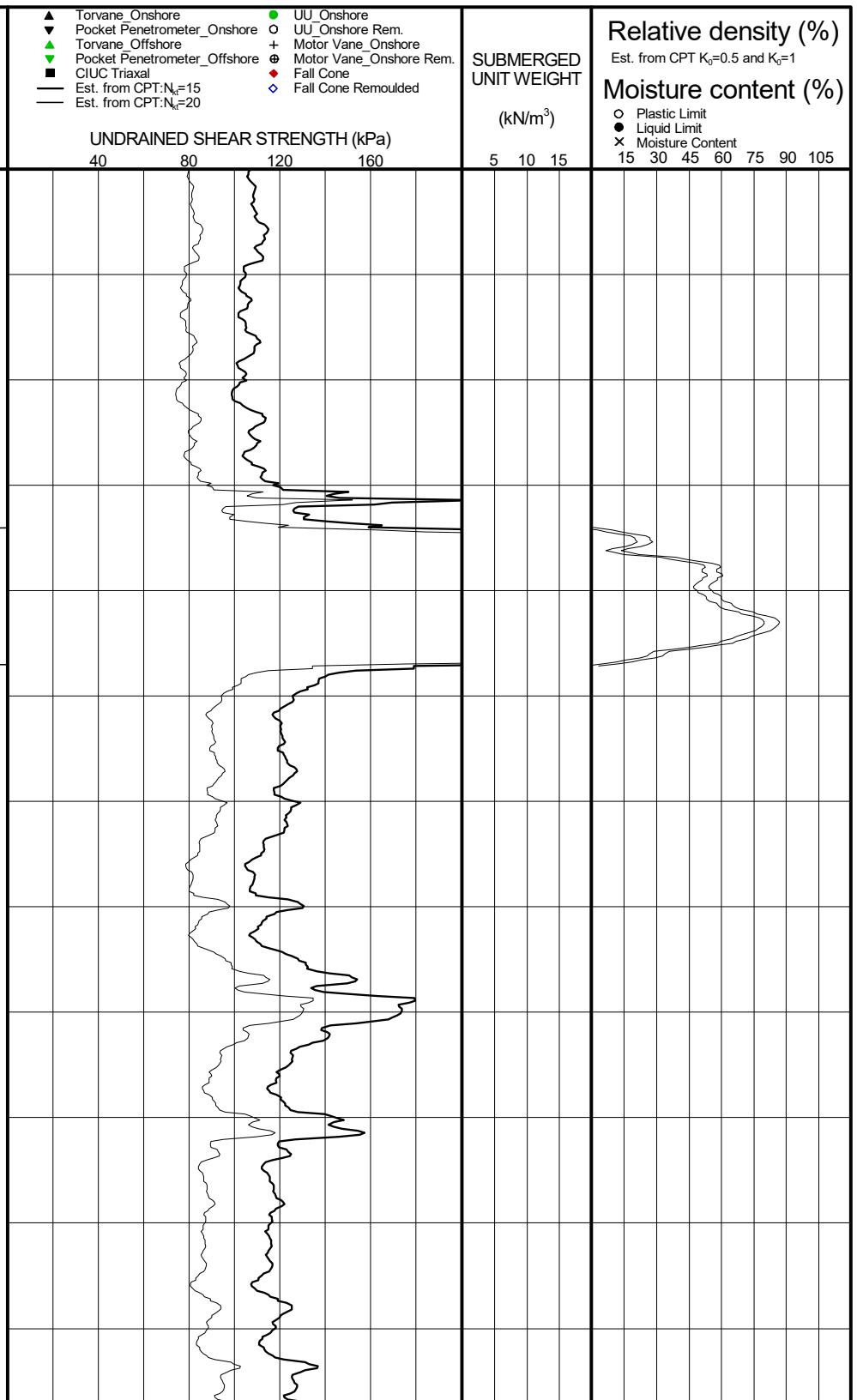
Z1_OWF_B20_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				7,4m Medium high to high shear strength slightly sandy CLAY with occasional partings of very loose sand *(continued)*
					... becoming sandy below 21.50m
22	72				21,7m Medium dense to dense silty SAND
					22,4m High shear strength slightly sandy CLAY
23	76				
24	80				
25				CPT	
	84				
26					
	88				
27					
28	92				
29	96				



COMBINED CPT/VC LOG

Z1_OWF_B20_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-93,54 m ZH
		Coordinates	E 547350,77m; N 4763598,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

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TECNOAMBIENTE
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DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
				CPT	22,4m High shear strength slightly sandy CLAY *(continued)*
31	100				Termination depth 30.87m. Test ended due to Target Depth reached Approx. Settlement 0.80m. Final PC Depth 4.05m.
32	104				
33	108				
34	112				
35	116				
36	120				
37	124				
38					
39	128				

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z1_OWF_B20_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

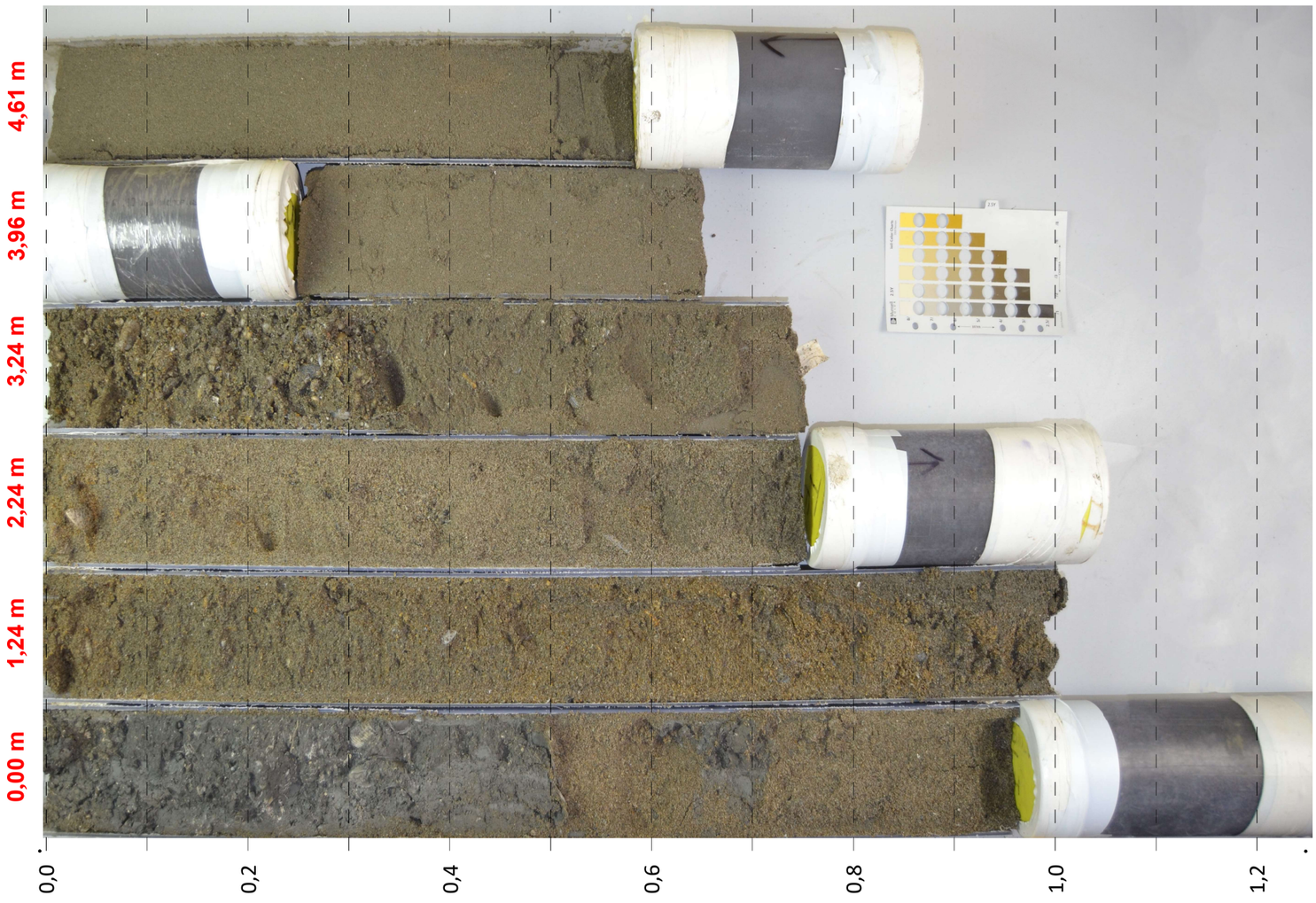
Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-93,54 m ZH
		Coordinates	E 547350,77m; N 4763598,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

APPENDIX III – VC LOGS - AO6 OWF ZONE 1



SOIL DESCRIPTION

DEPTH (m)	
0,0	0,00
	Soft, medium strength, very dark gray (2.5Y 3/1) calcareous, organic, medium plasticity,medium spaced thinly bedded sandy SILT. Abundant fine to coarse gravel sized shells and shell fragments.
0,5	0,50
	Dense, grayish brown (2.5Y 5/2) calcareous, slightly organic, non-plastic, very thinly bedded, slightly silty, gravelly medium to coarse SAND. With few fine to coarse gravel sized shells and shell fragments.
1,0	
1,5	
2,0	
2,5	
3,0	
	3,40
3,5	Medium loose, grayish brown (2.5Y 5/2) calcareous, slightly organic, non-plastic, homogeneous, gravelly fine to medium SAND. Coarse sand to medium gravel sized shells and shell fragments.
	3,70
4,0	Very dense, grayish brown (2.5Y 5/2) highly calcareous, slightly organic, non-plastic, very thinly bedded, slightly gravelly,slightly silty, fine to medium SAND. Beds of gravel with fine gravel sized shells and shell fragments and silty fine sand.
4,5	
5,0	
5,5	5,46
6,0	

Project N. : 113401341 Client : DGEC

SAMPLE POINT : Z1_OWF_B10_VC

Location : Offshore Gulf de Lyon

Water Depth (Reduced to LAT) : 94,50 m

Easting : 552748,92

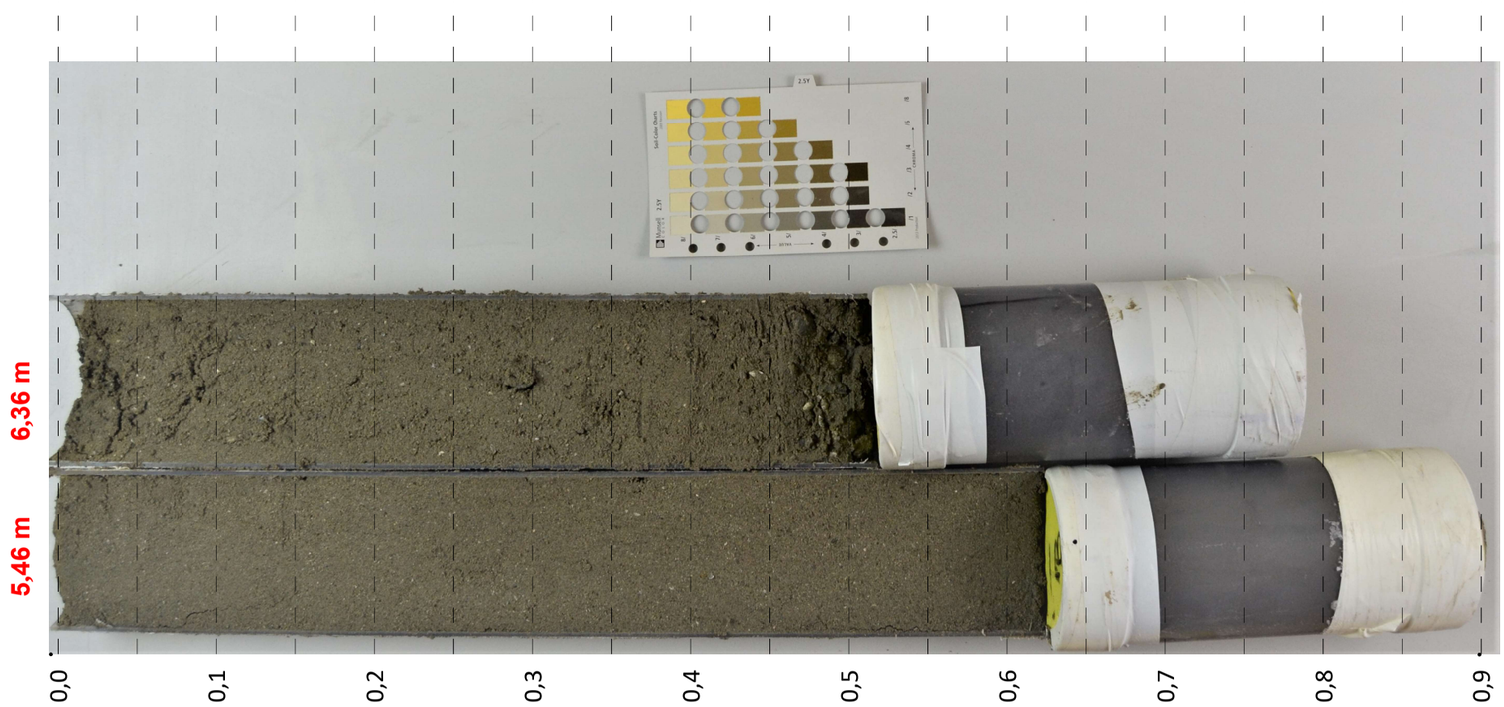
Northing : 4763576,47

Date of description : 05/07/2023

Performed by : Dott. Giorgio Mannella

Checked by : Dott. Geol. Paolo Brasey

DEPTH (m)	SOIL DESCRIPTION
6,0	Dense, dark grayish brown (2.5Y 4/2) highly calcareous, organic, non-plastic, homogeneous slightly silty, fine to medium SAND. Medium sand to medium gravel sized shells and shell fragments.
7,16	



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z1_OWF_B10_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 94,50 m Easting : 552748,92 Northing : 4763576,47	Date of description : 06/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey



DEPTH (m)

SOIL DESCRIPTION

0,0 — Very soft, extremely low strength, grayish brown (2.5Y 5/2) calcareous, slightly organic medium plasticity, homogeneous sandy, slightly clayey, SILT.
With many medium sand to coarse gravel sized shells and shell fragments.

0,45 — Dense, dark greenish gray (5GY 4/1) calcareous, slightly organic, low plasticity, homogeneous gravelly, silty, fine to medium SAND. with many medium sand to coarse gravel sized shell fragments.
Gravel fraction mainly composed by shells.

0,65 — Firm, grayish brown (2.5Y 5/2) calcareous, slightly organic, low plasticity, lensed slightly gravelly, sandy, SILT.
Gravel fraction mainly composed by shells and shell fragments.
At 0.87 m lense of dark greenish gray (5GY 4/1) silty fine sand.

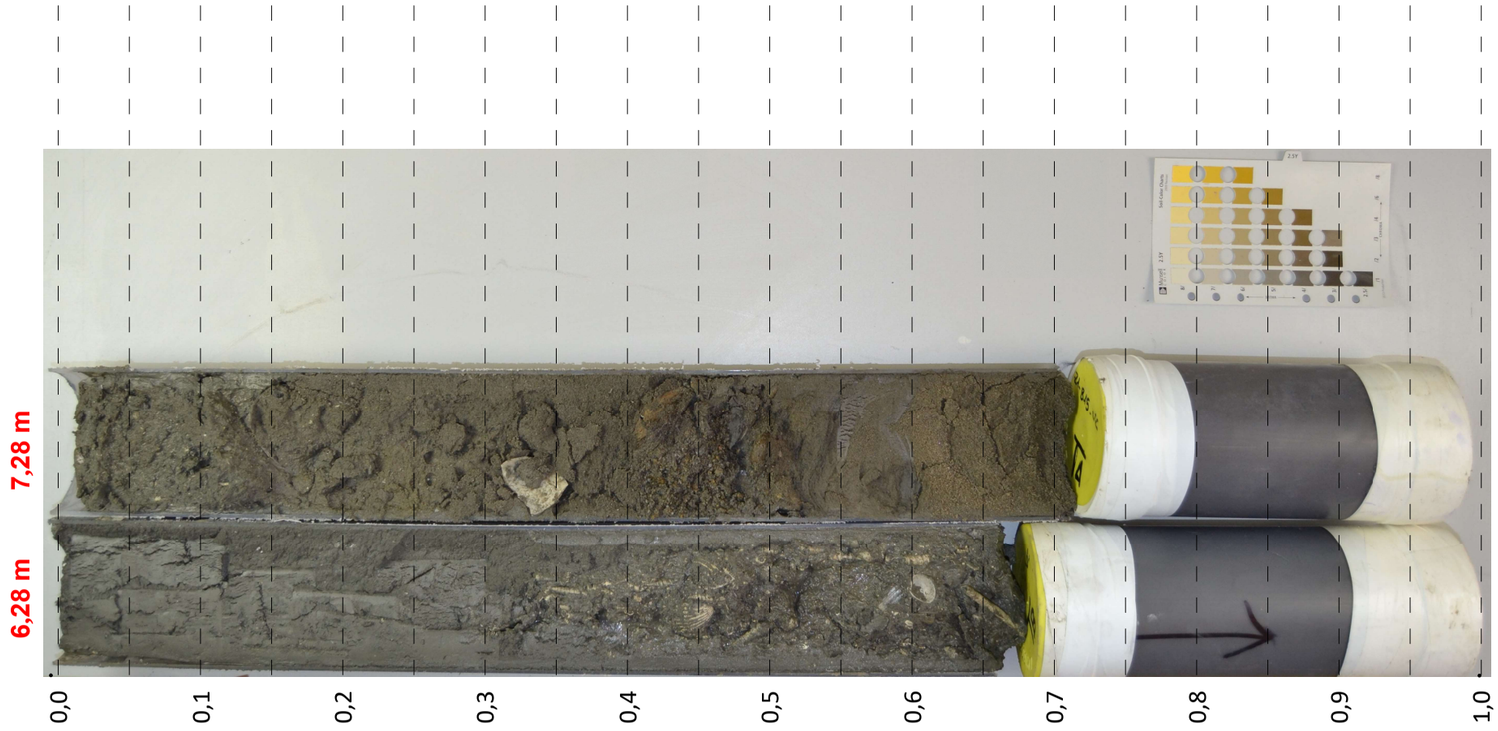
0,95 — Firm, dark greenish gray (5GY 4/1) calcareous, slightly organic, low plasticity, extremely closely spaced thinly bedded, slightly sandy, SILT.
Extremely close thinly bedded clayey silt.

5,28 — Firm, dark greenish gray (5GY 4/1) calcareous, organic, non-plastic, homogeneous, slightly sandy, SILT.
From 5.40 slightly gravelly silty sand. Gravel fraction mainly composed by shells and shell fragments.

6,28

Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z1_OWF_B15_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 93,00 m Easting : 546825,15 Northing : 4756175,46	Date of description : 05/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

DEPTH (m)	SOIL DESCRIPTION	
6,5	Soft, low strength, dark greenish gray (5GY 4/1) calcareous, organic, medium plasticity, homogeneous sandy, SILT. With black spots of organic matter and medium sand to medium gravel sized shell fragments.	6,70
	Medium loose, dark greenish gray (5GY 4/1) highly calcareous, slightly organic, non-plastic, homogeneous silty, very gravelly, medium SAND. With many coarse sand to coarse gravel sized shell fragments. Gravel fraction mainly composed by shells.	7,40
7,5	Dense, dark greenish gray (5GY 4/1) highly calcareous, slightly organic, non-plastic, lensed fine to medium SAND. With few medium gravel sized shell fragments. From 0.70 to 0.80 m slightly gravelly medium to coarse sand.	7,90
8,0	Medium loose, gray (2.5Y 5/1) highly calcareous, slightly organic, non-plastic, homogeneous, medium SAND.	8,28
8,5		
9,0		
9,5		
10,0		



Project N. : 113401341 Client : DGEC

SAMPLE POINT : Z1_OWF_B15_VC

Location : Offshore Gulf de Lyon

Water Depth (Reduced to LAT) : 93,00 m

Easting : 546825,15

Northing : 4756175,46

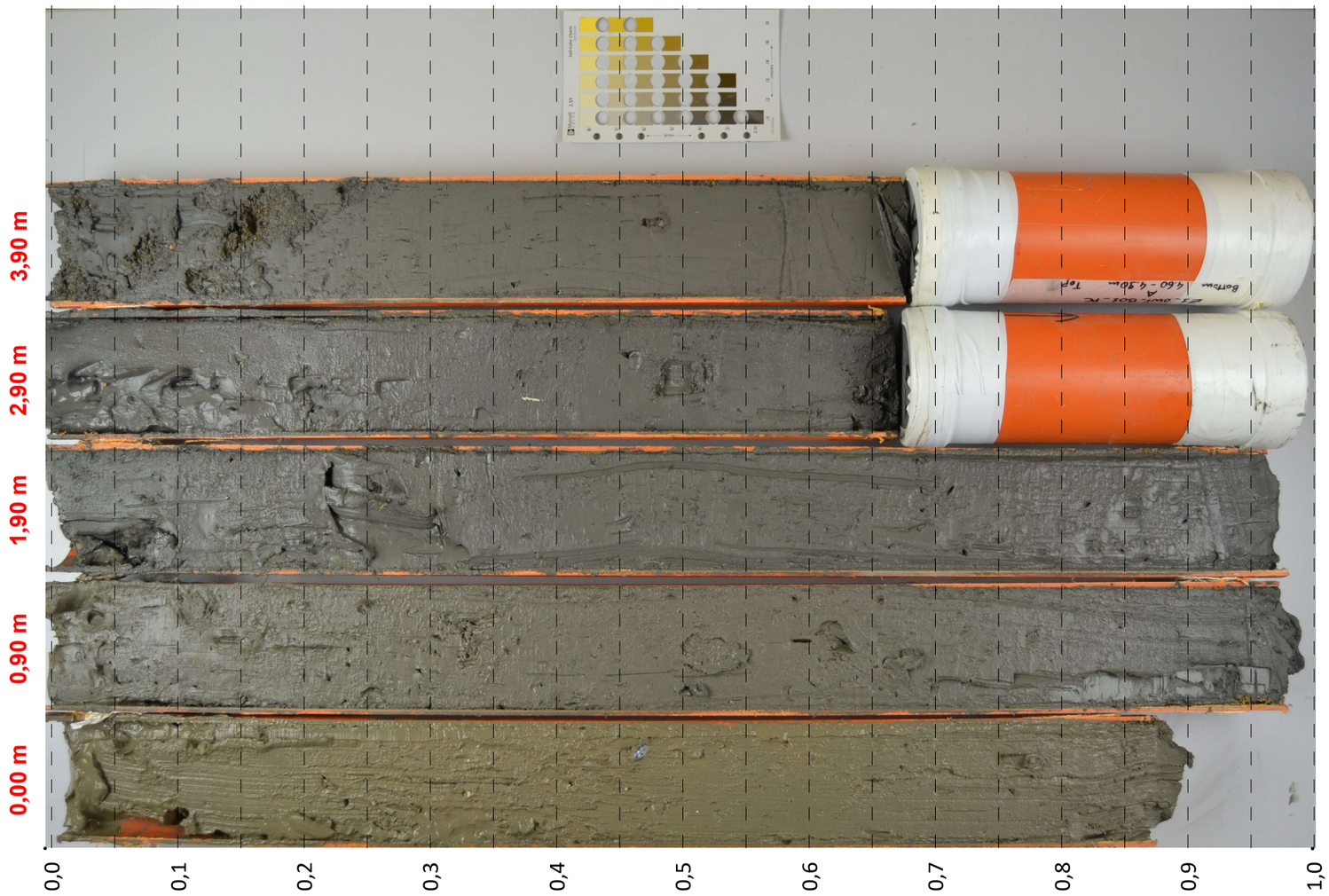
Date of description : 05/07/2023

Performed by : Dott. Giorgio Mannella

Checked by : Dott. Geol. Paolo Brasey

APPENDIX IV – PC LOGS - AO6 OWF ZONE 1

DEPTH (m)	SOIL DESCRIPTION	
0,0	Very soft, extremely low strength, grayish brown (2.5Y 5/2) calcareous, slightly organic, high plasticity, homogeneous, silty CLAY. With few medium sand to medium gravel sized shells and shell fragments.	
0,90	Soft, extremely low strength, dark gray (2.5Y 4/1) calcareous, organic, high plasticity, homogeneous, silty CLAY. With few medium sand to coarse gravel sized shell fragments.	
3,30	Soft, extremely low strength, dark gray (2.5Y 4/1) calcareous, organic, high plasticity, lensed, slightly sandy silty CLAY. With few medium sand to medium gravel sized shell fragments.	
3,70	Medium loose, dark gray (2.5Y 4/1) highly calcareous, slightly organic, non-plastic, lensed, silty medium to coarse SAND.	
4,15	Firm, low strength, dark gray (2.5Y 4/1) calcareous, slightly organic, high plasticity, homogeneous, silty CLAY. With few medium sand to fine gravel sized shells and shell fragments.	
4,90		



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z1_OWF_B01_PC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 85,00 m Easting : 535587,67 Northing : 4759613,72	Date of description : 03/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

RINA

Location : Offshore Gulf de Lyon

Project N. : 113401341 Client : DGEC

SAMPLE POINT : Z1_OWF_B05_PC

Water Depth (Reduced to LAT) : 82,00 m

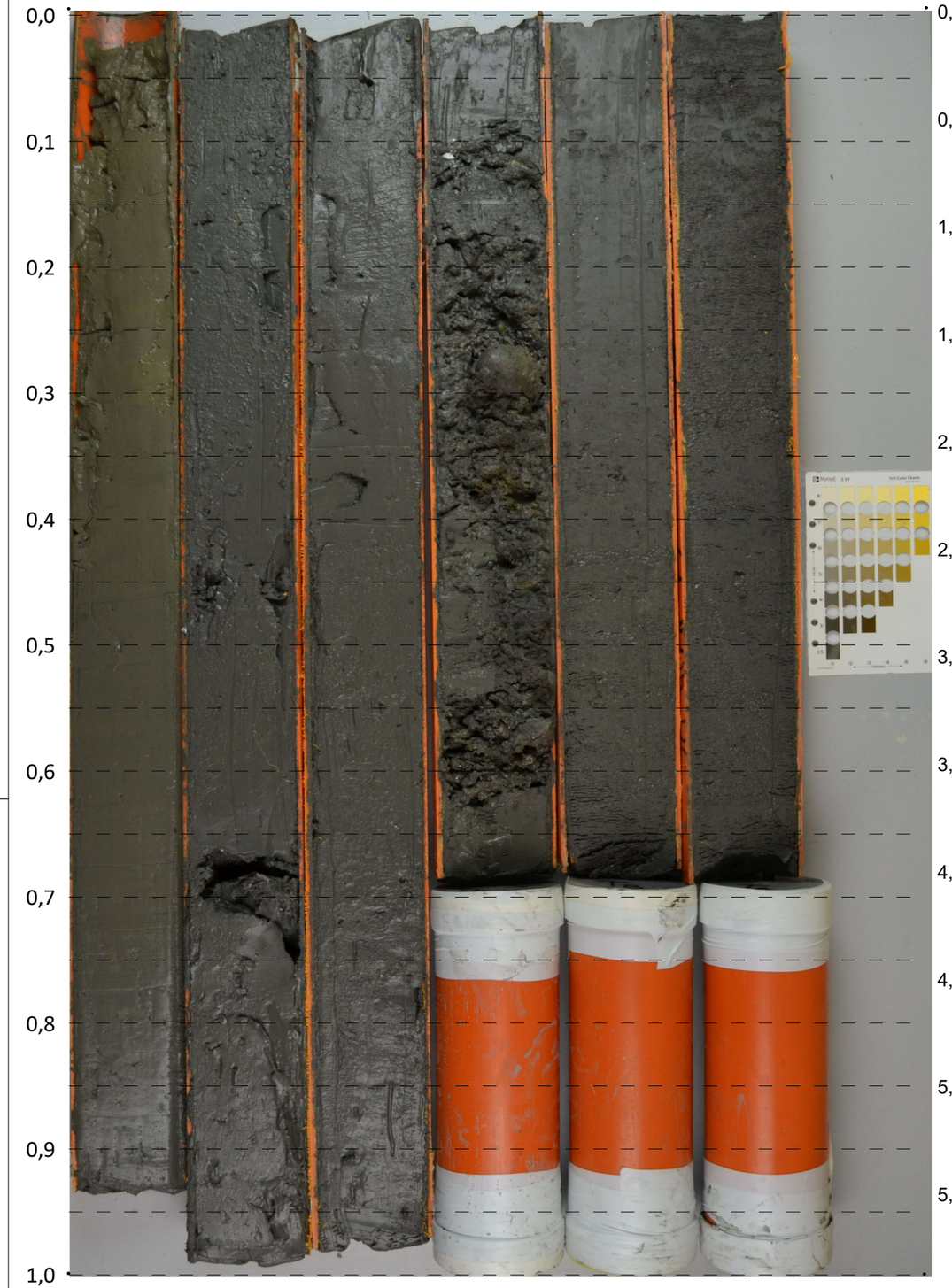
Easting : 537809,48

Northing : 4764591,61

Date of description : 30/06/2023

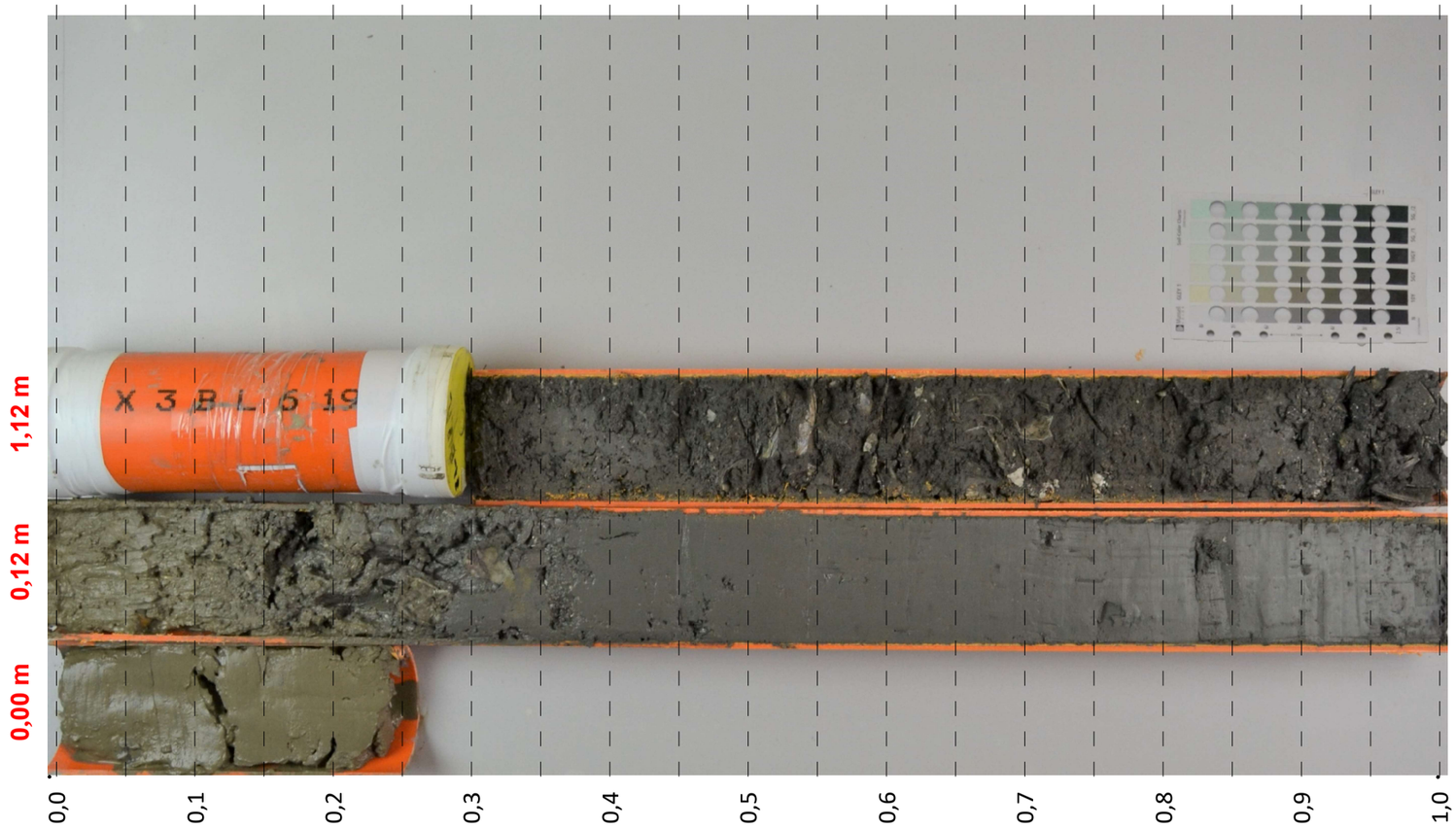
Performed by : Dott. Elena Tortonesi

Checked by : Dott. Geol. Paolo Brasey



DEPTH (m)	SOIL DESCRIPTION
0,0	Very soft, extremely low strength, dark greenish gray (10Y 4/1) highly calcareous, slightly organic, high plasticity, homogeneous silty, CLAY. With rare fine sand sized shell fragments.
0,5	
0,95	
1,0	Very soft, extremely low strength, dark greenish gray (5GY 4/1) highly calcareous, slightly organic, high plasticity, medium spaced very thinly bedded slightly sandy, silty, CLAY. At 1.40 and 1.65 m presence of centimetric shells and shell fragments.
1,5	
2,0	
2,5	
3,0	
3,05	
3,5	Medium loose, dark greenish gray (5GY 4/1) calcareous, organic, low plasticity, very closely spaced thinly bedded clayey, gravelly, SILT. With some rounded gravel and cobbles. Many gravel sized shell fragments.
3,60	
4,0	Soft, low strength, dark greenish gray (5GY 4/1) calcareous, slightly organic, high plasticity, homogeneous, silty, CLAY. With few fine sand sized shell fragments.
4,40	
4,5	Firm, medium strength, dark greenish gray (5GY 4/1) calcareous, slightly organic, medium plasticity, thickly laminated, sandy, slightly clayey, SILT. With medium sand sized shell fragments.
5,0	
5,5	
5,95	
6,0	

DEPTH (m)	SOIL DESCRIPTION	
0,0		0,00
	Very soft, extremely low strength, greenish gray (10Y 5/1) calcareous, organic, high plasticity, homogeneous sandy, CLAY. From 0.25 m to 0.50 m fine to coarse gravel sized shells and shell fragments. Shells abundance and size increase moving towards bottom.	0,50
0,5	Soft, low strength, dark greenish gray (5GY 4/1) calcareous, organic, high plasticity, homogeneous slightly sandy, clayey SILT. With fine to coarse sand sized shell fragments and rare spots of black organic matter.	1,10
1,0	Soft, low strength, dark greenish gray (5GY 4/1) calcareous, organic, medium plasticity, very closely spaced thinly laminated very sandy SILT. Medium to coarse sand sized shell fragments.	1,60
1,5	Dense, dark greenish gray (5GY 4/1) calcareous, organic, low plasticity, closely spaced very thinly bedded, gravelly very silty fine to medium SAND. Medium sand to coarse gravel sized shell fragments. Strong odor of gas.	2,12
2,0		
2,5		
3,0		
3,5		
4,0		
4,5		
5,0		
5,5		
6,0		



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z1_OWF_B18_PC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 94,00 m Easting : 544394,51 Northing : 4759917,16	Date of description : 30/06/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

SOIL DESCRIPTION

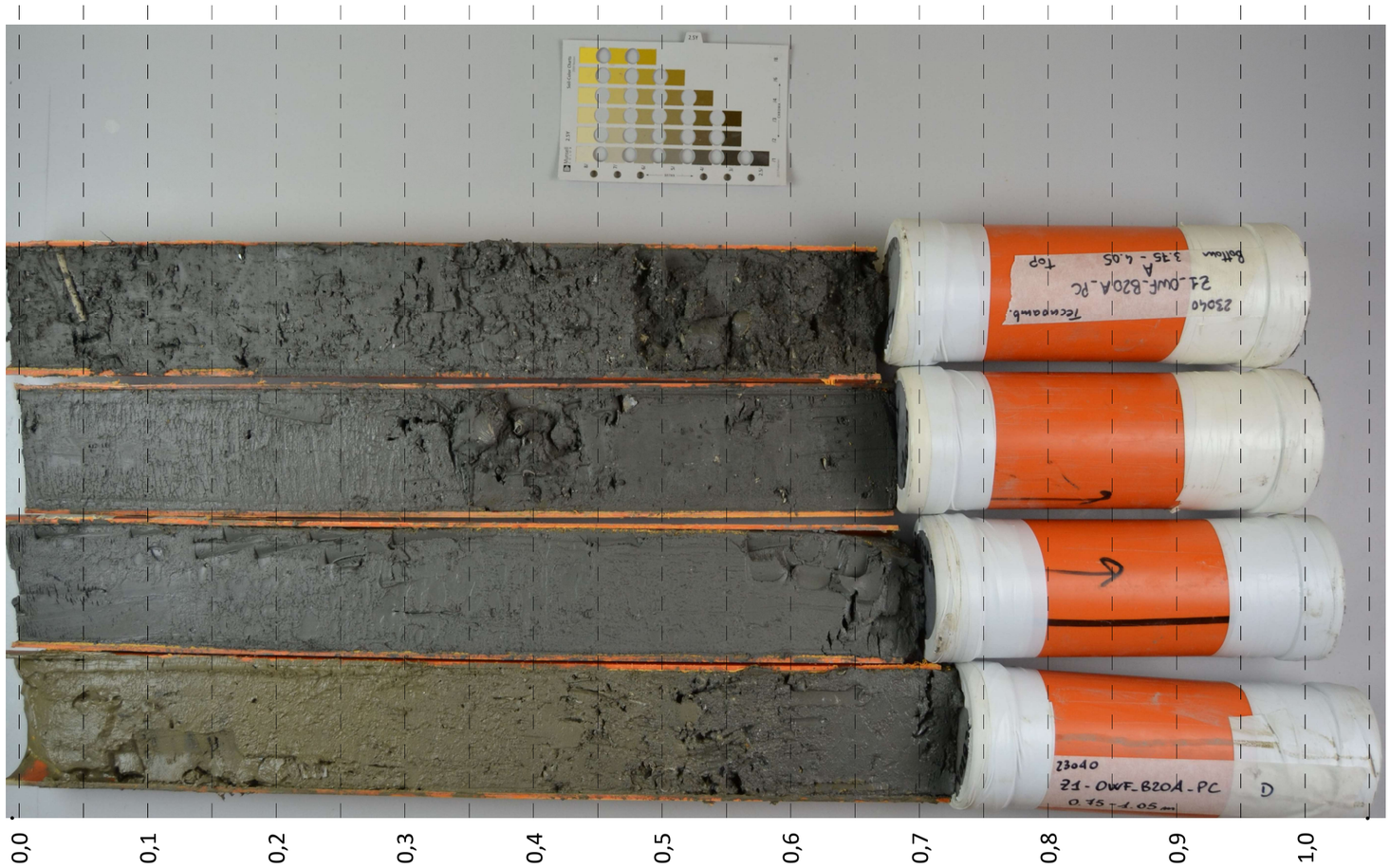
DEPTH (m)

0,00
Very soft, extremely low strength, greenish gray (10Y 5/1) calcareous, slightly organic, high plasticity, homogeneous silty, slightly sandy, CLAY.
With fine to coarse gravel sized shell fragments.

0,60
Soft, low strength, dark greenish gray (5GY 4/1) calcareous, slightly organic, high plasticity, homogeneous slightly sandy, silty, CLAY.
With few fine to coarse sand sized shell fragments.

2,80
Soft, low strength, dark greenish gray (5GY 4/1) calcareous, slightly organic, medium plasticity, homogeneous very sandy, slightly gravelly, SILT.
With many coarse sand to medium gravel sized shells and shell fragments.

4,05



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z1_OWF_B20A_PC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 94,00 m Easting : 547344,34 Northing : 4763598,69	Date of description : 04/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

APPENDIX V – CPT DETAILS - AO6 OWF ZONE 1

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	17/04/2023
		Water Depth	-85,11 m ZH
		Coordinates	E 535595,02m; N 4759617,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

Z1_OWF_B01B_CPT
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Offshore Gulf de Lyon
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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	17/04/2023
		Water Depth	-85,11 m ZH
		Coordinates	E 535595,02m; N 4759617,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	17/04/2023
		Water Depth	-85,11 m ZH
		Coordinates	E 535595,02m; N 4759617,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8
Date Performed	18/04/2023
Water Depth	-85,01 m ZH
Coordinates	E 535590,89m; N 4759605,9m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22598 / 001

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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-85,01 m ZH
		Coordinates	E 535590,89m; N 4759605,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 — 68
22 — 72
23 — 76
24 — 80
25 — 84
26 — 88
27 — 92
28 — 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-85,01 m ZH
		Coordinates	E 535590,89m; N 4759605,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-88,90 m ZH
		Coordinates	E 536024,66m; N 4756343,19m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

Z1_OWF_B02B_CPT
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-88,90 m ZH
		Coordinates	E 536024,66m; N 4756343,19m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22598 / 001

Z1_OWF_B02B_CPT
MED-TEC_A06
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8
Date Performed	18/04/2023
Water Depth	-88,90 m ZH
Coordinates	E 536024,66m; N 4756343,19m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22598 / 001

Z1_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-93,90 m ZH
		Coordinates	E 540173,2m; N 4755417,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B03_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-93,90 m ZH
		Coordinates	E 540173,2m; N 4755417,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B03_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-93,90 m ZH
		Coordinates	E 540173,2m; N 4755417,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B03_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	10/04/2023
		Water Depth	-93,96 m ZH
		Coordinates	E 540185,64m; N 4755420,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

Z1_OWF_B03_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	10/04/2023
		Water Depth	-93,96 m ZH
		Coordinates	E 540185,64m; N 4755420,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22596 / 001

Z1_OWF_B03_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-82,35 m ZH
		Coordinates	E 537802,22m; N 4764592,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

Z1_OWF_B05_CPT
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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8
Date Performed	08/04/2023
Water Depth	-82,35 m ZH
Coordinates	E 537802,22m; N 4764592,9m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22597 / 001

Z1_OWF_B05_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25 84
26 88
27 92
28 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-82,35 m ZH
		Coordinates	E 537802,22m; N 4764592,9m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

Z1_OWF_B05_CPT
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-89,34 m ZH
		Coordinates	E 548245,88m; N 4767784,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22599 / 001

Z1_OWF_B07_CPT
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Offshore Gulf de Lyon
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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-89,34 m ZH
		Coordinates	E 548245,88m; N 4767784,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22599 / 001

Z1_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 548259,43m; N 4767796,5m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B07B_CPTa
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 548259,43m; N 4767796,5m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B07B_CPTa
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

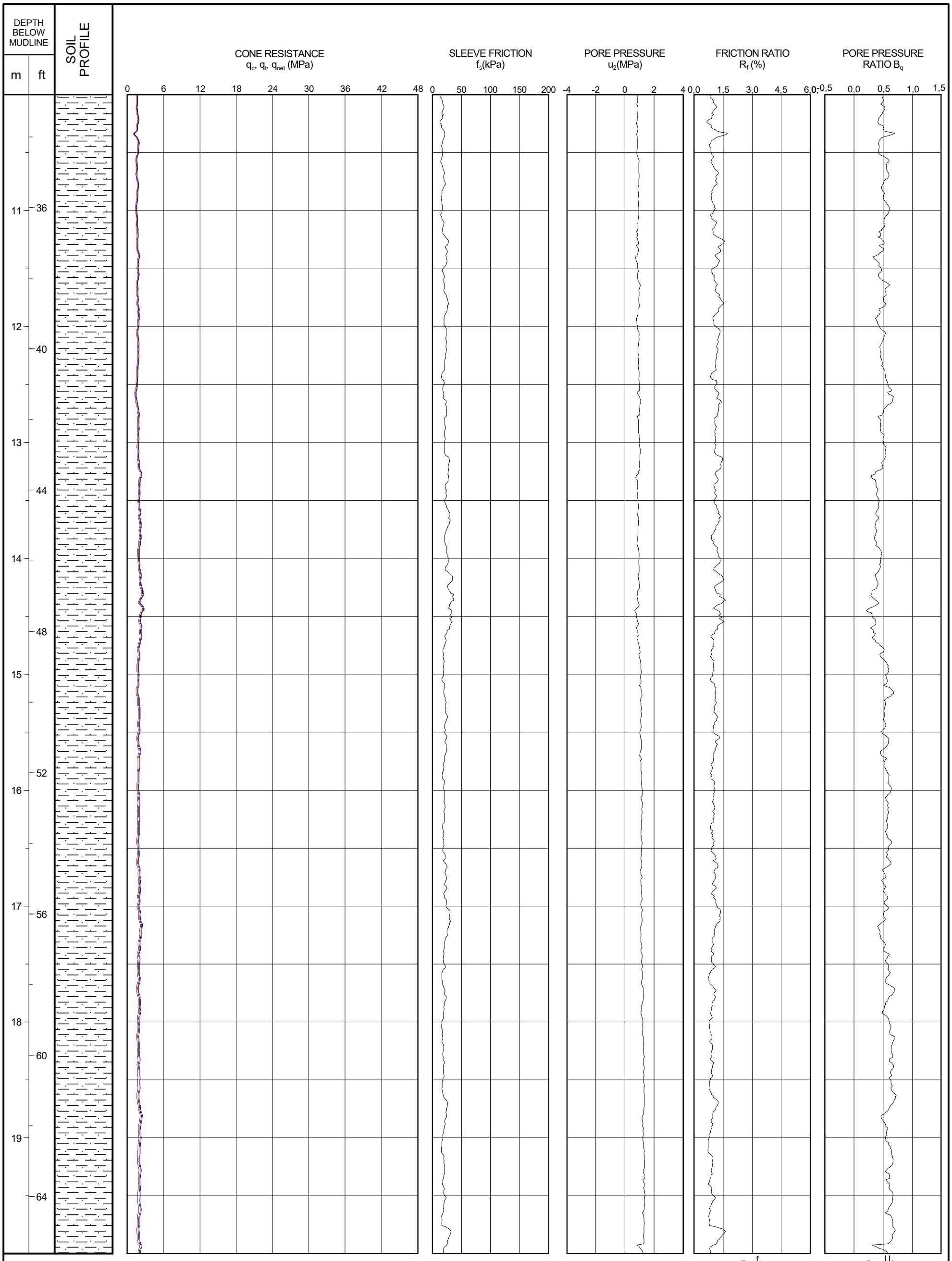
Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-88,86 m ZH
		Coordinates	E 553283,12m; N 4771040,14m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

Z1_OWF_B08_CPT
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PCPT PROFILE

Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-88,86 m ZH
		Coordinates	E 553283,12m; N 4771040,14m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

Z1_OWF_B08_CPT
MED-TEC_A06
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Liberté Égalité Fraternité

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

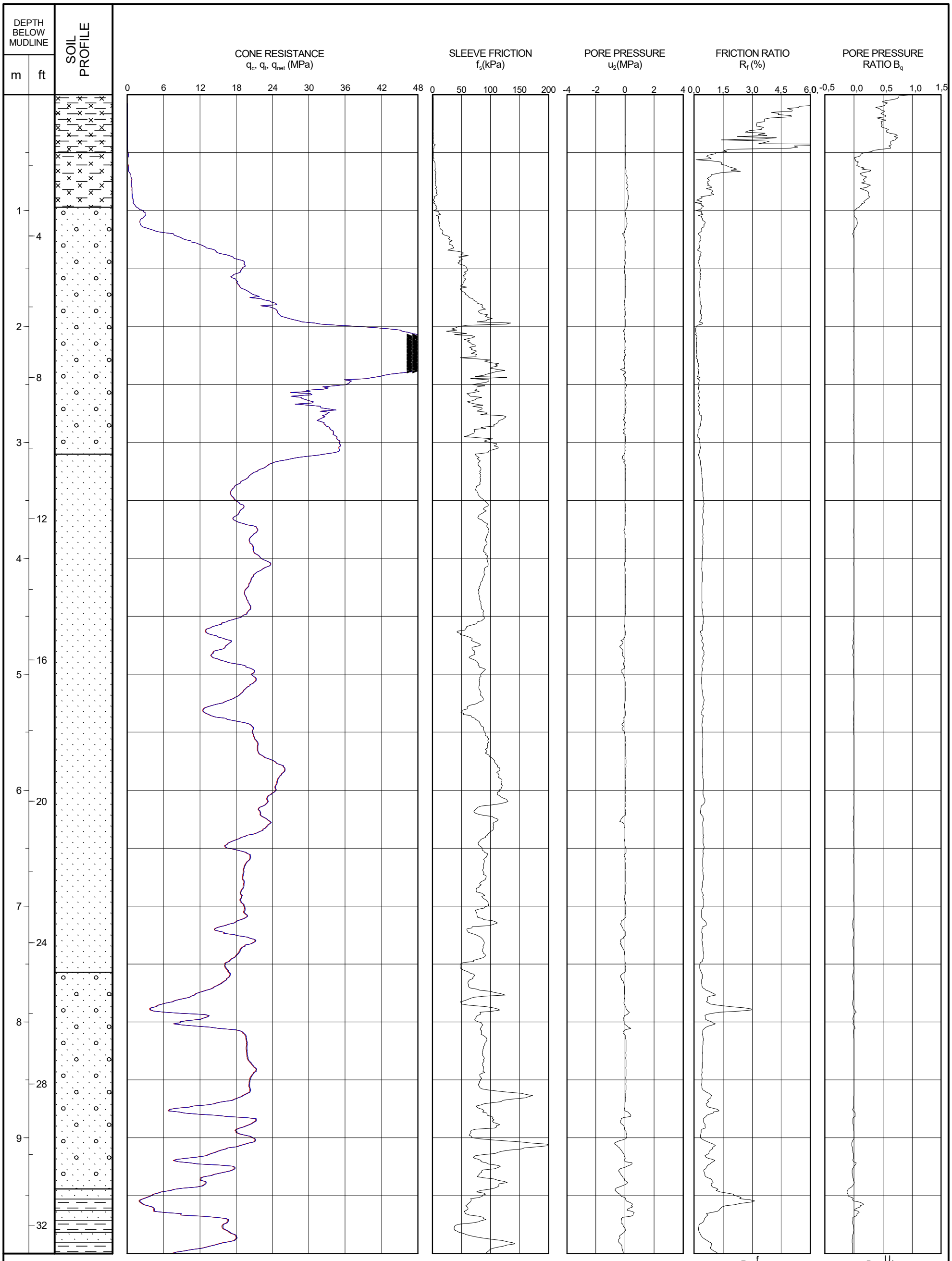
Alpha Value	0.8	Date Performed	04/04/2023
		Water Depth	-88,86 m ZH
		Coordinates	E 553283,12m; N 4771040,14m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22597 / 001

Z1_OWF_B08_CPT
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Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente



PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

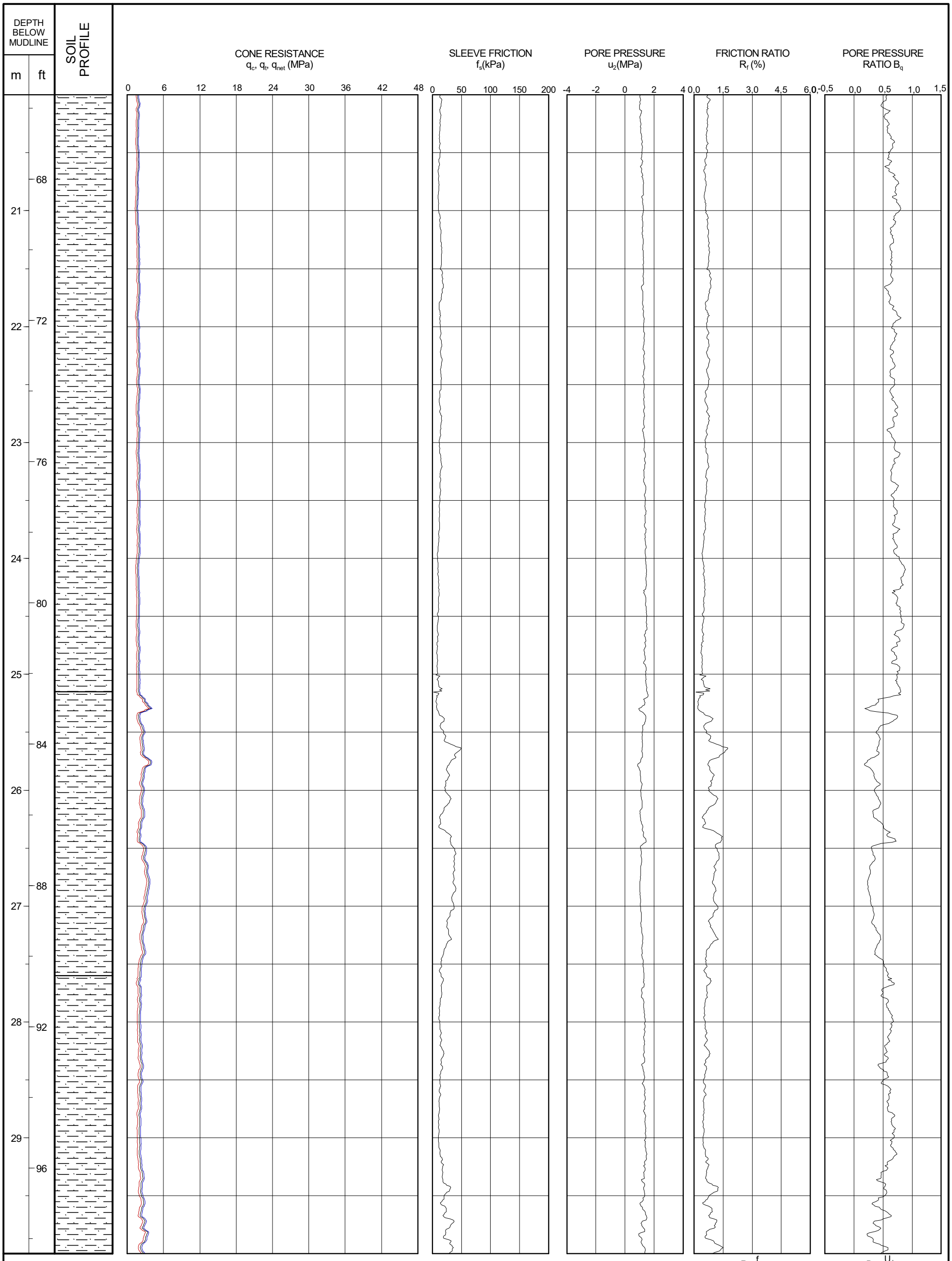
Alpha Value	0.8
Date Performed	09/04/2023
Water Depth	-95,47 m ZH
Coordinates	E 552748,23m; N 4763567,91m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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A TRADEBE COMPANY

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PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
	100
31	104
32	108
33	112
34	116
35	120
36	124
37	128
38	
39	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-95,47 m ZH
		Coordinates	E 552748,23m; N 4763567,91m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B10_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25 84
26 88
27
28 92
29 96

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
	100
31	
	104
32	
	108
33	
	112
34	
	116
35	
	120
36	
	124
37	
	128
38	
39	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-99,94 m ZH
		Coordinates	E 550109,22m; N 4751107,06m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-96,38 m ZH
		Coordinates	E 548461,56m; N 4753650,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

Z1_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
		Water Depth	-96,38 m ZH
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m | ft

SOIL PROFILE

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0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

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PCPT PROFILE

Alpha Value	0.8	Date Performed	18/04/2023
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

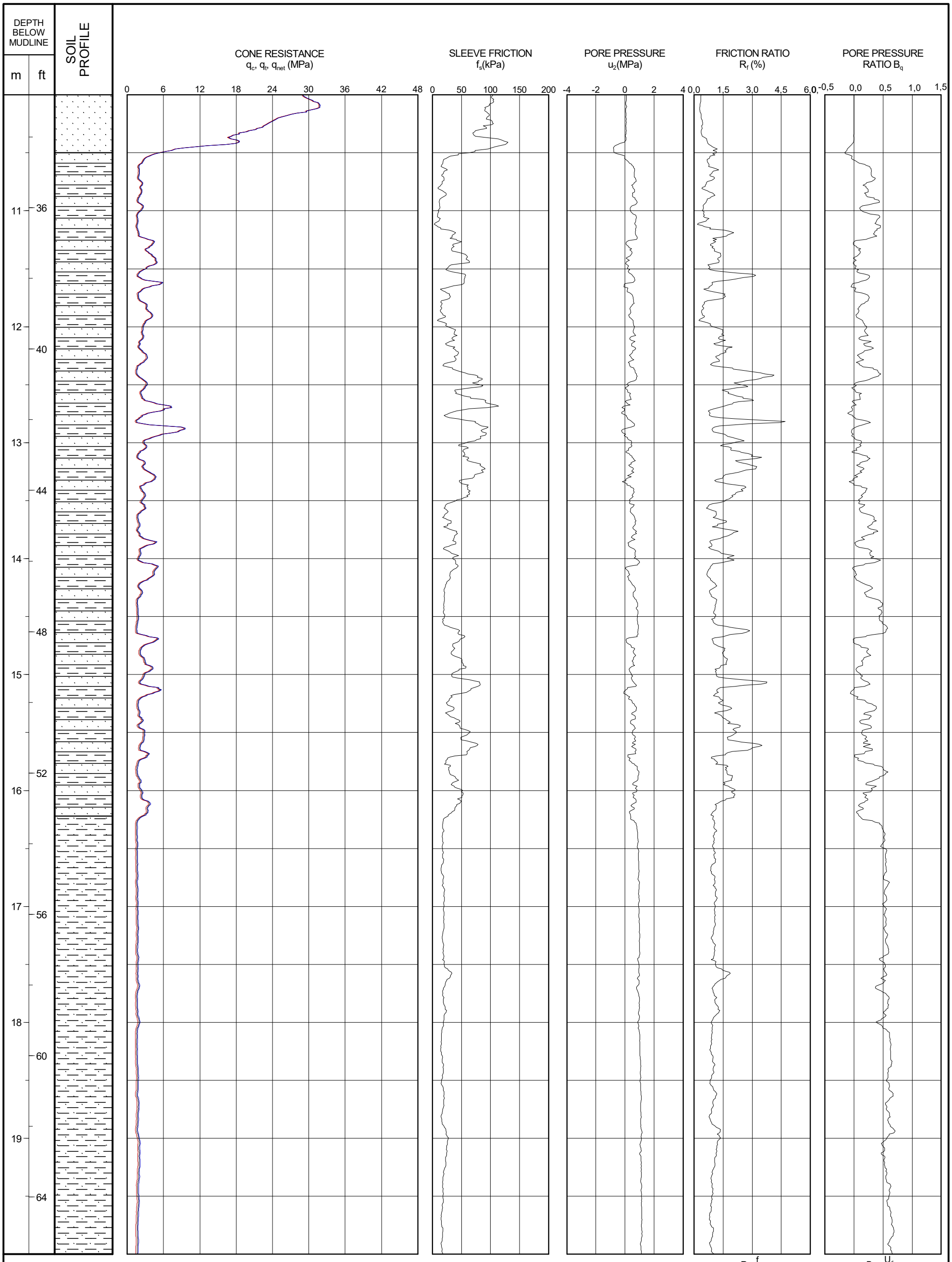
Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-94,30 m ZH
		Coordinates	E 546832,01m; N 4756171,29m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

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Tecnoambiente



PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-94,30 m ZH
		Coordinates	E 546832,01m; N 4756171,29m
		Made By/Date	SC - 14/11/2023
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	09/04/2023
		Water Depth	-94,30 m ZH
		Coordinates	E 546832,01m; N 4756171,29m
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

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u_2(MPa)

-4 -2 0 2 4

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R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

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q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-94,02 m ZH
		Coordinates	E 544394,81m; N 4759927,8m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22597 / 001

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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
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18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

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PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
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		Coordinates	E 544394,81m; N 4759927,8m
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

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-0,5 0,0 0,5 1,0 1,5

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DEPTH BELOW MUDLINE

m | ft

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f_s(kPa)

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u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
	100
31	
	104
32	
	108
33	
	112
34	
	116
35	
	120
36	
	124
37	
	128
38	
39	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
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m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

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R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

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8 32
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q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-93,54 m ZH
		Coordinates	E 547350,77m; N 4763598,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B20_CPT
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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	08/04/2023
		Water Depth	-93,54 m ZH
		Coordinates	E 547350,77m; N 4763598,43m
		Made By/Date	SC - 14/11/2023
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m | ft

SOIL PROFILE

CONE RESISTANCE
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0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

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-0,5 0,0 0,5 1,0 1,5

21 | 68
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PCPT PROFILE

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Z1_OWF_B20_CPT
MED-TEC_A06
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DEPTH BELOW MUDLINE

m | ft

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0 6 12 18 24 30 36 42 48

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R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
	100
31	
	104
32	
	108
33	
	112
34	
	116
35	
	120
36	
	124
37	
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39	

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		Cone Number	S10CFIIP.S22594 / 001

Z1_OWF_B20_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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APPENDIX VI – COMBINED CPT LOGS - AO6 OWF ZONE 2

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength clayey SILT

... becoming very low to low shear strength sandy silt below 0.75m

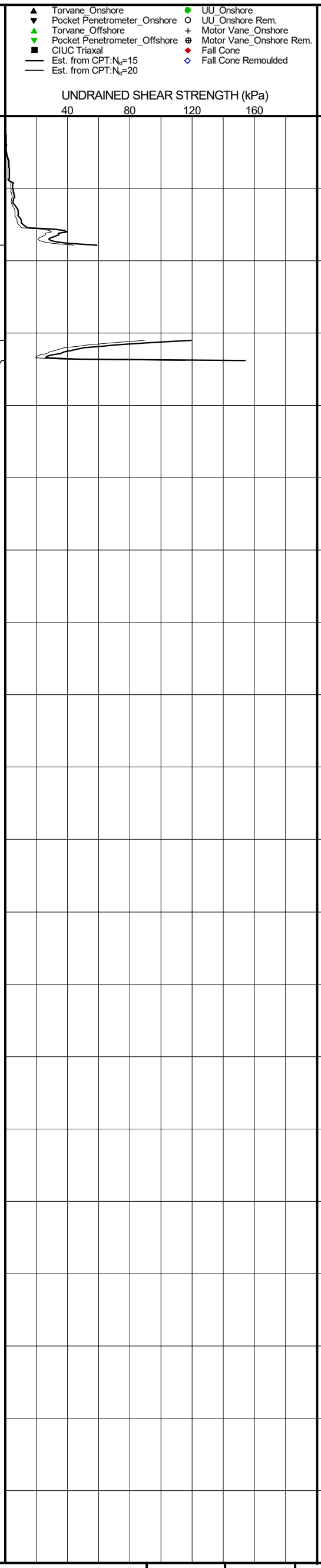
0,9m Dense silty SAND
... loose down to 1.08m

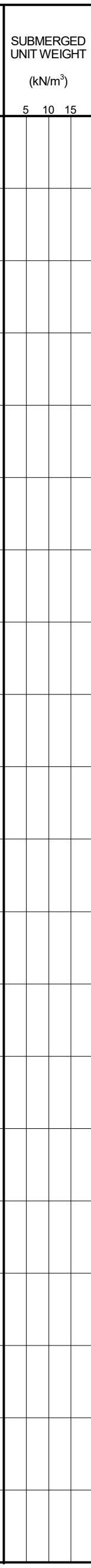
1,6m Low shear strength sandy CLAY

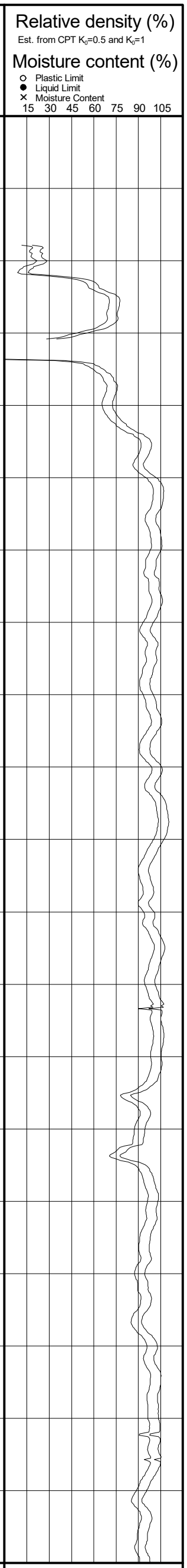
1,7m Very dense slightly gravelly SAND
... dense down to 2.20m

... dense to very dense between 6.72m - 7.23m

CPT







COMBINED CPT/VC LOG

Z2_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

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Liberté Égalité Fraternité

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DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				1,7m Very dense slightly gravelly SAND *(continued)*
12	40				... becoming dense below 12.00m
13	44				13,3m Medium shear strength sandy CLAY
					13,4m Very dense gravelly SAND
14	48				14,2m Dense to very dense slightly gravelly SAND
15				CPT	... loose to medium dense below 14.95m
16	52				15,2m Medium to high shear strength sandy CLAY interbedded with medium dense silty SAND
17	56				
18	60				18,0m Medium to high shear strength sandy CLAY
19	64				18,6m Medium to high shear strength slightly sandy CLAY

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
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		Cone Number	S10CFIIP.S22602 / 001

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DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

18,6m Medium to high shear strength slightly sandy CLAY *(continued)*

22,8m High shear strength slightly sandy CLAY

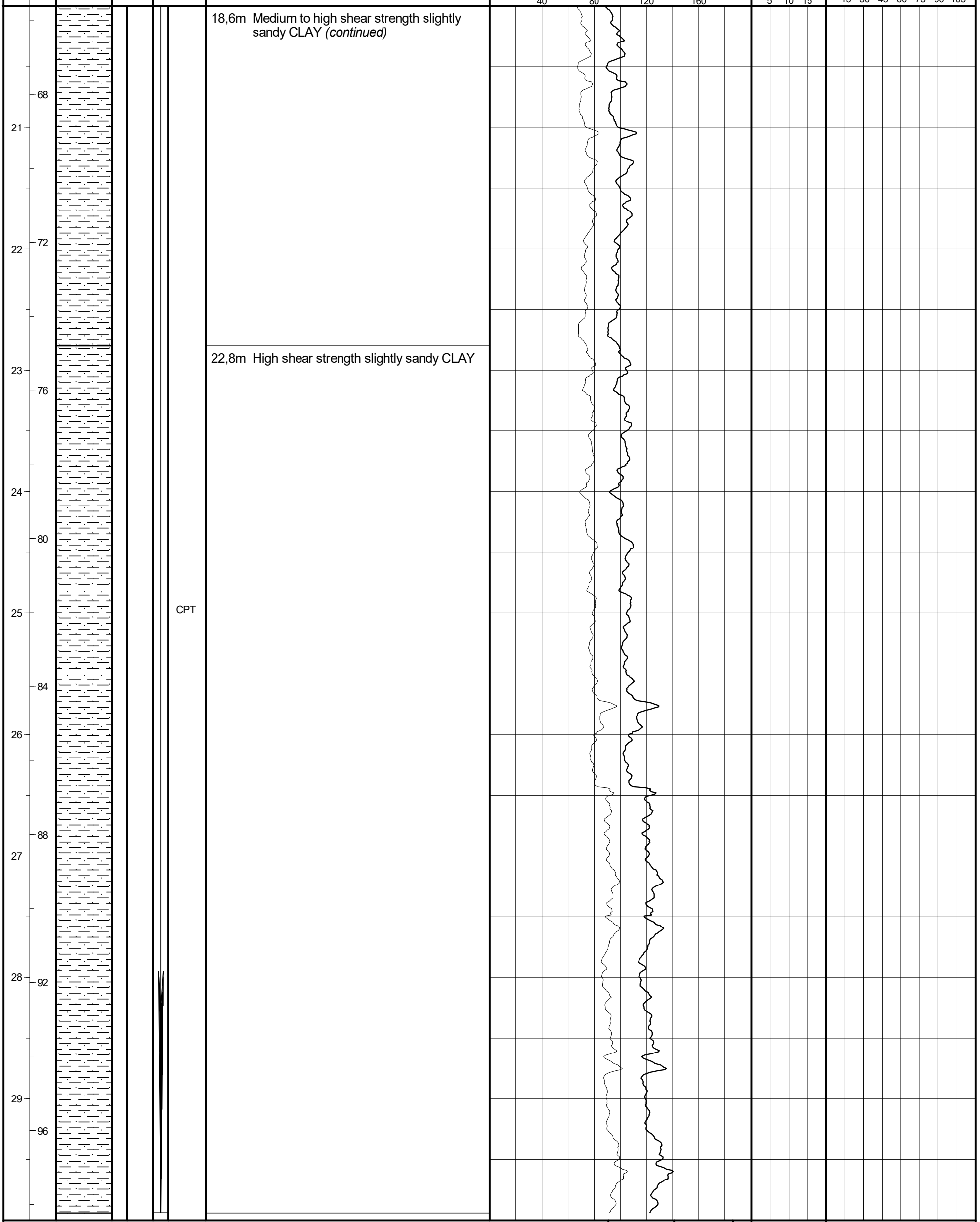
▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105



COMBINED CPT/VC LOG

Z2_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.94m. Depth ended due to Target Depth reached Approx. Settlement 0.79m
31	100				
	104				
32					
	108				
33					
	112				
34					
	116				
35					
	120				
36					
	124				
37					
	128				
38					
39					

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
—— Est. from CPT:N_{kt}=15
—— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

SUBMERGED UNIT WEIGHT (kN/m^3)

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content

m	ft	SOIL DESCRIPTION
0	0	0,0m Extremely low to very low shear strength slightly sandy clayey SILT
		... becoming sandy below 0.45m
		... becoming medium shear strength below 1.85m
2	8	2,0m Very loose silty SAND
		2,2m Very low to low shear strength slightly clayey sandy SILT
3	12	2,7m Extremely low to very low shear strength slightly clayey SILT
4	16	4,4m Very loose to loose silty SAND with partings of low to medium shear strength clayey silt
5	20	5,1m Dense slightly silty SAND
6	24	6,1m Medium to high shear strength clayey SILT interbedded with loose to medium dense, locally dense, silty SAND
8	28	7,9m Medium to high shear strength sandy SILT
9	32	

SAMPLE NO: VC

CPT: CPT

COMBINED CPT/VC LOG

Z2_OWF_B03A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

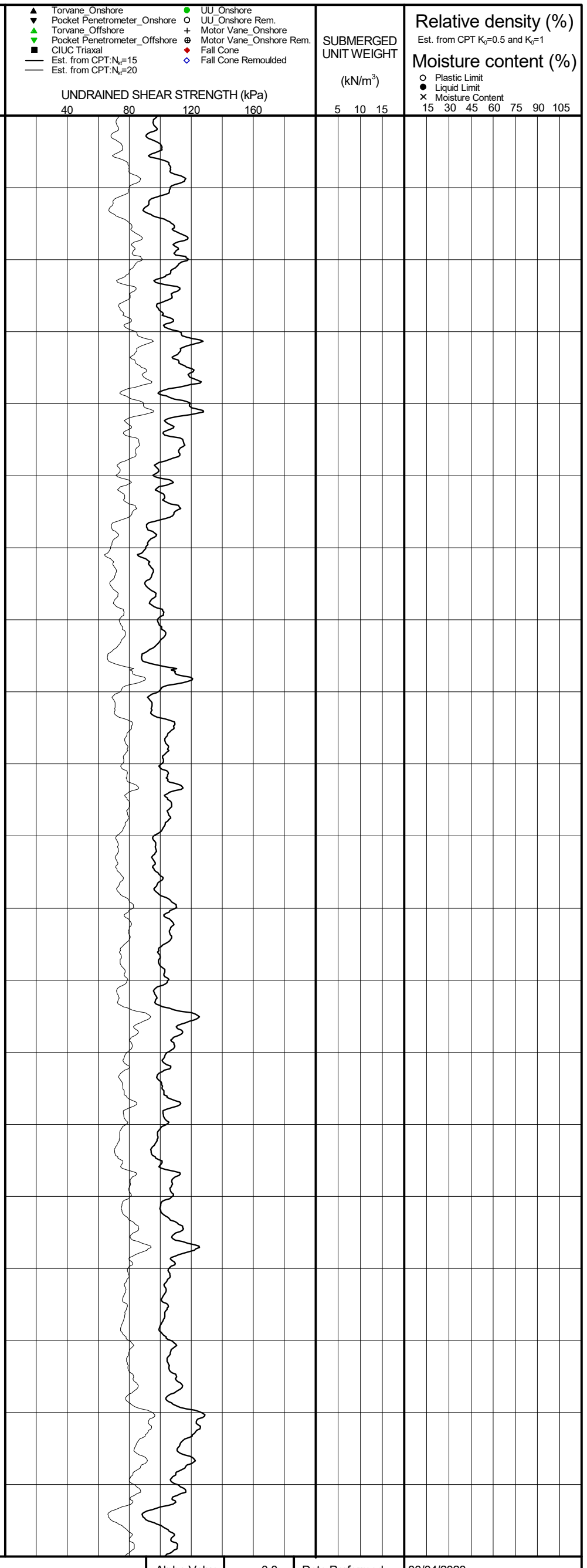
Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				7,9m Medium to high shear strength sandy SILT *(continued)*
12	40				
13	44				
14	48				
15	52			CPT	
16	56				
17	60				
18	64				
19					



COMBINED CPT/VC LOG

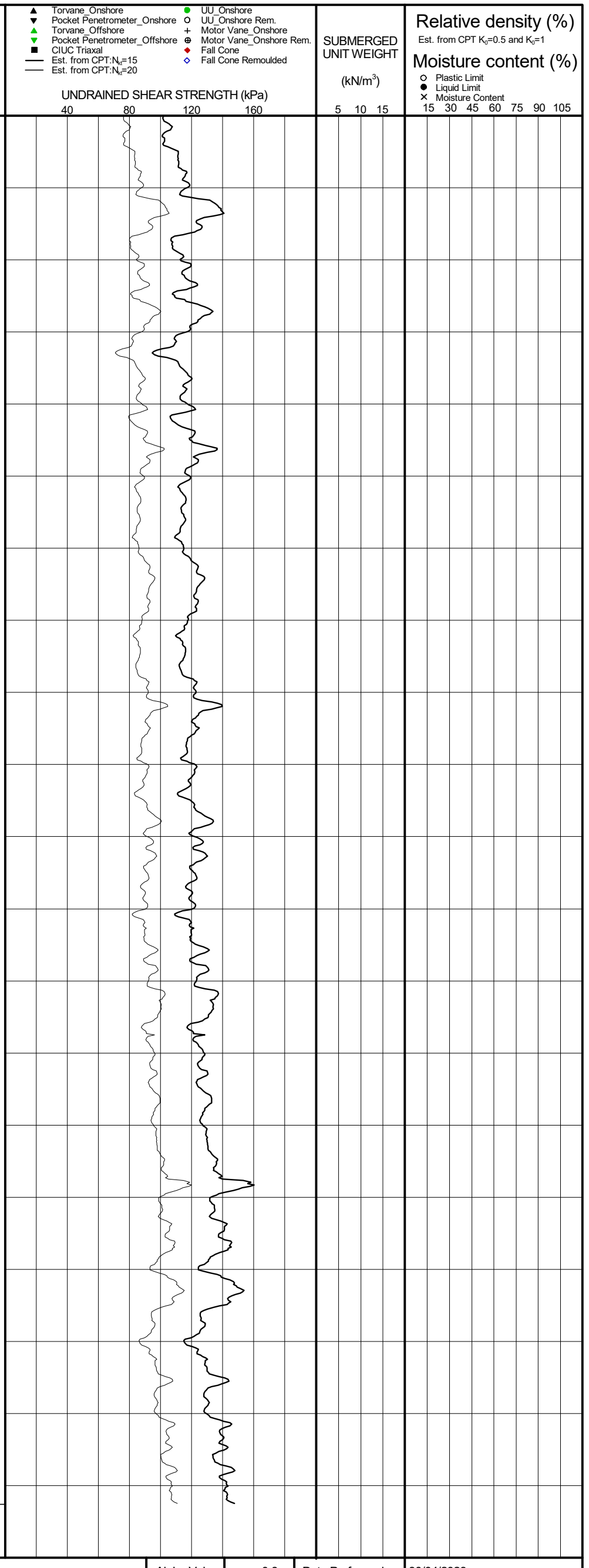
Z2_OWF_B03A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				7,9m Medium to high shear strength sandy SILT *(continued)*
22	72				
23	76				
24	80			CPT	
25	84				
26	88				
27	92				
28	96				
29					Final Depth 29.63m. Depth ended due to Target



COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B03A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Depth reached Approx. Settlement 0.50m. Final PC Depth 3.38m. Final VC Depth 4.58m.
31	100				
32	104				
33	108				
34	112				
35	116				
36	120				
37	124				
38	128				
39					

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B03A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

0,5m Extremely low to very low shear strength clayey SILT
... sandy silt between 0.50m - 0.55m

2,7m Very low to medium shear strength sandy SILT

3,1m Dense silty SAND

3,4m Medium shear strength slightly sandy CLAY

5,6m Medium to high shear strength slightly sandy CLAY

... sandy between 6.30m - 6.80m

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					5,6m Medium to high shear strength slightly sandy CLAY *(continued)*
					10,6m High shear strength slightly sandy CLAY
11	36				
12	40				... sandy between 11.90m - 16.55m
13	44				
14	48				
15				CPT	
	52				
16					
	56				
17					
	60				
18					
	64				
19					

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					10,6m High shear strength slightly sandy CLAY *(continued)*
21	68				
22	72				
23	76				
24	80				
25	84			CPT	
26	88				
27	92				
28	96				
29					

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT

(kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 30.0m. Depth ended due to Target Depth reached Approx. Settlement 0.81m

▲ Torvane_Onshore ● UU_Onshore
▼ Pocket Penetrometer_Onshore ○ UU_Onshore Rem.
▲ Torvane_Offshore + Motor Vane_Onshore
▼ Pocket Penetrometer_Offshore ⊕ Motor Vane_Onshore Rem.
■ CIUC Triaxal ◆ Fall Cone
— Est. from CPT:N_{kt}=15 ◇ Fall Cone Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

m	ft
31	100
32	104
33	108
34	112
35	116
36	120
37	124
38	128
39	

COMBINED CPT/VC LOG

Z2_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

0,7m Very low to low shear strength sandy SILT

1,2m Low shear strength slightly sandy clayey SILT

2,0m Medium shear strength slightly sandy clayey SILT

4,7m Medium to high shear strength sandy clayey SILT

6,4m Medium to high shear strength clayey SILT

VC

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B05A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

6,4m Medium to high shear strength clayey SILT *(continued)*

11,9m High shear strength clayey SILT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

m	ft
11	36
12	40
	44
13	
14	48
15	52
16	56
17	60
18	64
19	

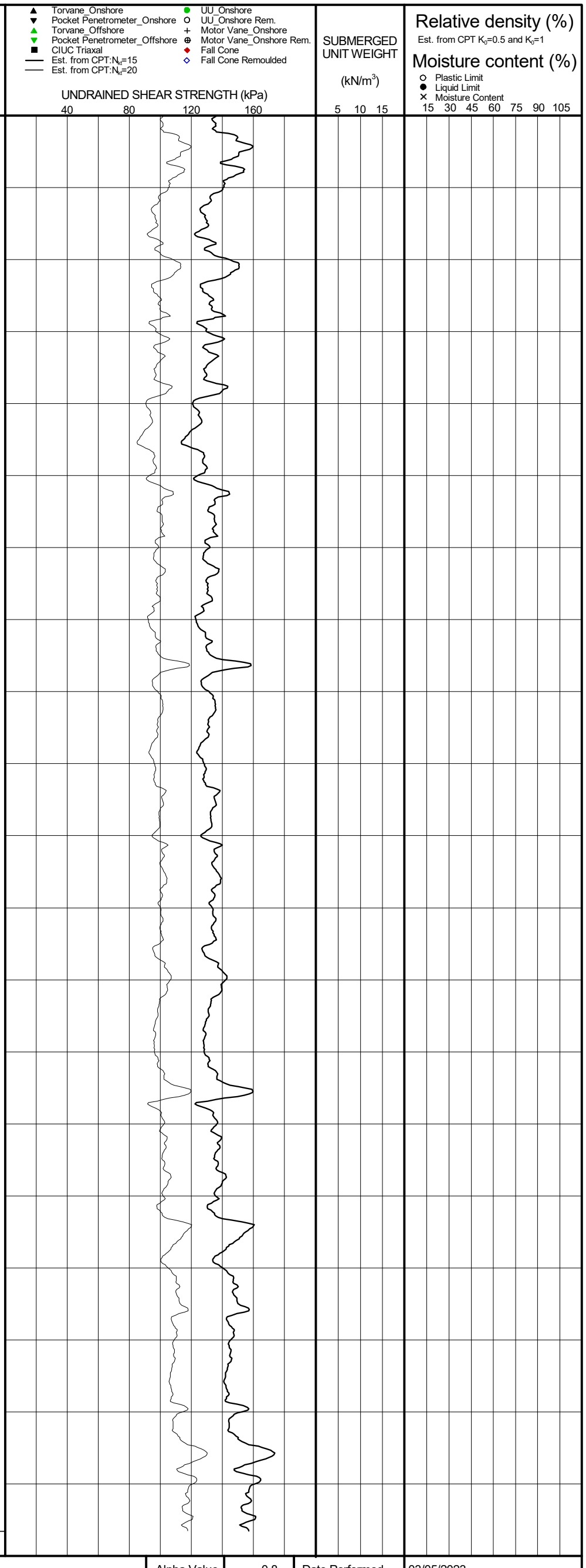
COMBINED CPT/VC LOG

Z2_OWF_B05A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					11,9m High shear strength clayey SILT *(continued)*
21	68				
22	72				
23	76				
24	80				
25	84			CPT	
26	88				
27	92				
28	96				
29					



SUBMERGED UNIT WEIGHT (kN/m³)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B05A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.83m. Depth ended due to Target Depth reached Approx. Settlement 0.66m. Final PC Depth 2.86m. Final VC Depth 5.10m.

▲ Torvane_Onshore ▼ Pocket Penetrometer_Onshore ▲ Torvane_Offshore ▼ Pocket Penetrometer_Offshore ■ CIUC Triaxal — Est. from CPT:N_{kt}=15 — Est. from CPT:N_{kt}=20
● UU_Onshore ○ UU_Onshore Rem. + Motor Vane_Onshore ⊕ Motor Vane_Onshore Rem. ◆ Fall Cone ◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit ● Liquid Limit × Moisture Content
15 30 45 60 75 90 105

m: 31 32 33 34 35 36 37 38 39
ft: 100 104 108 112 116 120 124 128

COMBINED CPT/VC LOG

Z2_OWF_B05A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

... very loose clayey sand between 0.75m - 0.82m

... becoming very low to medium shear strength below 1.05m

1,1m Medium to high, locally vey high, shear strength sandy CLAY interbedded with medium dense to dense silty SAND

6,0m Dense slightly silty SAND

... becoming medium dense to dense below 8.05m

9,1m High shear strength sandy CLAY interbedded with very loose to loose silty SAND

9,6m Medium shear strength slightly sandy CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				9,6m Medium shear strength slightly sandy CLAY *(continued)*
12	40				11,9m High shear strength slightly sandy CLAY
13	44				
14	48				
15				CPT	
	52				
16					
17	56				
18	60				
19	64				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					11,9m High shear strength slightly sandy CLAY *(continued)*
21	68				
22	72				
23	76				
24	80				
25	84				
26	88				
27	92				
28	96				
29					

▲ Torvane_Onshore ● UU_Onshore
▼ Pocket Penetrometer_Onshore ○ UU_Onshore Rem.
▲ Torvane_Offshore + Motor Vane_Onshore
▼ Pocket Penetrometer_Offshore ⊕ Motor Vane_Onshore Rem.
■ CIUC Triaxal ◆ Fall Cone
— Est. from CPT:N_{kt}=15 ◇ Fall Cone Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.84m. Depth ended due to Target Depth reached Approx. Settlement 0.67m

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

m	ft
31	100
32	104
33	108
34	112
35	116
36	120
37	124
38	128
39	

COMBINED CPT/VC LOG

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

0,0m Extremely low to low shear strength sandy SILT

0,8m Medium dense to dense SAND

6,1m Medium dense to dense SAND with frequent partings of low to medium, locally high, shear strength sandy CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

m: 1 2 3 4 5 6 7 8 9
ft: 4 8 12 16 20 24 28 32

COMBINED CPT/VC LOG

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				6,1m Medium dense to dense SAND with frequent partings of low to medium, locally high, shear strength sandy CLAY *(continued)*
12	40				
13	44				
14					14,0m Low shear strength silghtly sandy CLAY
	48				14,4m Medium dense to dense silty SAND
15				CPT	... becoming loose below 15.4m
	52				15,6m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND
16					
17	56				17,2m Medium dense to dense silty SAND
					... high shear strength sandy clay between 17.52m -17.58m
18	60				
19					
	64				19,4m Medium to high shear strength sandy CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					19,4m Medium to high shear strength sandy CLAY *(continued)*
	68				20,6m Medium shear strength silghtly sandy CLAY
21					
	72				
22					
					22,7m Medium to high shear strength silghtly sandy CLAY
23					
	76				
24					
	80				
25				CPT	
	84				
26					
	88				
27					
28	92				
29					
	96				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.80m. Depth ended due to Target Depth reached Approx. Settlement 0.57m. Final VC Depth 4.66m.

▲ Torvane_Onshore ● UU_Onshore
▼ Pocket Penetrometer_Onshore ○ UU_Onshore Rem.
▲ Torvane_Offshore + Motor Vane_Onshore
▼ Pocket Penetrometer_Offshore ⊕ Motor Vane_Onshore Rem.
■ CIUC Triaxal ◆ Fall Cone
— Est. from CPT:N_{kt}=15 ◇ Fall Cone Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

m: 31 32 33 34 35 36 37 38 39
ft: 100 104 108 112 116 120 124 128

COMBINED CPT/VC LOG

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

0,8m Low to medium shear strength sandy SILT with partings of loose sand

2,1m Very low to low shear strength sandy SILT

3,5m Low to medium shear strength sandy SILT interbedded with very loose to loose SAND

5,0m Medium dense SAND

5,5m Low to medium shear strength sandy CLAY with frequent partings of loose silty SAND

8,4m Medium to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

▲ Torvane_Onshore ▼ Pocket Penetrometer_Onshore ▲ Torvane_Offshore ▼ Pocket Penetrometer_Offshore ■ CIUC Triaxal — Est. from CPT:N_{kt}=15 — Est. from CPT:N_{kt}=20
● UU_Onshore ○ UU_Onshore Rem. + Motor Vane_Onshore ⊕ Motor Vane_Onshore Rem. ◆ Fall Cone ◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): ○ Plastic Limit ● Liquid Limit × Moisture Content — 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

8,4m Medium to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND *(continued)*

11,5m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND

13,8m Medium to high shear strength slightly sandy CLAY with occasional sand partings

19,1m Medium shear strength CLAY

COMBINED CPT/VC LOG

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

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Liberté Égalité Fraternité

TECNOAMBIENTE A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				19,1m Medium shear strength CLAY *(continued)*
					20,8m Medium to high shear strength sandy CLAY
22	72				21,8m Medium to high shear strength slightly sandy CLAY
23	76				
24	80				... sandy below 24.05m
25				CPT	24,5m High to very high shear strength sandy CLAY interbedded with very loose to loose silty SAND
	84				
26					
	88				
27					
28	92				27,6m High to very high shear strength sandy CLAY
29					29,0m High to very high shear strength CLAY
	96				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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Liberté
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.76m. Depth ended due to Target Depth reached Approx. Settlement 0.64m. Final PC Depth 4.10m.

▲ Torvane_Onshore ● UU_Onshore
▼ Pocket Penetrometer_Onshore ○ UU_Onshore Rem.
▲ Torvane_Offshore + Motor Vane_Onshore
▼ Pocket Penetrometer_Offshore ⊕ Motor Vane_Onshore Rem.
■ CIUC Triaxal ◆ Fall Cone
— Est. from CPT:N_{kt}=15 ◇ Fall Cone Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

m: 31 32 33 34 35 36 37 38 39
ft: 100 104 108 112 116 120 124 128

COMBINED CPT/VC LOG

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): 15 30 45 60 75 90 105

Plastic Limit; Liquid Limit; Moisture Content

m	ft
1	4
2	8
3	12
4	16
5	20
6	24
7	28
8	32
9	

CPT

0,0m Extremely low strength slightly sandy clayey SILT

0,8m Low to medium strength sandy SILT

1,1m Extremely low to low strength slightly sandy clayey SILT

... becoming medium strength sandy below 2.25m

Final Depth 2.32m. Depth ended due to Comm. Lost
Approx. Settlement 0.58m. Final PC Depth 3.00m. Final VC Depth 4.40m.

COMBINED CPT/VC LOG

Alpha Value	0.8
Date Performed	21/03/2023
Water Depth	-88,05 m ZH
Coordinates	E 628660,88m; N 4772895,5m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low to low shear strength slightly sandy clayey SILT

1,1m Very low to low shear strength sandy SILT

1,3m Extremely low shear strength slightly clayey sandy SILT

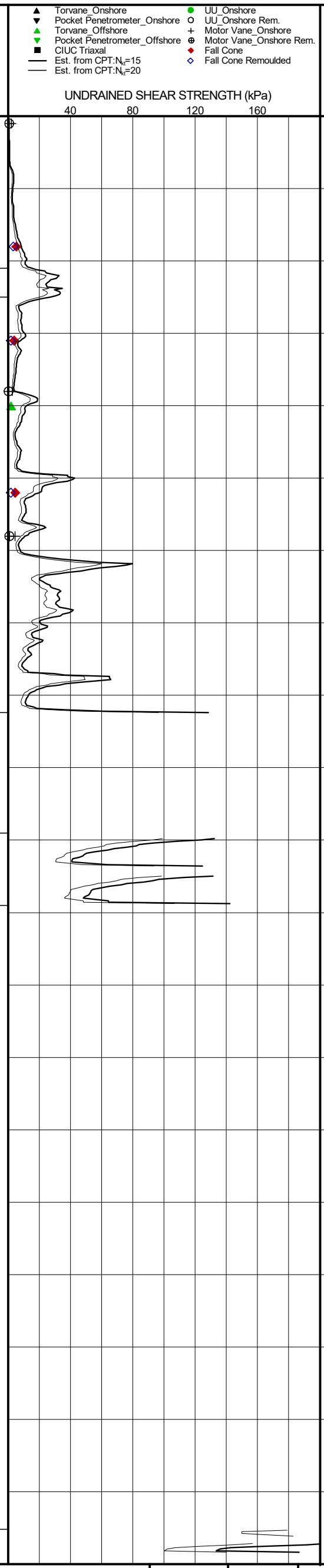
... becoming low to medium shear strength below 2.45m

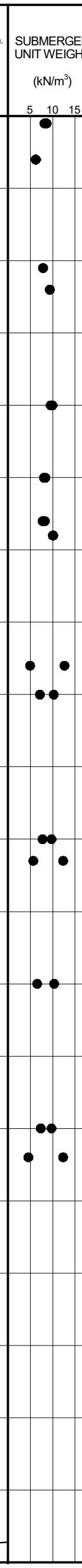
4,1m Medium dense to dense SAND

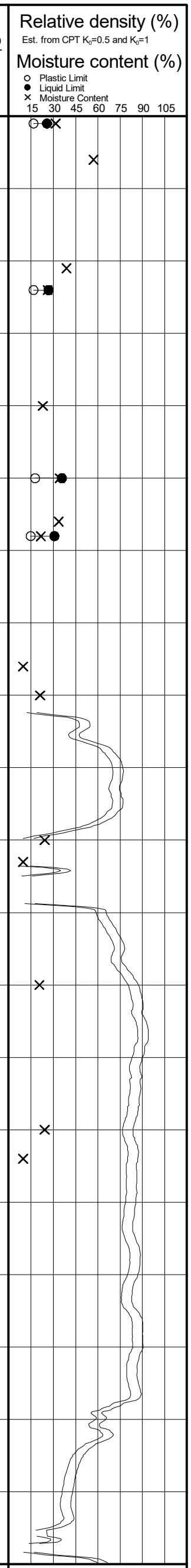
5,0m Low to medium shear strength CLAY with partings of loose sand

5,5m Dense to very dense SAND

... becoming loose to medium dense below 8.95m







COMBINED CPT/VC LOG

Alpha Value	0.8
Date Performed	21/03/2023
Water Depth	-88,04 m ZH
Coordinates	E 628669,72m; N 4772887,26m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				9,8m Medium to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND *(continued)*
					10,4m Medium dense to dense silty SAND
12	40				11,3m Medium shear strength sandy CLAY 11.55m -11.75m medium dense sand
					12,4m Loose to medium dense SAND ... becoming clayey below 12.80m
13	44				13,1m Dense silty SAND
14	48				13,7m Medium to high shear strength sandy CLAY with partings of loose sand
					14,4m Medium strength silty CLAY
15				CPT	14,8m High shear strength sandy CLAY interbedded with loose silty SAND
16	52				15,6m Medium shear strength CLAY below 16.45m with sand partings
17	56				17,0m Dense silty SAND @17.75m very loose clayey
18	60				@18.70m high shear strength sandy clay ... becoming loose to medium dense below 18.9m
19	64				19,1m Medium to high shear strength sandy CLAY

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit; Liquid Limit; Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,04 m ZH
		Coordinates	E 628669,72m; N 4772887,26m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

20,2m Dense silty SAND
... loose clayey sand down to 20.35m

... loose clayey sand below 21.25m

21,3m Medium to high strength slightly sandy CLAY with sand partings

24,1m High shear strength sandy CLAY with sand partings

25,8m High shear strength sandy CLAY interbedded with very loose to loose silty SAND

26,6m High shear strength sandy CLAY

27,3m High shear strength sandy CLAY interbedded with very loose to medium dense silty SAND

28,2m High to very high shear strength sandy CLAY

28,9m High shear strength sandy CLAY interbedded with very loose to medium dense silty SAND

29,5m High shear strength sandy CLAY

29,8m Very loose to loose silty SAND

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,04 m ZH
		Coordinates	E 628669,72m; N 4772887,26m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.79m. Depth ended due to Target Depth reached. Approx. Settlement 0.64m. Final PC Depth 3.00m. Final VC Depth 4.40m.

▲ Torvane_Onshore ● UU_Onshore
▼ Pocket Penetrometer_Onshore ○ UU_Onshore Rem.
▲ Torvane_Offshore + Motor Vane_Onshore
▼ Pocket Penetrometer_Offshore ⊕ Motor Vane_Onshore Rem.
■ CIUC Triaxal ◆ Fall Cone
— Est. from CPT:N_{kt}=15 ◇ Fall Cone Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

m: 31 32 33 34 35 36 37 38 39
ft: 100 104 108 112 116 120 124 128

COMBINED CPT/VC LOG

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,04 m ZH
		Coordinates	E 628669,72m; N 4772887,26m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

... becoming very low to low shear strength below 1.02m

1,2m Dense SAND

... loose to medium dense between 1.1m - 1.42m

... very dense between 2.55m - 3.70m

... medium dense between 4.4m - 4.53m

4,9m Medium shear strength slightly sandy clayey SILT

5,3m Medium dense to dense SAND

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-80,82 m ZH
		Coordinates	E 626463,06m; N 4776487,28m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					5,3m Medium dense to dense SAND *(continued)*
11	36				
12	40				12,0m High to very high shear strength sandy CLAY
					12,2m Medium dense silty SAND
13	44				12,7m Medium to high shear strength sandy CLAY
					13,1m Very dense silty SAND
14	48				
15				CPT	14,9m Medium to high shear strength sandy CLAY interbedded with medium dense to dense silty SAND
	52				
16					
17	56				
18	60				
19	64				18,8m Medium shear strength sandy CLAY

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-80,82 m ZH
		Coordinates	E 626463,06m; N 4776487,28m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				18,8m Medium shear strength sandy CLAY *(continued)*
					20,4m Medium dense silty SAND
					20,8m Medium to high shear strength sandy CLAY with partings of very loose to loose sand
22	72				
23	76				
24	80				23,6m Medium to high shear strength slightly sandy CLAY
25	84			CPT	25,0m Medium dense silty SAND ... becoming sandy CLAY below 25.42m
26					25,5m Dense to very dense silty SAND
27	88				
28	92				27,9m Medium to high shear strength sandy CLAY
29	96				29,0m High shear strength sandy CLAY interbedded with very loose to medium dense silty SAND
					Final Depth 29.67m. Depth ended due to Target

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-80,82 m ZH
		Coordinates	E 626463,06m; N 4776487,28m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Depth reached Approx. Settlement 0.60m. Final VC Depth 4.56m.
31	100				
32	104				
33	108				
34	112				
35	116				
36	120				
37	124				
38	128				
39					

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
○ Plastic Limit
● Liquid Limit
× Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-80,82 m ZH
		Coordinates	E 626463,06m; N 4776487,28m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low to very low shear strength slightly sandy clayey SILT

0,4m Dense to very dense gravelly SAND

... becoming very dense below 1.25m

2,7m Medium dense to dense slightly gravelly SAND
... sandy clay between 2.78m - 2.86m

3,2m Very dense to dense silty SAND
... gravelly down to 3.45m

4,4m Medium dense to dense silty SAND interbedded with high to very high shear strength sandy CLAY

... medium shear strength between 8.60m - 8.65m

8,7m Medium dense silty SAND

CPT

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT

(kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-83,46 m ZH
		Coordinates	E 624295,46m; N 4773987,6m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
11	36				10,0m Loose to medium dense silty SAND interbedded with high shear strength sandy CLAY
12	40				11,8m Loose to medium dense silty SAND
13	44				13,6m Medium to high shear strength sandy CLAY interbedded with medium dense SAND
14	48				14,5m Medium dense SAND
15				CPT	
16	52				15,5m Dense to very dense silty SAND
17	56				
18	60				
19	64				

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-83,46 m ZH
		Coordinates	E 624295,46m; N 4773987,6m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
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TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
21	68				15,5m Dense to very dense silty SAND *(continued)*
22	72				21,5m Medium dense to dense, locally very dense, silty SAND with occasional high to very high shear strength clay partings
23	76			CPT	
24	80				
25	84				25,7m Dense silty slightly silty SAND
26					
27	88				... becoming very dense below 26.7m
28	92				Final Depth 27.32m. Depth ended due to High Risk of Breakage Approx. Settlement 0.45m
29	96				

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-83,46 m ZH
		Coordinates	E 624295,46m; N 4773987,6m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low to very low shear strength slightly sandy clayey SILT

0,8m Very loose to loose silty SAND interbedded with very low to low shear strength clayey SILT

1,6m Medium dense to dense slightly silty SAND interbedded with medium to high shear strength clayey SILT

3,9m Low to medium shear strength sandy SILT

6,8m Medium dense to dense SAND

... becoming silty below 7.9m

... medium shear strength sandy clay below 9.42m

9,5m Dense to very dense SAND

UNDRAINED SHEAR STRENGTH (kPa)

- Torvane_Onshore
- Pocket Penetrometer_Onshore
- Torvane_Offshore
- Pocket Penetrometer_Offshore
- CIUC Triaxal
- Est. from CPT:N_{kt}=15
- Est. from CPT:N_{kt}=20
- UU_Onshore
- UU_Onshore Rem.
- Motor Vane_Onshore
- Motor Vane_Onshore Rem.
- Fall Cone
- Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

- Plastic Limit
- Liquid Limit
- Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

Torvane_Onshore; Pocket Penetrometer_Onshore; Torvane_Offshore; Pocket Penetrometer_Offshore; CIUC Triaxal; Est. from CPT:N_{kt}=15; Est. from CPT:N_{kt}=20; UU_Onshore; UU_Onshore Rem.; Motor Vane_Onshore; Motor Vane_Onshore Rem.; Fall Cone; Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3): 5 10 15

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1

Moisture content (%): Plastic Limit; Liquid Limit; Moisture Content — 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

9,5m Dense to very dense SAND *(continued)*

... medium dense between 11.05m - 11.34m

12,0m Medium dense to dense slightly silty SAND

15,3m Dense to very dense silty SAND

... becoming medium dense to dense below 16.85m

17,5m Medium to high shear strength sandy CLAY

17,7m Medium dense to dense slightly silty SAND

... becoming very loose to loose below 18.9m

19,0m Medium shear strength sandy CLAY

19,2m Loose to medium dense slightly silty SAND

COMBINED CPT/VC LOG

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					20,0m Medium to high shear strength sandy CLAY *(continued)*
					20,3m Medium dense slightly silty SAND
21	68				
					21,7m Medium to very high shear strength sandy CLAY
22	72				22,0m Medium dense SAND
23	76				23,4m Very loose to loose silty SAND interbedded with medium to high shear strength sandy CLAY
24	80				23,9m Low to medium shear strength sandy CLAY
					24,5m Medium dense SAND
25	84			CPT	
26	88				26,0m Medium to high shear strength sandy CLAY
27	92				26,7m Medium to high shear strength slightly sandy CLAY
28	96				
29					

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.83m. Depth ended due to Target Depth reached Approx. Settlement 0.71m. Final VC Depth 5.32m.

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT

(kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

m	ft
31	100
32	104
33	108
34	112
35	116
36	120
37	124
38	128
39	

COMBINED CPT/VC LOG

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly sandy clayey SILT

... becoming very low shear strength sandy clay below 1.0m

1,2m Very loose to loose silty SAND

1,9m Medium dense silty SAND

3,1m Very low to low shear strength silty CLAY
... low to medium shear strength sandy clay down to 3.5m

5,0m Loose to medium dense clayey SAND

5,5m Dense SAND

8,1m Medium dense silty SAND

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT
(kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B19A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	05/05/2023
		Water Depth	-83,40 m ZH
		Coordinates	E 619896,41m; N 4775039,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m ft | SOIL PROFILE | SAMPLE NO | CPT | SOIL DESCRIPTION

9,9m Low shear strength sandy CLAY interbedded with dense silty SAND *(continued)*

11,3m Very dense gravelly SAND

12,4m Medium to high shear strength sandy CLAY interbedded with medium dense to dense silty SAND

13,4m Low to medium shear strength sandy CLAY with occasional sand partings of very loose sand

16,5m Medium shear strength slightly sandy silty CLAY

CPT

Torvane_Onshore
Pocket Penetrometer_Onshore
Torvane_Offshore
Pocket Penetrometer_Offshore
CIUC Triaxal
Est. from CPT:N_{kt}=15
Est. from CPT:N_{kt}=20
UU_Onshore
UU_Onshore Rem.
Motor Vane_Onshore
Motor Vane_Onshore Rem.
Fall Cone
Fall Cone Remoulded

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)
5 10 15

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)
Plastic Limit
Liquid Limit
Moisture Content
15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B19A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

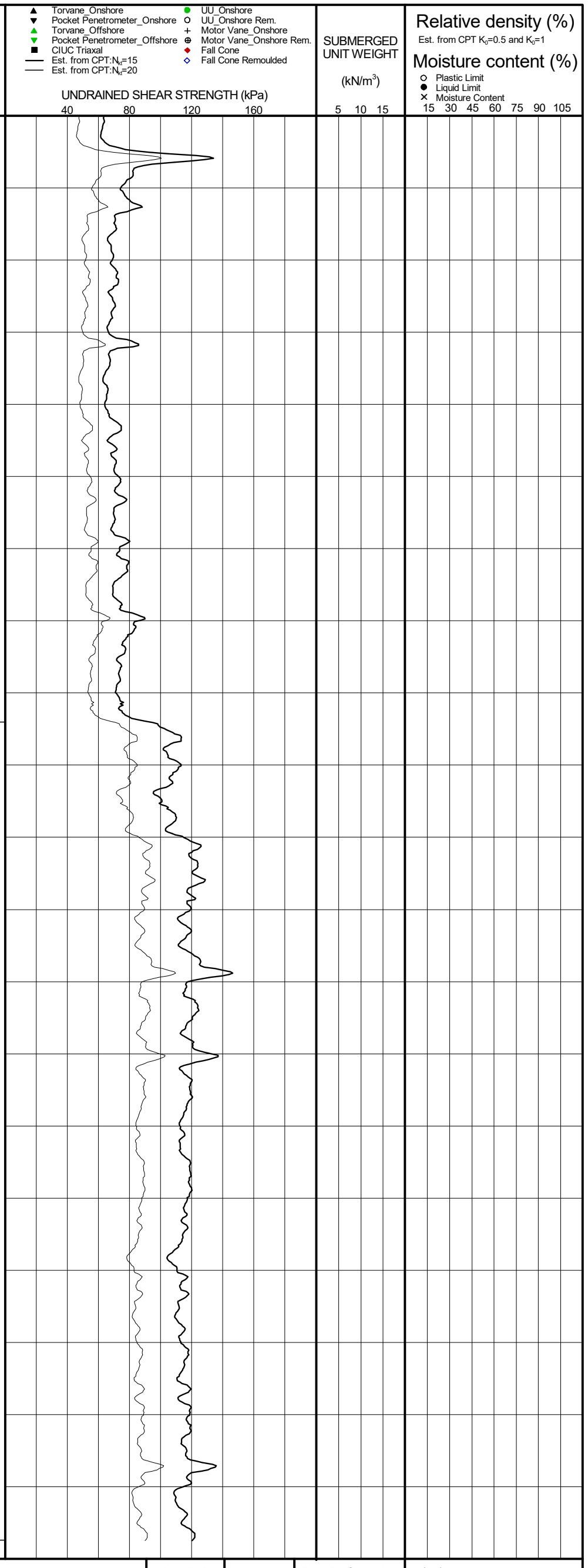
Alpha Value	0.8	Date Performed	05/05/2023
		Water Depth	-83,40 m ZH
		Coordinates	E 619896,41m; N 4775039,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					16,5m Medium shear strength slightly sandy silty CLAY *(continued)*
21	68				
22	72				
23	76				
24	80				24,2m High shear strength slightly sandy silty CLAY
25	84			CPT	
26	88				
27	92				
28	96				
29					



SUBMERGED UNIT WEIGHT (kN/m³)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

Plastic Limit
Liquid Limit
Moisture Content

15 30 45 60 75 90 105

COMBINED CPT/VC LOG

Z2_OWF_B19A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	05/05/2023
		Water Depth	-83,40 m ZH
		Coordinates	E 619896,41m; N 4775039,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	CPT	SOIL DESCRIPTION
					Final Depth 29.87m. Depth ended due to Target Depth reached Approx. Settlement 0.74m

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane_Onshore
▼ Pocket Penetrometer_Onshore
▲ Torvane_Offshore
▼ Pocket Penetrometer_Offshore
■ CIUC Triaxal
— Est. from CPT:N_{kt}=15
— Est. from CPT:N_{kt}=20
● UU_Onshore
○ UU_Onshore Rem.
\+ Motor Vane_Onshore
⊕ Motor Vane_Onshore Rem.
◆ Fall Cone
◇ Fall Cone Remoulded

40 80 120 160

SUBMERGED UNIT WEIGHT (kN/m^3)

5 10 15

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

Moisture content (%)

○ Plastic Limit
● Liquid Limit
× Moisture Content

15 30 45 60 75 90 105

m: 31 32 33 34 35 36 37 38 39

ft: 100 104 108 112 116 120 124 128

COMBINED CPT/VC LOG

Z2_OWF_B19A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	05/05/2023
		Water Depth	-83,40 m ZH
		Coordinates	E 619896,41m; N 4775039,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

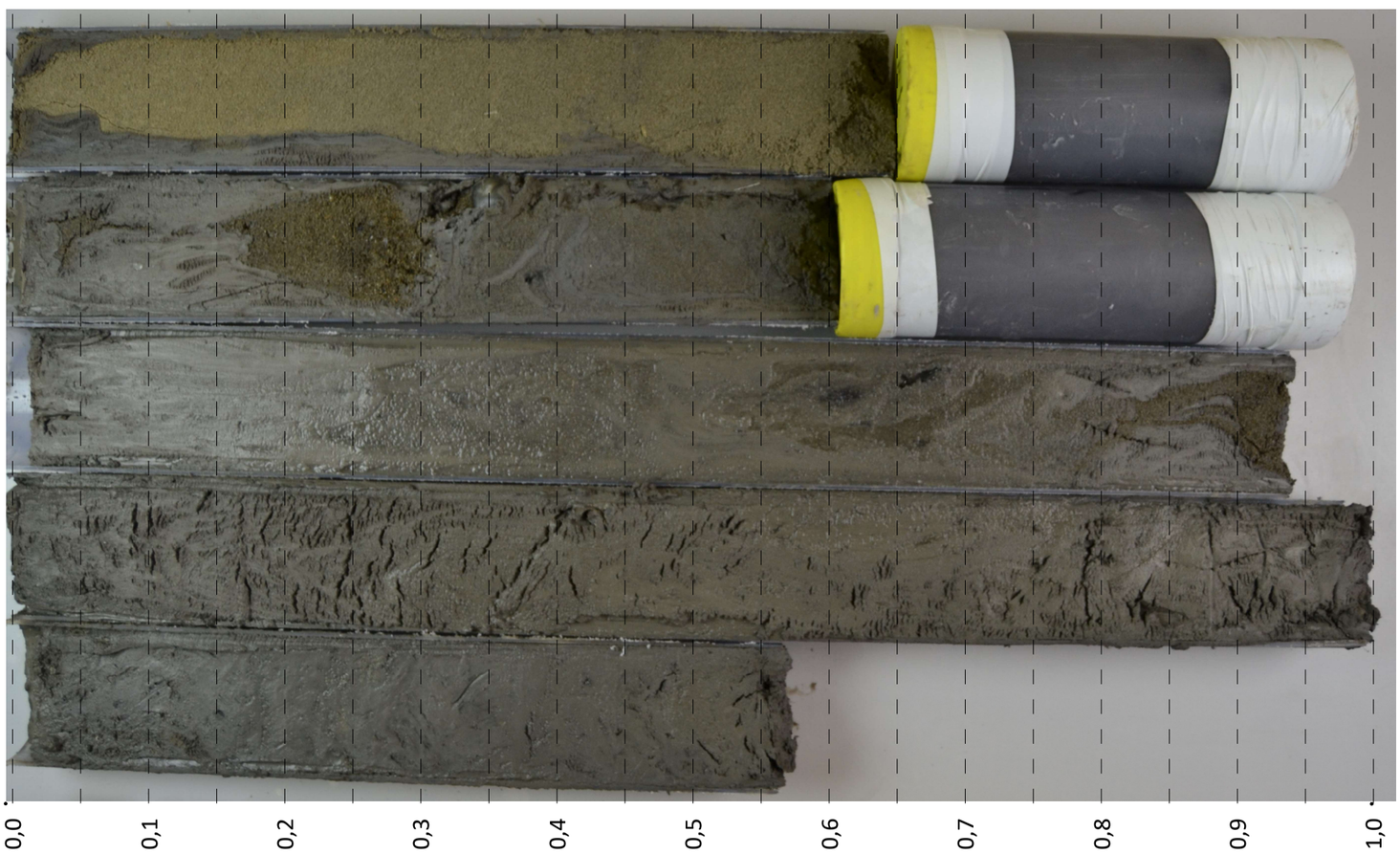
MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

APPENDIX VII – VC LOGS - AO6 OWF ZONE 2

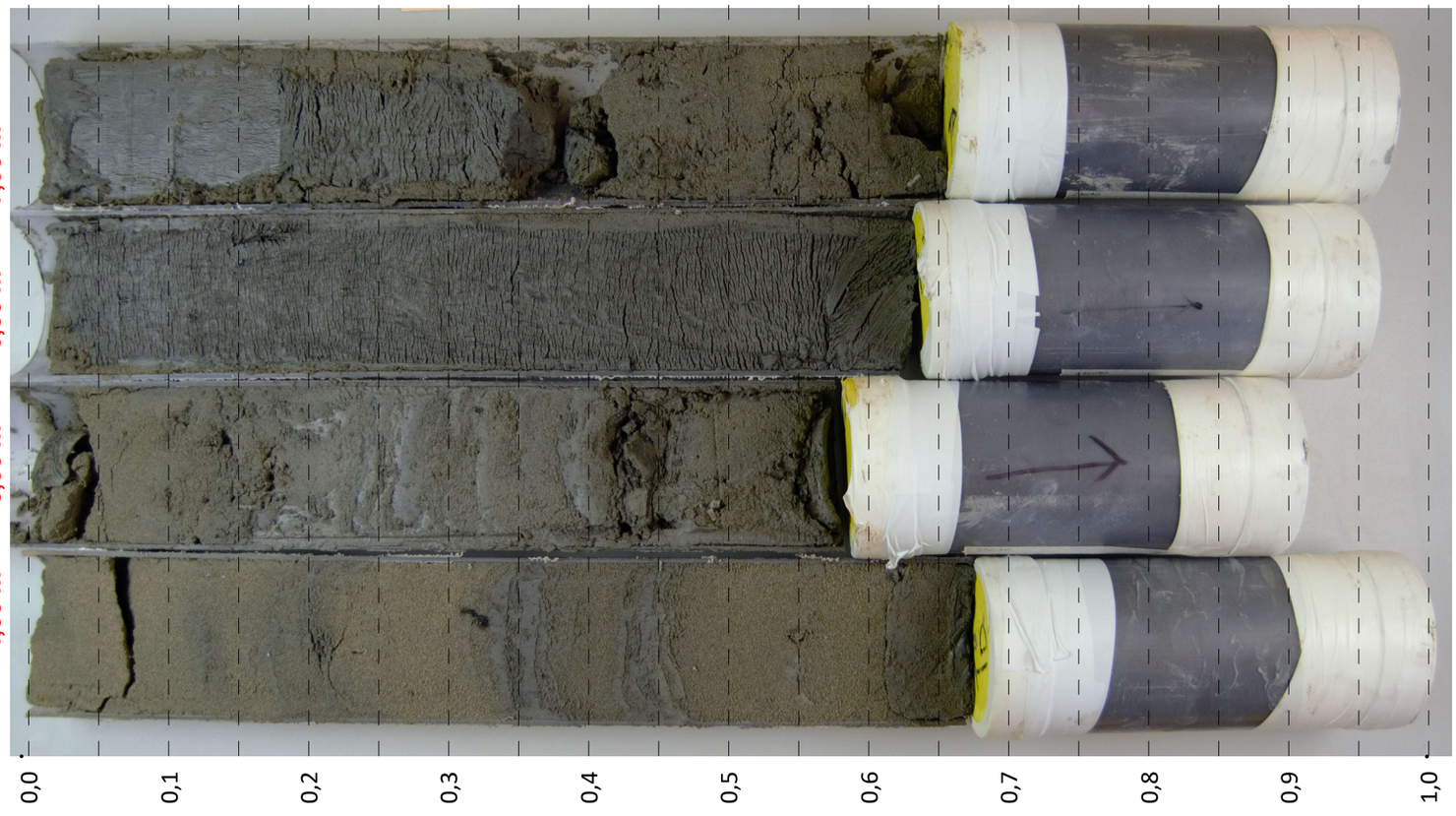
DEPTH (m)	SOIL DESCRIPTION	
0,0		0,00
	Very soft, extremely low strength, dark gray (2.5Y 4/1) calcareous, medium plasticity, homogeneous clayey, slightly sandy, SILT. With coarse sand to medium gravel sized shells and shell fragments.	
0,5		0,50
	Soft, very low strength, dark gray (2.5Y 4/1) calcareous, slightly organic, low plasticity, lensed clayey, sandy, SILT. From 2.38 to 3.58 dark olive brown decimetrical lenses of coarse sand. At 2.28 pocket of black organic matter.	
1,0		
1,5		
2,0		
2,5		
3,0		
3,5		3,58
	Dense, olive gray (5Y 5/2) calcareous, non-plastic, homogeneous fine to medium SAND. With few coarse sand to fine gravel sized shells and shell fragments.	
4,0		
4,5		4,58
5,0		



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B03A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 109,00 m Easting : 634501,96 Northing : 4765196,31	Date of description : 10/07/2023 Performed by : Luca Tricarico Checked by : Dott. Geol. Paolo Brasey

SOIL DESCRIPTION

DEPTH (m)	
5,0	Dense, olive gray (5Y 5/2), calcareous, non-plastic, closely spaced very thinly bedded, silty, fine to medium SAND. Very thin beds of dark gray (2.5Y 4/1) very clayey SILT.
6,58	Soft, very low strength, dark gray (2.5Y 4/1), slightly calcareous, slightly organic, medium plasticity, thinly laminated, slightly sandy, very clayey SILT.
8,00	Dense, olive gray (5Y 5/2), calcareous, non-plastic, homogeneous, fine to medium SAND.
8,58	



Project N. : 113401341 Client : DGEC

SAMPLE POINT : Z2_OWF_B03A_VC

Location : Offshore Gulf de Lyon

Water Depth (Reduced to LAT) : 109,00 m

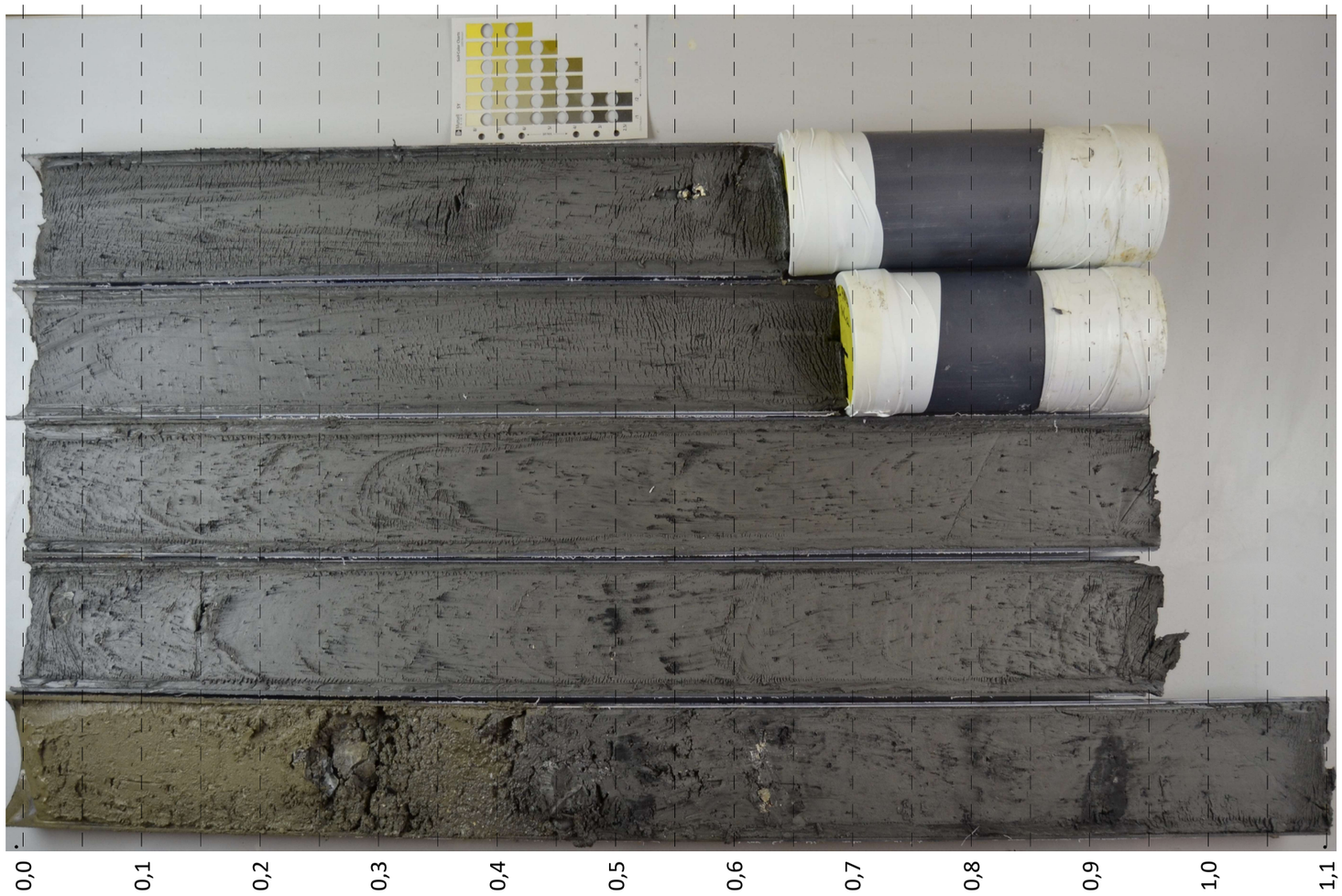
Easting : 634501,96

Northing : 4765196,31

Date of description : 10/07/2023

Performed by : Luca Tricarico

Checked by : Dott. Geol. Paolo Brasey



SOIL DESCRIPTION

0,00 — Very soft, extremely low strength, olive gray (5Y 4/2) highly calcareous, very organic, medium plasticity, homogeneous very clayey sandy SILT. With many fine to coarse gravel sized shells and shell fragments.

0,45 — Soft, low strength, dark olive gray (5Y 3/2) calcareous, very organic, high plasticity, homogeneous slightly sandy very clayey SILT. With fine to coarse gravel sized shells and shell fragments. With many coarse sand to medium gravel sized black pockets organic matter.

5,10

Project N. : 113401341 Client : DGEC

SAMPLE POINT : Z2_OWF_B05A_VCa

Location : Offshore Gulf de Lyon

Water Depth (Reduced to LAT) : 124,00 m

Easting : 630082,98

Northing : 4760192,86

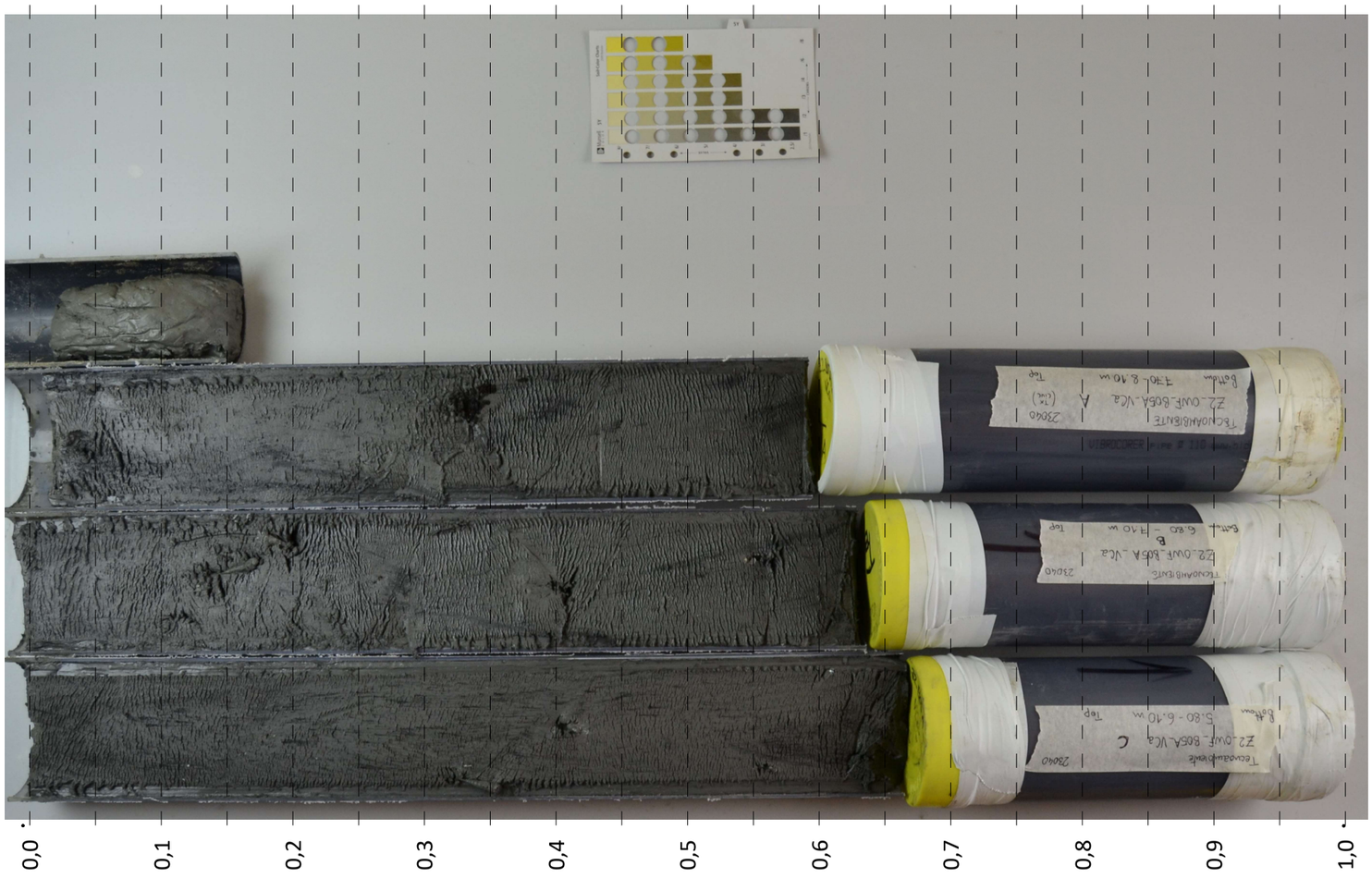
Date of description : 19/07/2023

Performed by : Dott. Elena Tortonesi

Checked by : Dott. Geol. Paolo Brasey

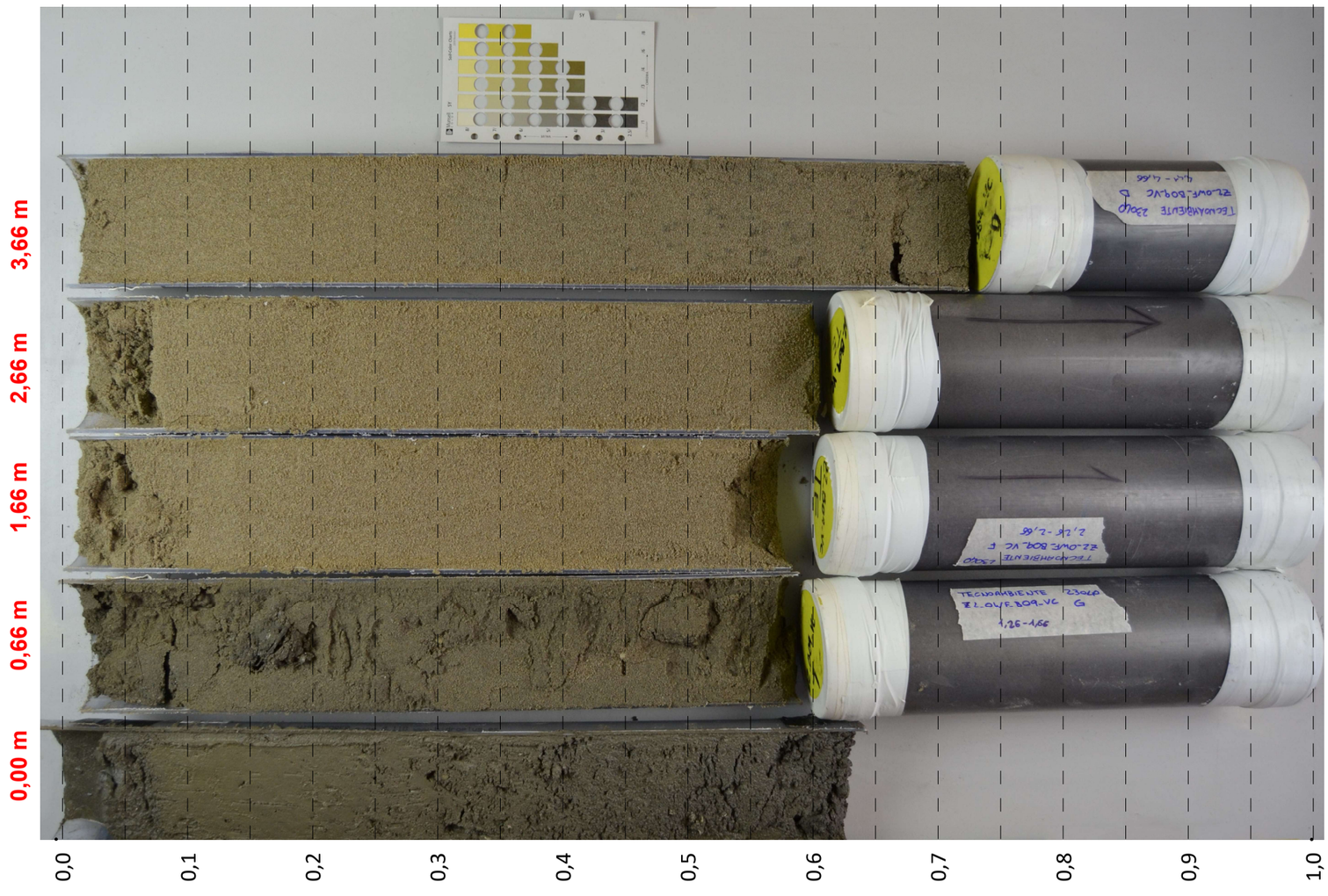
SOIL DESCRIPTION

DEPTH (m)	
6,0	Soft, medium strength, very dark gray (5Y 3/1) calcareous, very organic, medium plasticity, homogeneous clayey SILT. Medium to coarse gravel sized shells and shell fragments. With many black pockets of organic matter
8,20	



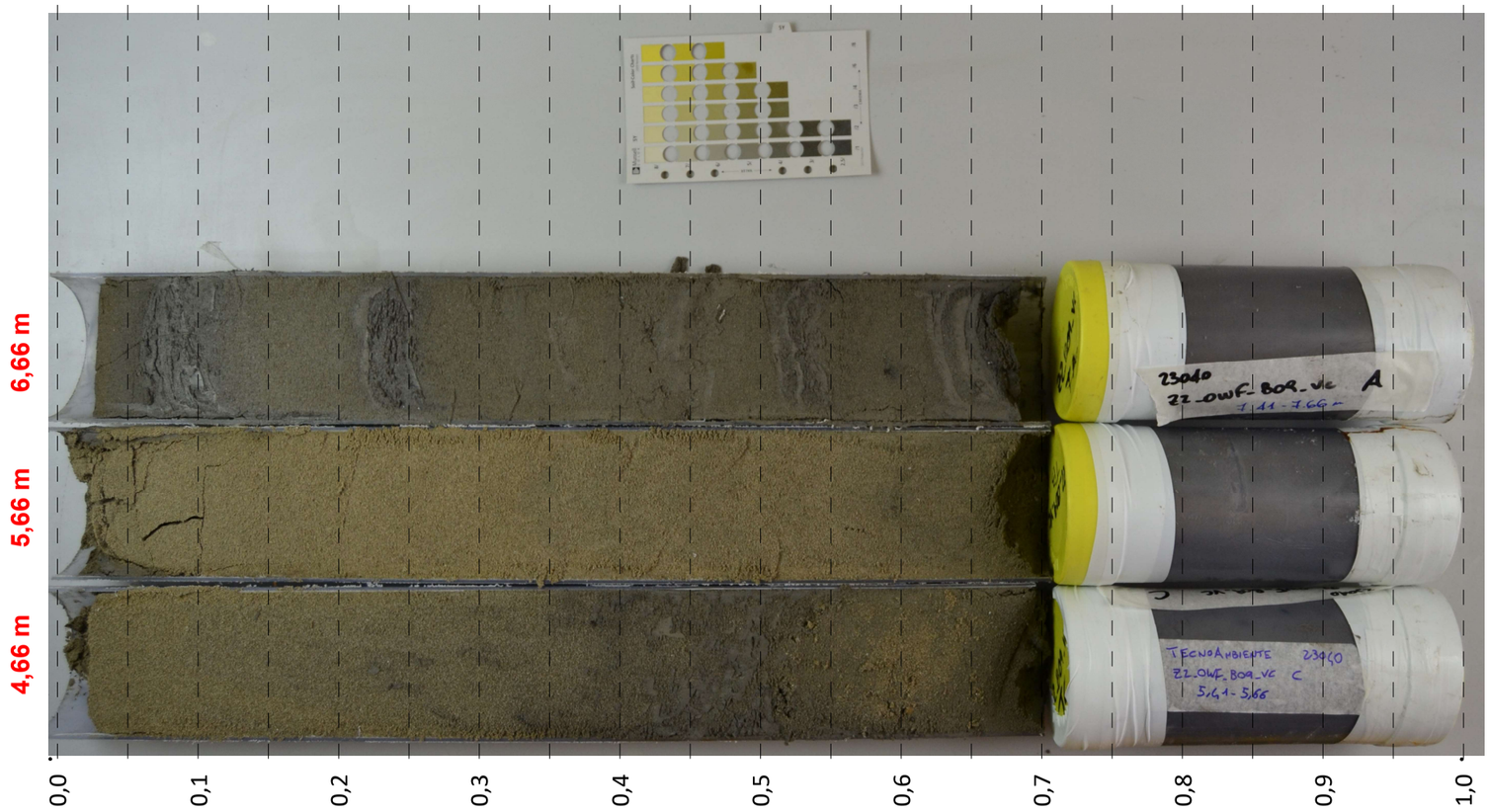
Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B05A_VCa**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 124,00 m Easting : 630082,98 Northing : 4760192,86	Date of description : 19/07/2023 Performed by : Dott. Elena Tortonesi Checked by : Dott. Geol. Paolo Brasey

DEPTH (m)	SOIL DESCRIPTION	
0,0		0,00
	Very soft, extremely low strength, very dark gray (2.5Y 3/1) highly calcareous, medium plasticity, homogeneous, very sandy SILT. With coarse sand to fine gravel sized shells fragments.	0,26
0,5	Medium loose, very dark gray (2.5Y 3/1) highly calcareous, non-plastic, homogeneous, silty fine SAND. With many coarse sand to coarse gravel sized shells fragments.	0,62
1,0		
1,5	Medium loose, very dark grayish brown (2.5Y 3/2) calcareous, non-plastic, homogeneous, fine to medium SAND. With coarse sand to coarse gravel sized shells fragments.	1,66
2,0		
2,5		
3,0	Dense, light olive brown (2.5Y 5/3) slightly calcareous, non-plastic, homogeneous, fine to medium SAND.	
3,5		
4,0		
4,5		4,66
5,0		



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B09_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 94,00 m Easting : 626091,29 Northing : 4768887,04	Date of description : 05/07/2023 Performed by : Luca Tricarico Checked by : Dott. Geol. Paolo Brasey

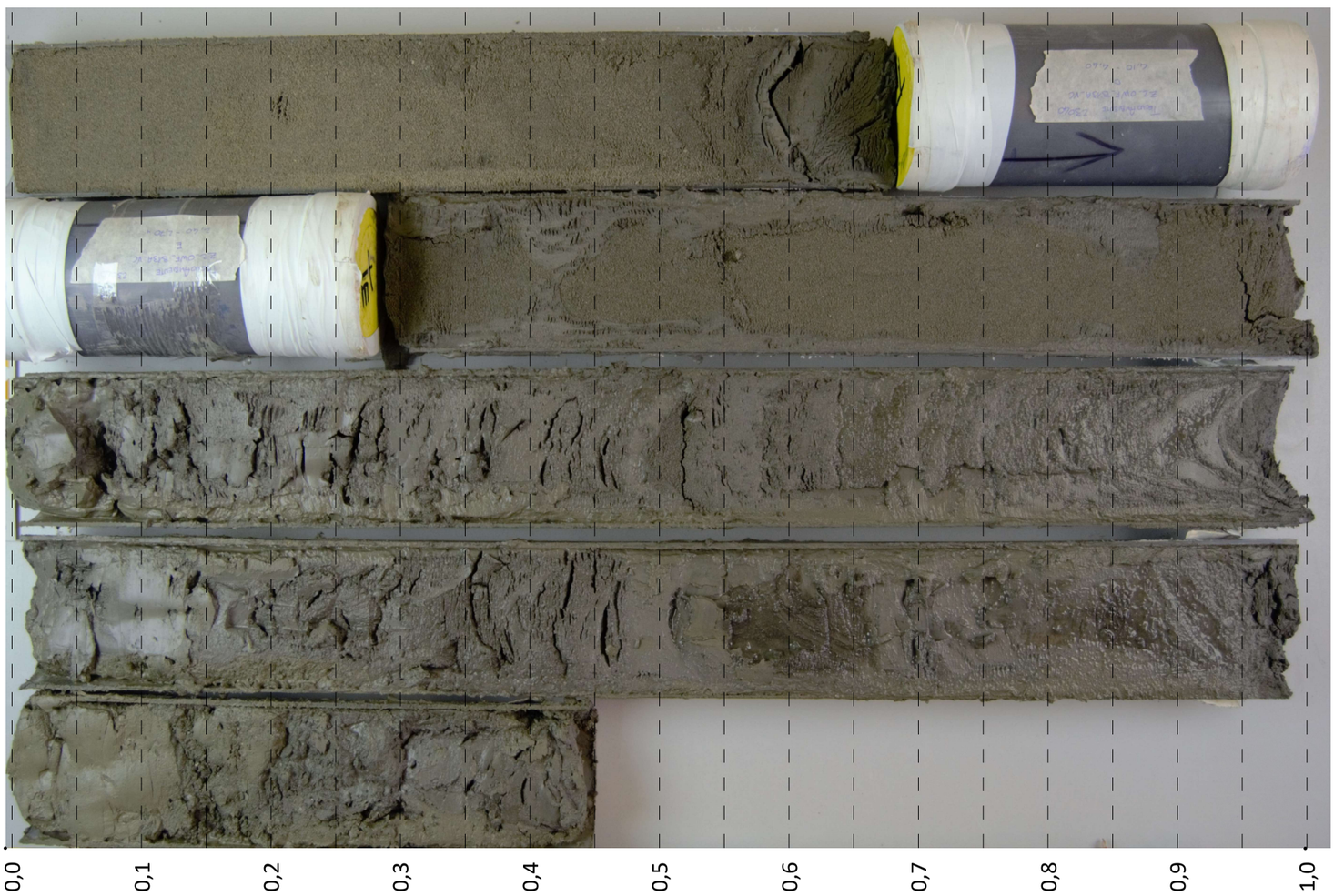
DEPTH (m)	SOIL DESCRIPTION
5,0	Dense, light olive brown (2.5Y 5/3) slightly calcareous, non-plastic, homogeneous slightly gravelly fine to medium SAND. At 5.46 very dark greyish brown thin beds of silty clay.
6,66	Dense, dark gray (2.5Y 4/1) slightly calcareous, non-plastic, closely spaced very thinly bedded fine to medium SAND. Very thin beds of very dark greyish brown silty clay.
7,66	



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B09_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 94,00 m Easting : 626091,29 Northing : 4768887,04	Date of description : 05/07/2023 Performed by : Luca Tricarico Checked by : Dott. Geol. Paolo Brasey

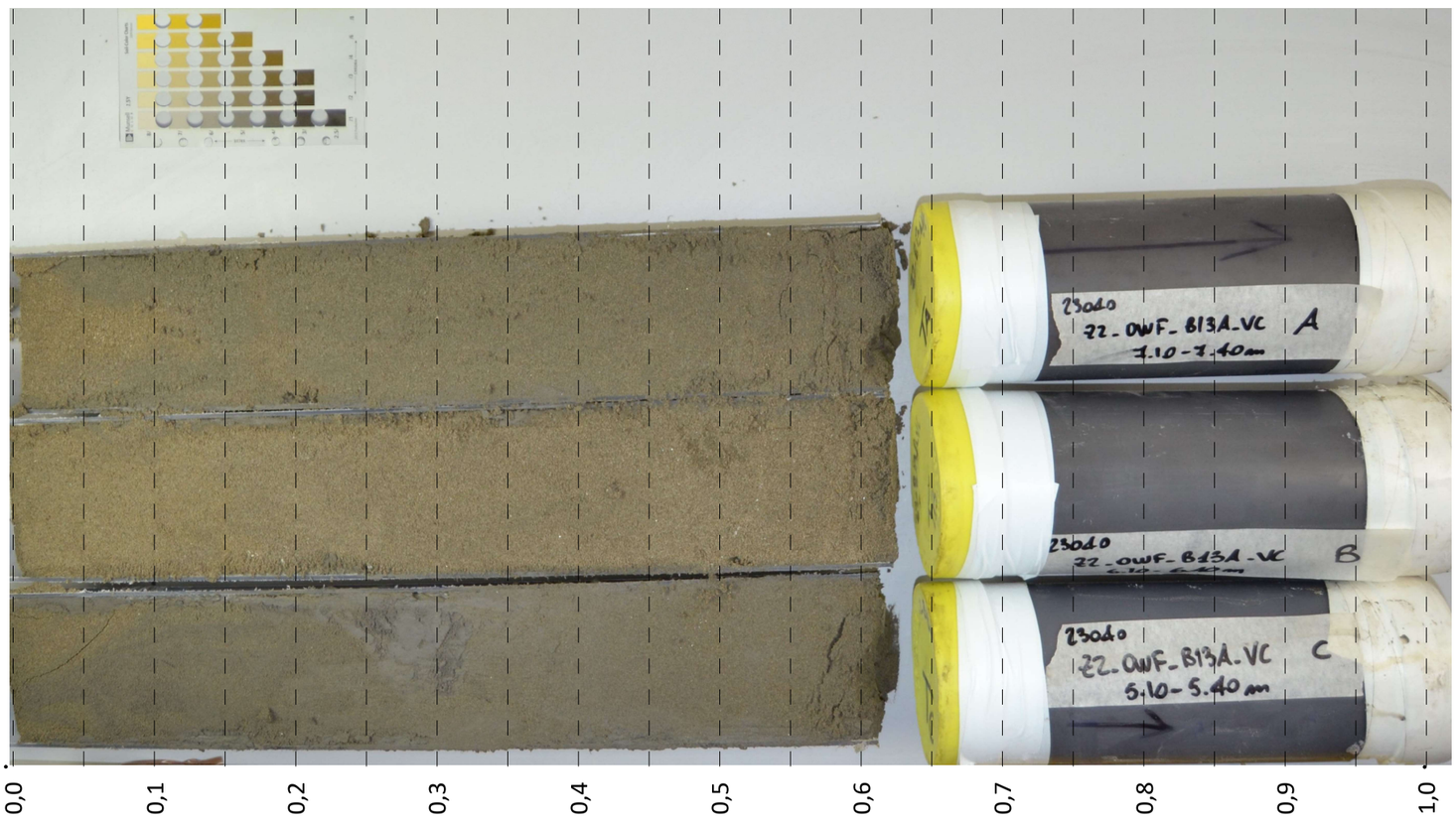
SOIL DESCRIPTION

DEPTH (m)	
0,00	Very soft, extremely low strength, olive (5Y 5/3) highly calcareous, medium plasticity, homogeneous very clayey, SILT.
0,20	With coarse sand to fine gravel sized shells and shells fragments.
	Soft, extremely low strength, olive gray (5Y 5/2) calcareous, low plasticity, very closely spaced thickly laminated sandy, clayey, SILT. Thick laminae of fine to medium sand. At 1.40 to 1.95 centimetrical cobble.
2,40	Dense, pale olive (5Y 6/3) calcareous, non-plastic, homogeneous silty, clayey, fine to medium SAND.
4,00	Stiff, olive gray (5Y 5/2) calcareous, high plasticity, homogeneous, clayey, sandy, SILT .
4,40	



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B13A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 88,00 m Easting : 628664,11 Northing : 4772888,32	Date of description : 12/07/2023 Performed by : Luca Tricarico Checked by : Dott. Geol. Paolo Brasey

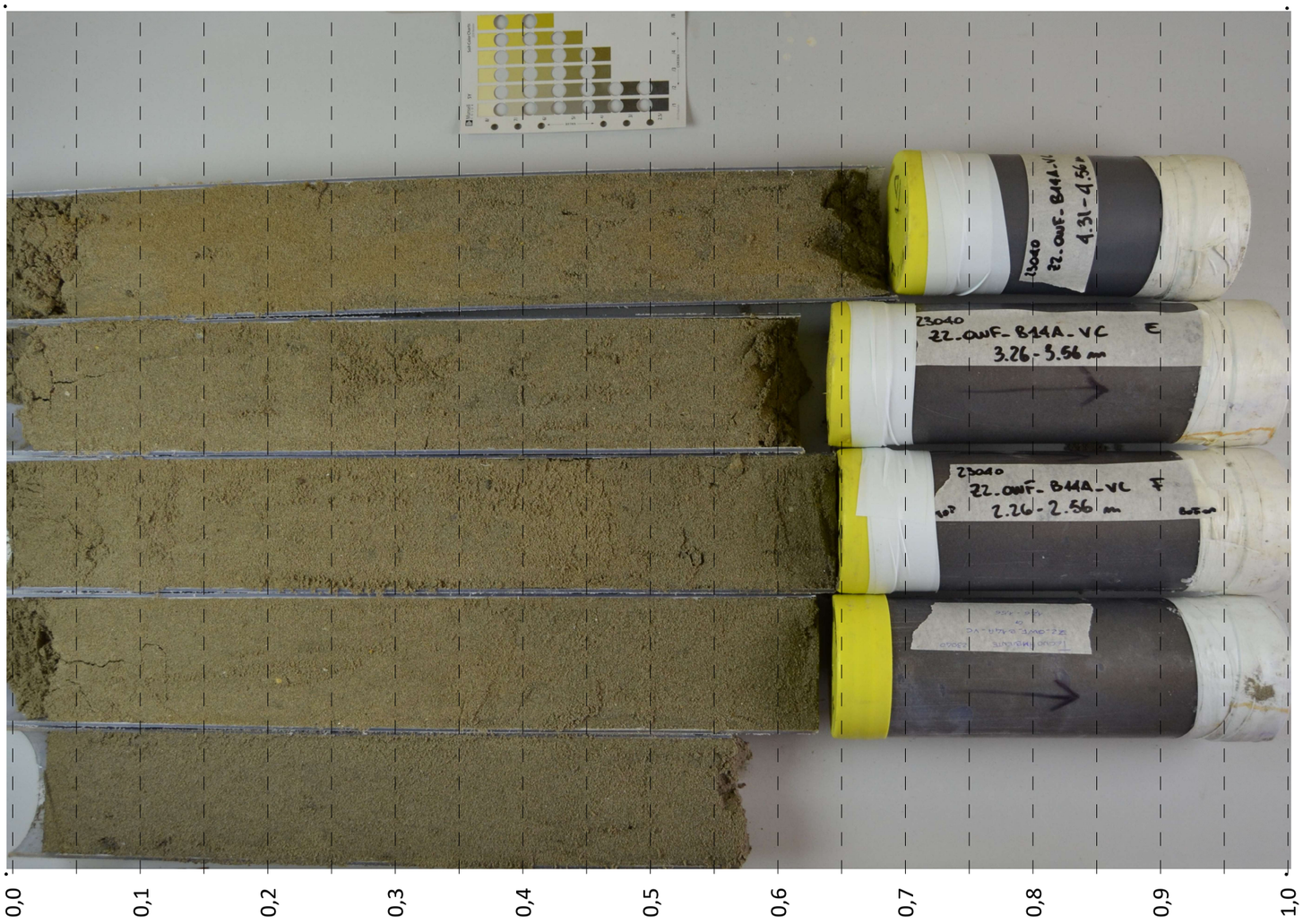
DEPTH (m)	SOIL DESCRIPTION
5,0	Dense, pale olive (5Y 6/3) calcareous, non-plastic, homogeneous silty, fine to medium SAND.
7,40	



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B13A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 88,00 m Easting : 628664,11 Northing : 4772888,32	Date of description : 12/07/2023 Performed by : Luca Tricarico Checked by : Dott. Geol. Paolo Brasey

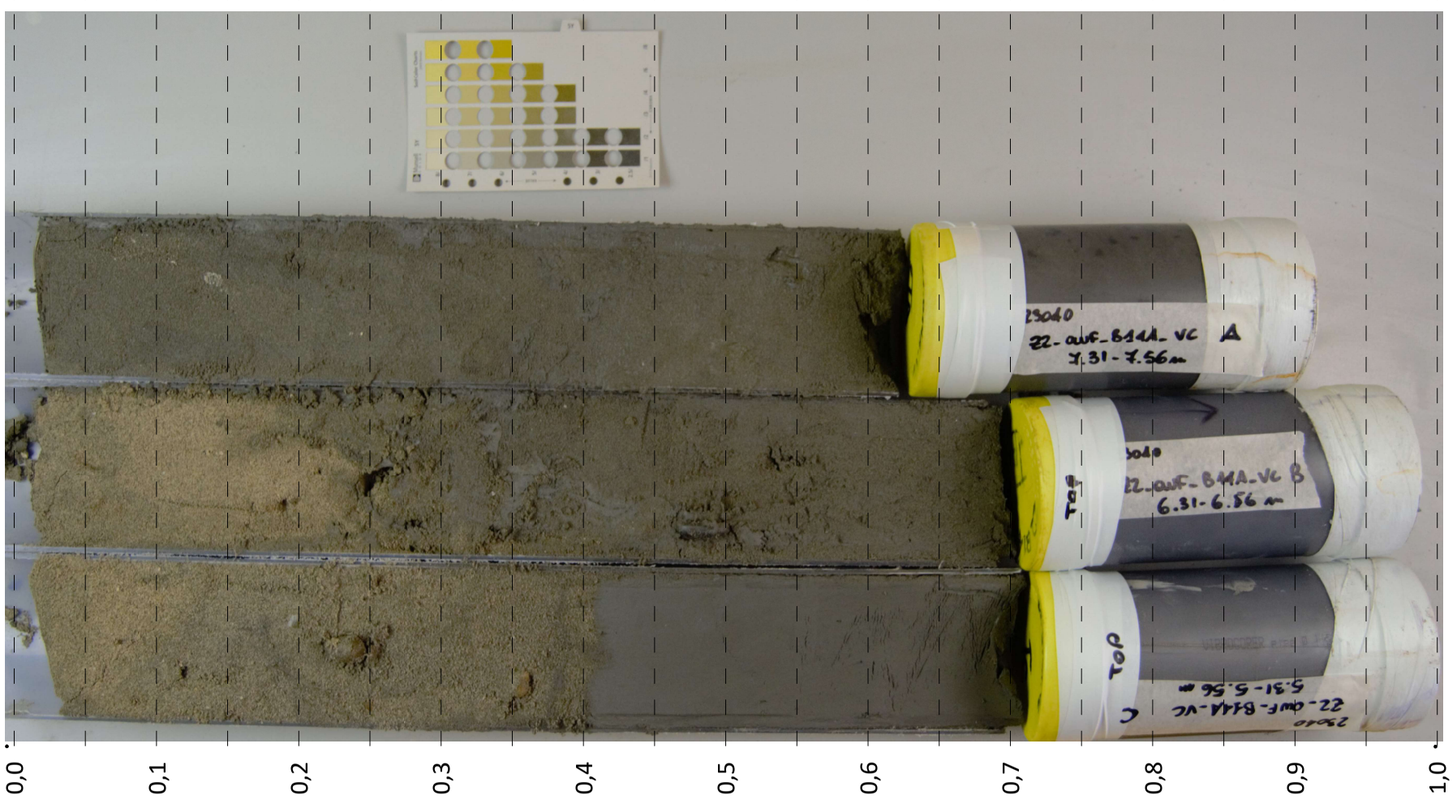
SOIL DESCRIPTION

DEPTH (m)	
0,00	Dense, light olive brown (2.5Y 5/3) calcareous, non-plastic, homogeneous, fine to medium SAND.
4,56	

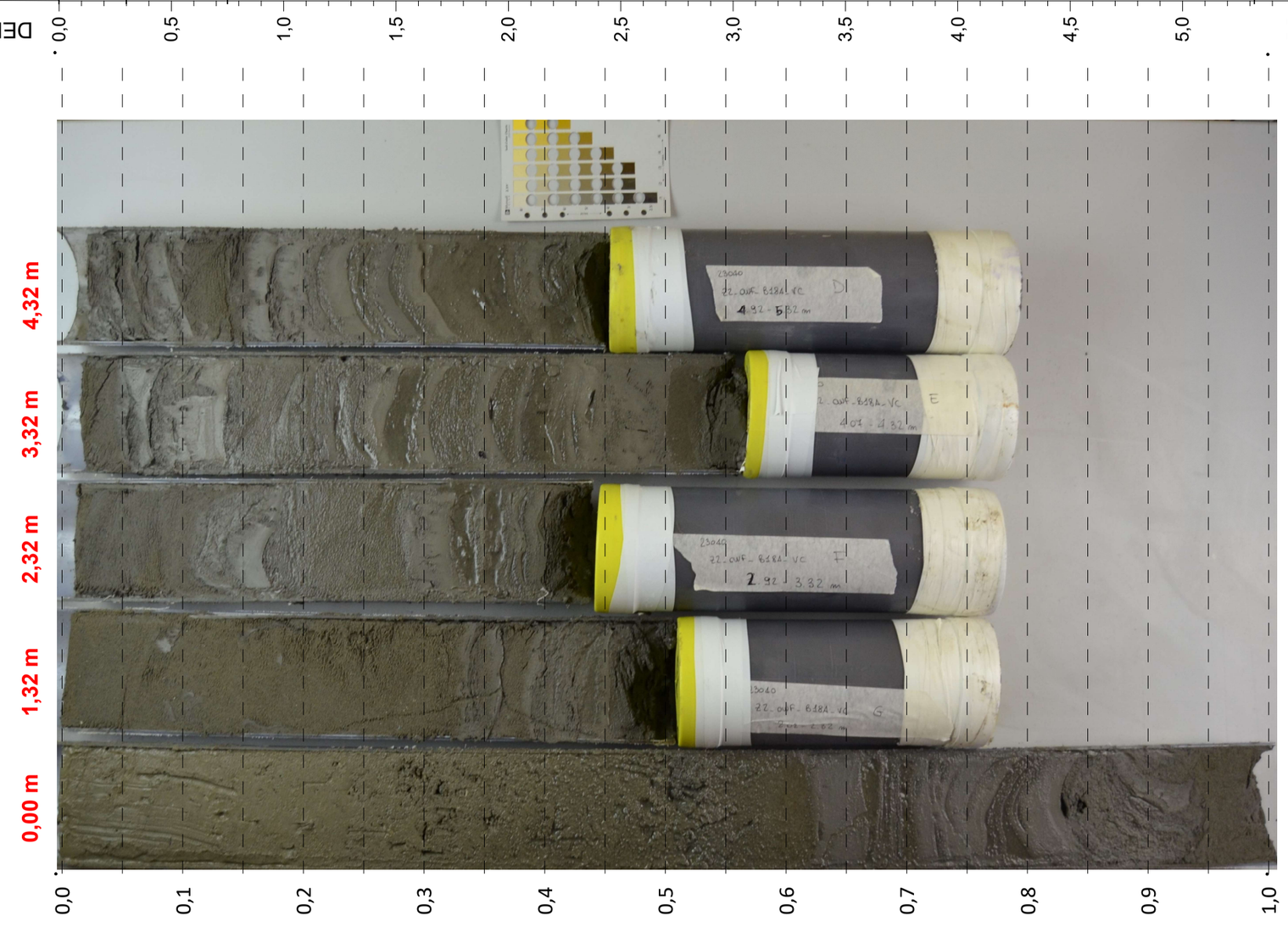


Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B14A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 80,00 m Easting : 626455,26 Northing : 4776488,91	Date of description : 11/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

DEPTH (m)	SOIL DESCRIPTION	
4,5	Dense, light olive brown (2.5Y 5/3) calcareous, non-plastic, homogeneous fine to medium SAND. From 4.76 m to 4.81 m centimetric cobbles.	4,90
5,0	Firm, low strength, dark gray (2.5Y 4/1) highly calcareous, high plasticity, homogeneous CLAY.	5,56
5,5	Dense, light olive brown (2.5Y 5/3) calcareous, non-plastic, homogeneous fine to medium SAND.	5,76
6,0	Dense, dark gray (2.5Y 4/1) calcareous, non-plastic, homogeneous, silty,clayey, fine SAND. At 6.02 m centimetric cobble.	7,56
6,5		
7,0		
7,5		
8,0		
8,5		
9,0		

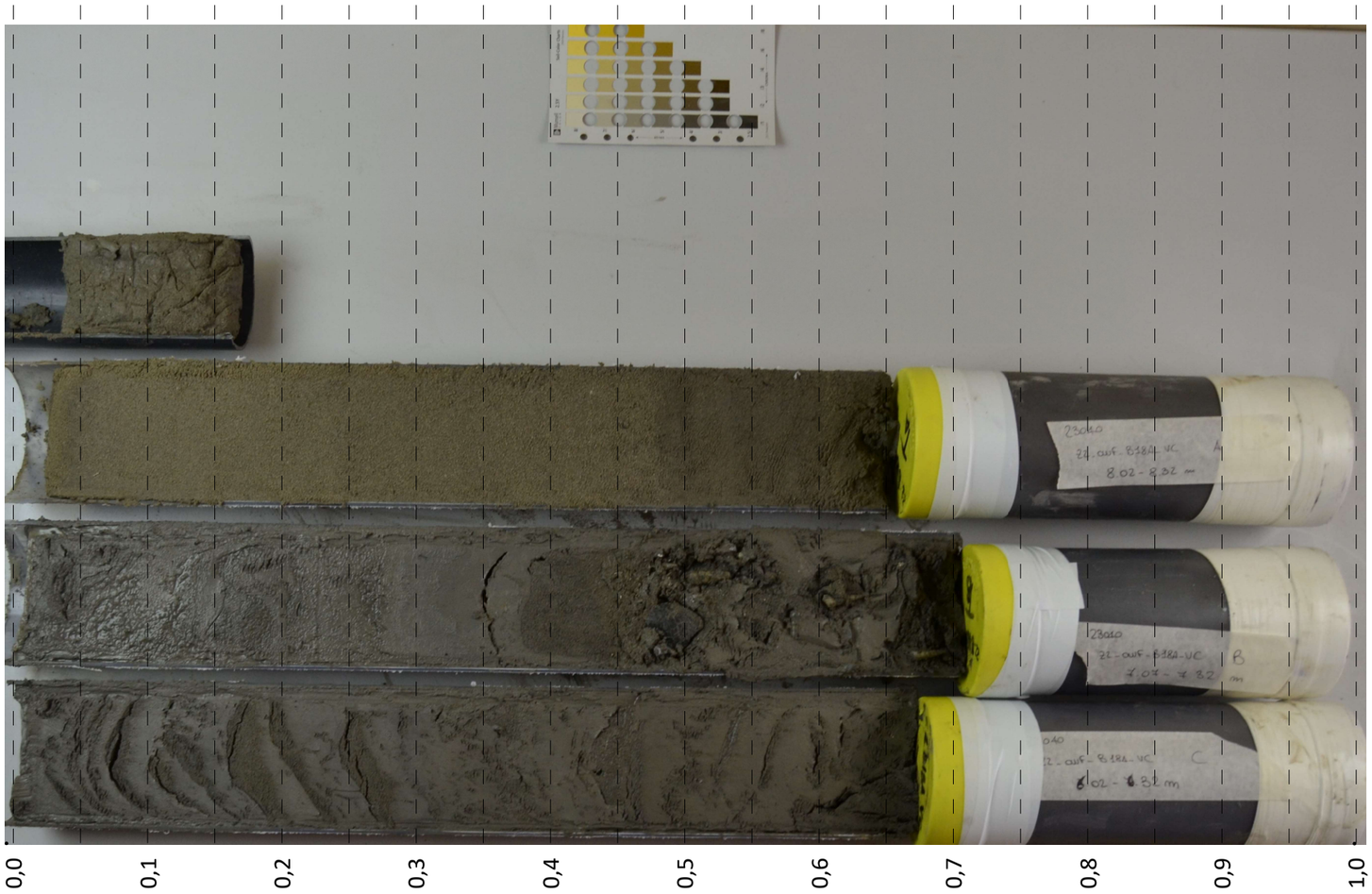


Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B14A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 80,00 m Easting : 626455,26 Northing : 4776488,91	Date of description : 11/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B18A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 90,00 m Easting : 618830,83 Northing : 4770755,18	Date of description : 30/06/2023 Performed by : Dott. Elena Tortonesi Checked by : Dott. Geol. Paolo Brasey

DEPTH (m)	SOIL DESCRIPTION
5,0	Very soft, very low strength, olive gray (5Y 4/2) calcareous, medium plasticity,very closely spaced very thinly bedded clayey, sandy SILT. Interbedded with fine to medium sand. At 6.80 m very gravelly silty sand. Gravel fraction mainly composed of shells.
7,32	Dense, olive (5Y 5/4) calcareous, non-plastic, homogeneous fine to medium SAND.
8,42	

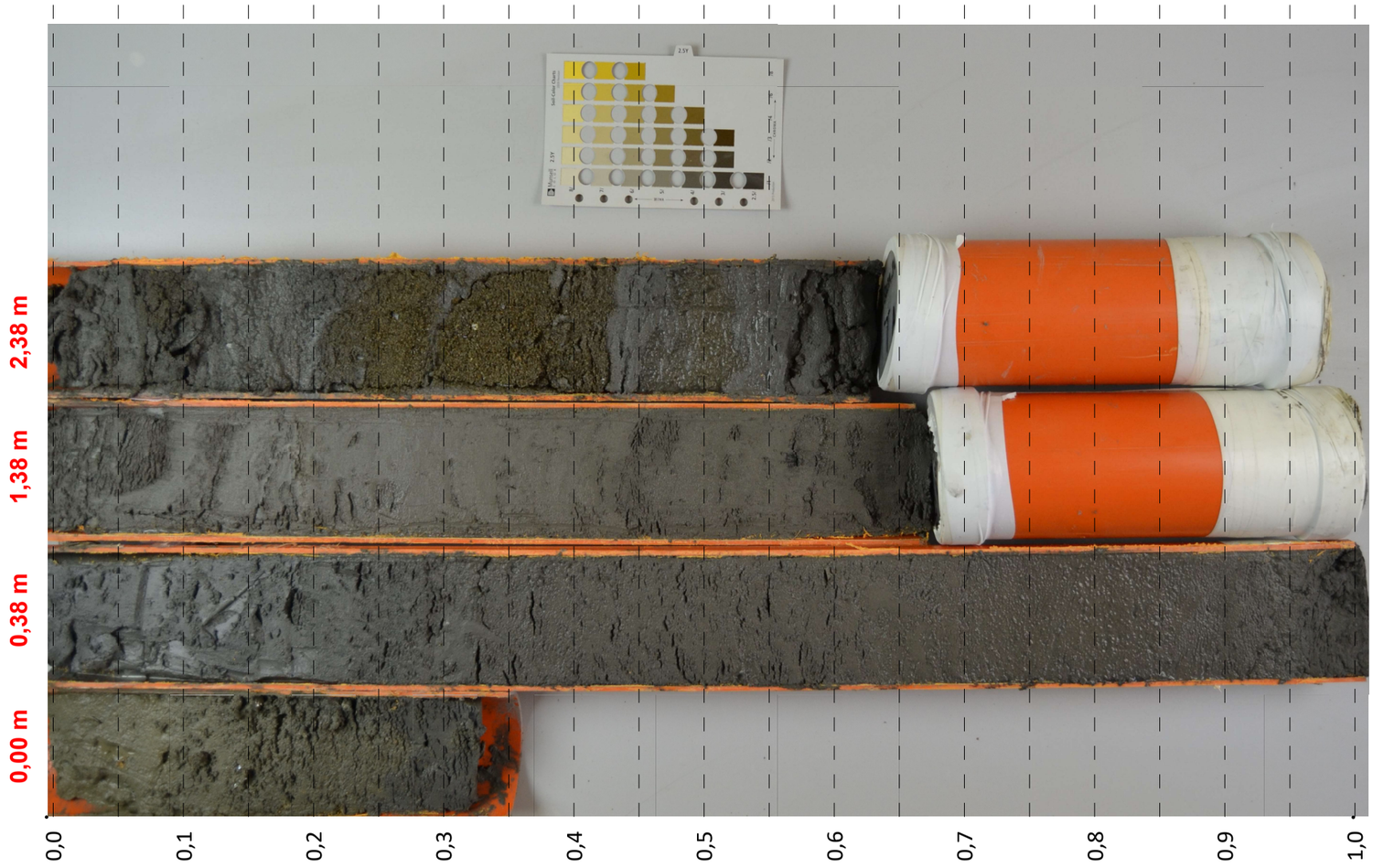


Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B18A_VC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 90,00 m Easting : 618830,83 Northing : 4770755,18	Date of description : 30/06/2023 Performed by : Dott. Elena Tortonesi Checked by : Dott. Geol. Paolo Brasey

APPENDIX VIII – PC LOGS - AO6 OWF ZONE 2

SOIL DESCRIPTION

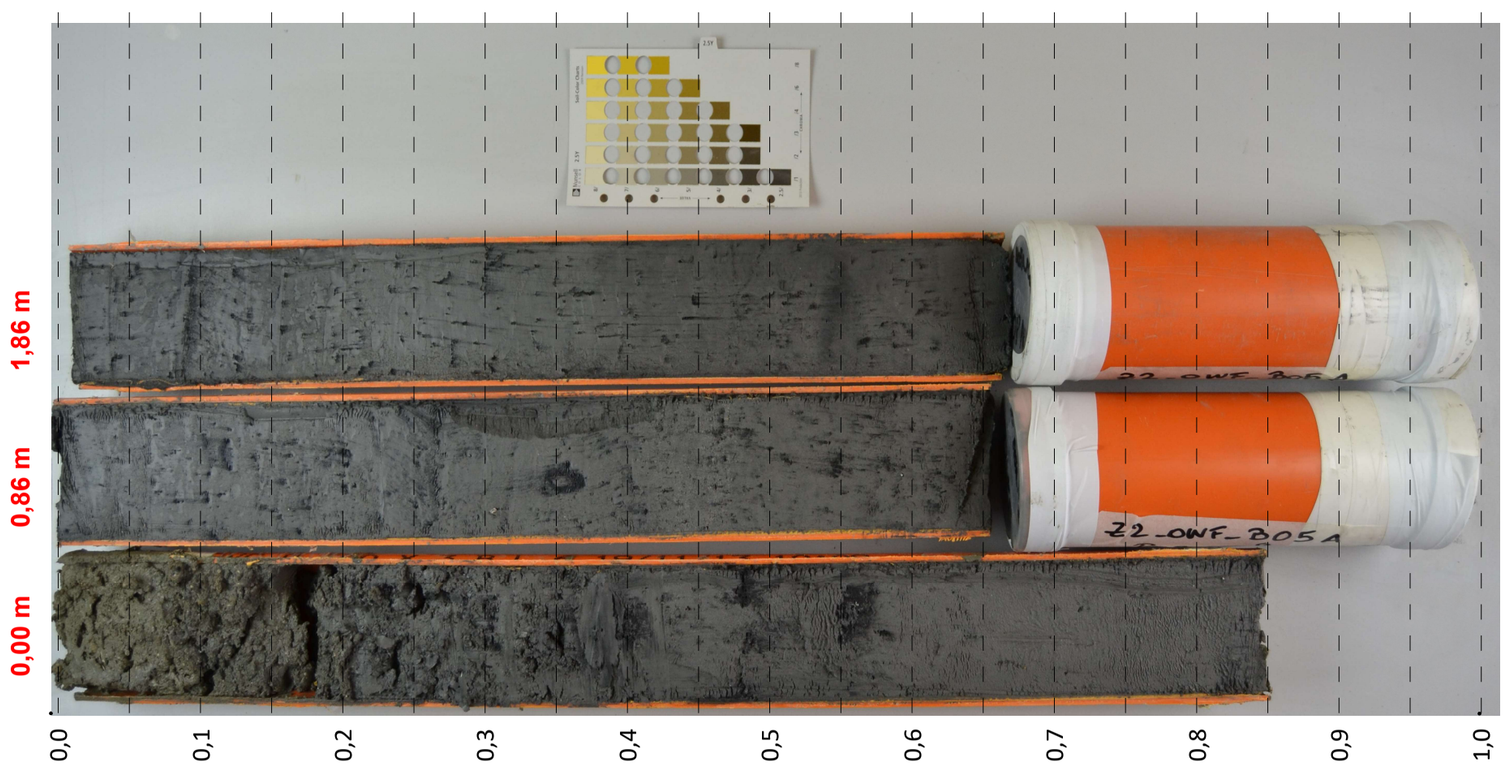
DEPTH (m)	
0,00	Very soft, extremely low strength, grayish brown (2.5Y 5/2) calcareous, slightly organic, high plasticity, homogeneous sandy, slightly clayey, SILT. Coarse sand to medium gravel sized shell fragments.
0,30	Firm, very low strength, dark gray (2.5Y 4/1) calcareous, organic, low plasticity, medium spaced very thinly bedded slightly clayey, very sandy, SILT. With very few gravel sized shells.
1,95	Dense, dark gray (10Y 4/1) highly calcareous, organic, non-plastic, medium spaced thinly bedded silty, slightly clayey, medium to coarse SAND. Fine to medium gravel sized shells and shell fragments. Beds of grayish brown (2.5Y 5/2) sand and laminae of clayey silt.
3,38	



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B03A_PC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 109,00 m Easting : 634495,33 Northing : 4765188,57	Date of description : 06/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

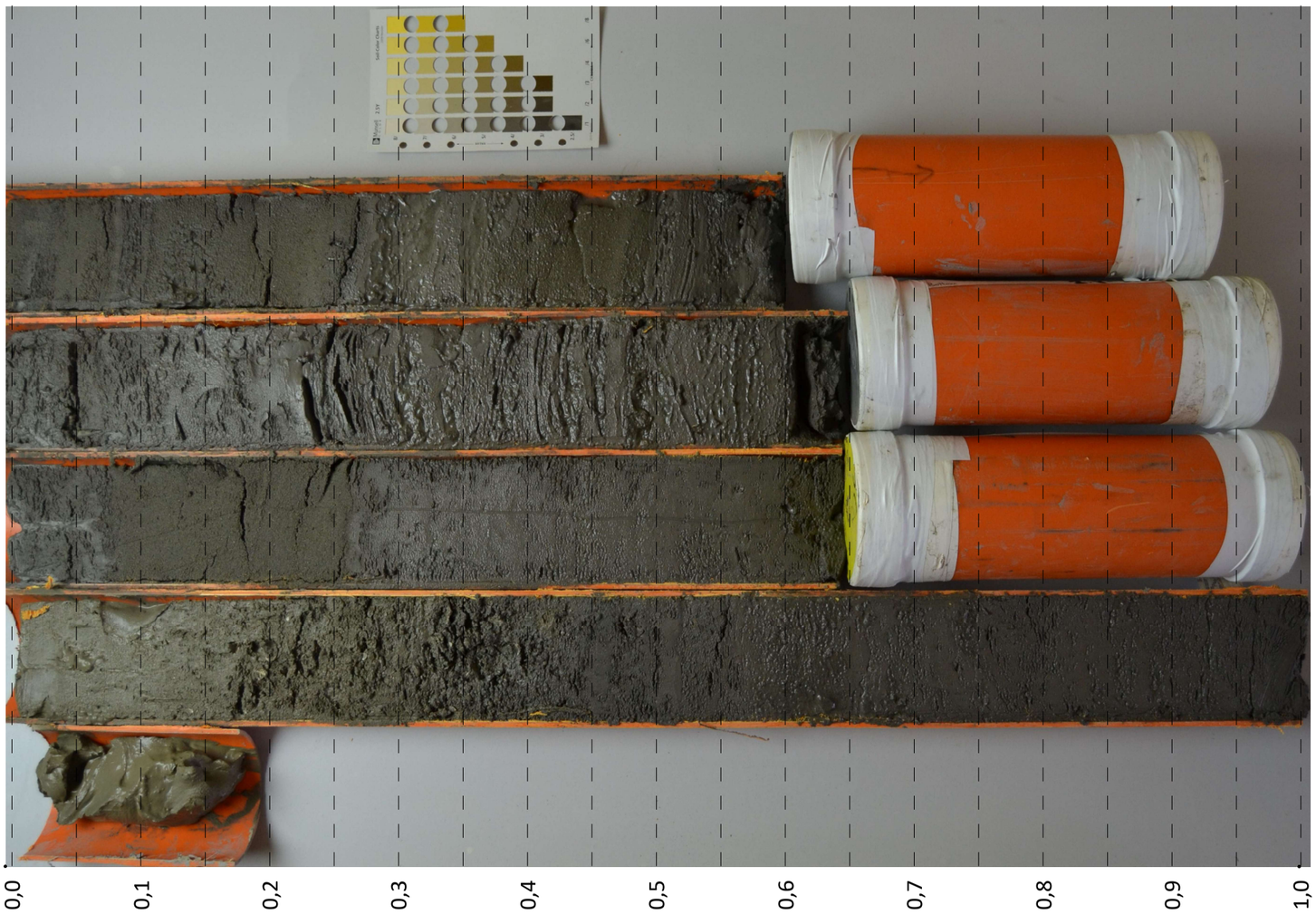
SOIL DESCRIPTION

DEPTH (m)	
0,00	Very soft, very low strength, grayish brown (2.5Y 5/2) highly calcareous, slightly organic, medium plasticity, homogeneous, very sandy slightly clayey, SILT. With many medium to coarse gravel sized shells and shell fragments.
0,25	Soft, very low strength, very dark grayish brown (2.5Y 3/2) highly calcareous, very organic, high plasticity, widely spaced thickly laminated, slighly sandy SILT. With few coarse sand to coarse gravel sized shells and shell fragments. with many pockets and laminae of organic fine sand and laminae of clay.
2,86	



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B05A_Pca**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 125,00 m Easting : 630079,15 Northing : 4760201,4	Date of description : 06/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

DEPTH (m)	SOIL DESCRIPTION	
0,0		0,00
	Very soft, very low strength, grayish brown (2.5Y 5/2) calcareous, slightly organic, high plasticity, homogeneous slightly sandy, silty, CLAY. Coarse sand to medium gravel sized shell fragments.	
		0,45
	Soft, very low strength, very dark grayish brown (2.5Y 3/2) highly calcareous, organic, medium plasticity, medium spaced thinly bedded clayey, very sandy, SILT. With thin beds of fine to medium sand. With coarse sand sized shell fragments.	
0,5		
1,0		
1,5		
2,0		
2,5		
3,0		
3,5		
4,0		4,10
4,5		
5,0		



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B11_PC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 94,00 m Easting : 632650,31 Northing : 4770339,21	Date of description : 06/07/2023 Performed by : Dott. Giorgio Mannella Checked by : Dott. Geol. Paolo Brasey

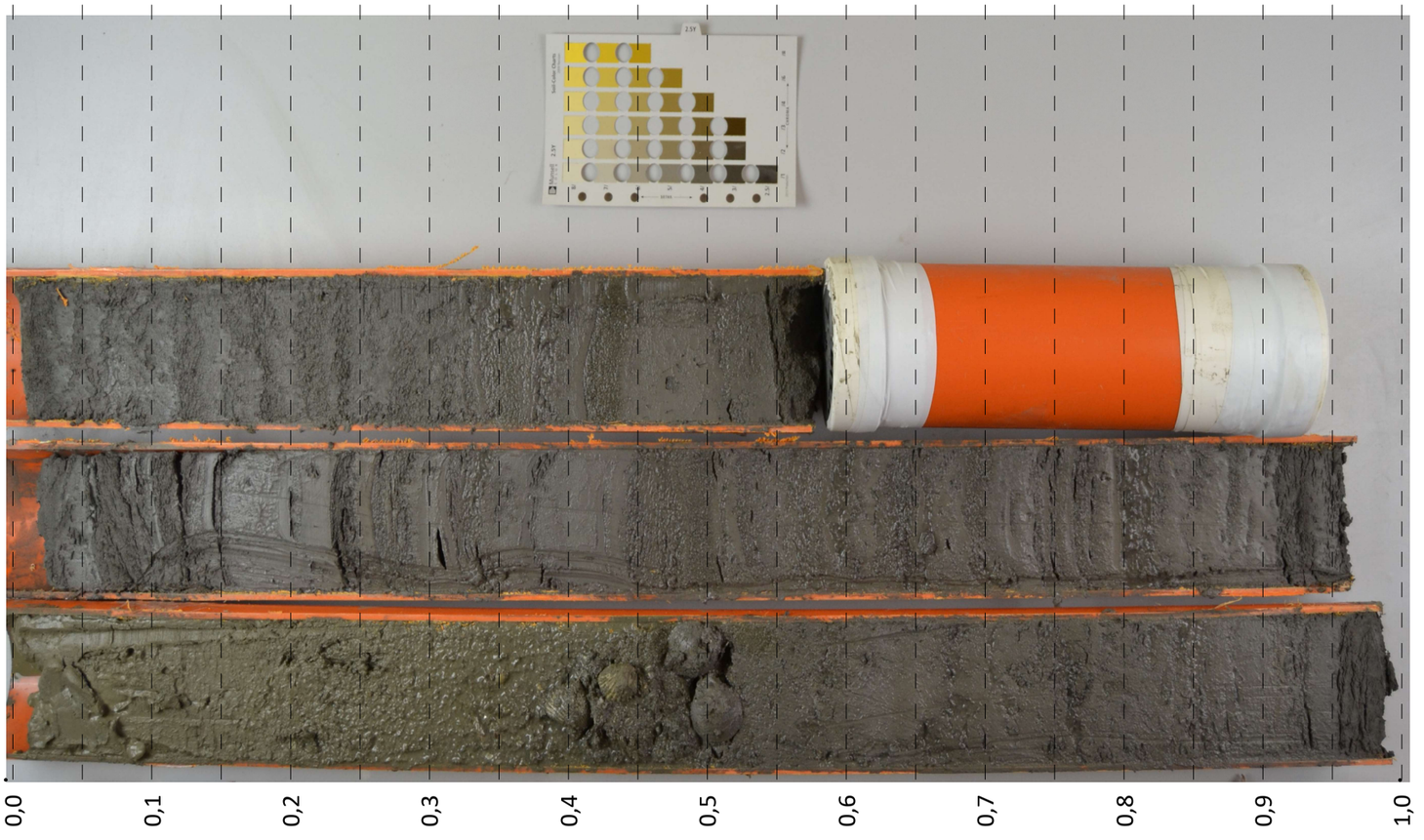
SOIL DESCRIPTION

DEPTH (m)

0,00 — Very soft, extremely low strength, olive (5Y 4/3) highly calcareous, very organic, medium plasticity, homogeneous very clayey, SILT.
With many coarse sand to coarse gravel sized shells and shells fragments.

0,50 — Soft, very low strength, dark gray (2.5Y 4/1) calcareous, medium plasticity, very closely spaced very thinly bedded very clayey, SILT.
Beds of dark grey medium to coarse sand.

3,00



Project N. : 113401341 Client : DGEC	**SAMPLE POINT : Z2_OWF_B13_PC**
Location : Offshore Gulf de Lyon	
Water Depth (Reduced to LAT) : 88,00 m Easting : 628652,03 Northing : 4772877,67	Date of description : 10/07/2023 Performed by : Luca Tricarico Checked by : Dott. Geol. Paolo Brasey

APPENDIX IX – CPT DETAILS - AO6 OWF ZONE 2

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-95,10 m ZH
		Coordinates	E 637024,84m; N 4769227,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B03A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B03A_CPT
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 21 22 23 24 25 26 27 28 29

ft: 68 72 76 80 84 88 92 96

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	30/04/2023
		Water Depth	-108,99 m ZH
		Coordinates	E 634504,84m; N 4765192,27m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B03A_CPT
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B04_CPT
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 11 12 13 14 15 16 17 18 19

ft: 36 40 44 48 52 56 60 64

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B04_CPT
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-119,80 m ZH
		Coordinates	E 635190,67m; N 4761968,41m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B04_CPT
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DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B05A_CPT
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 11 12 13 14 15 16 17 18 19

ft: 36 40 44 48 52 56 60 64

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B05A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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Tecnoambiente

DEPTH BELOW MUDLINE

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)
0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)
0 50 100 150 200

PORE PRESSURE
u_2(MPa)
-4 -2 0 2 4

FRICTION RATIO
R_f (%)
0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q
-0,5 0,0 0,5 1,0 1,5

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-125,57 m ZH
		Coordinates	E 630077,47m; N 4760196,74m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B05A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

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A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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Liberté Égalité Fraternité

TECNOAMBIENTE
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Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 — 68
22 — 72
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q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	06/05/2023
		Water Depth	-114,24 m ZH
		Coordinates	E 628284,57m; N 4765251,63m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

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Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

SOIL PROFILE

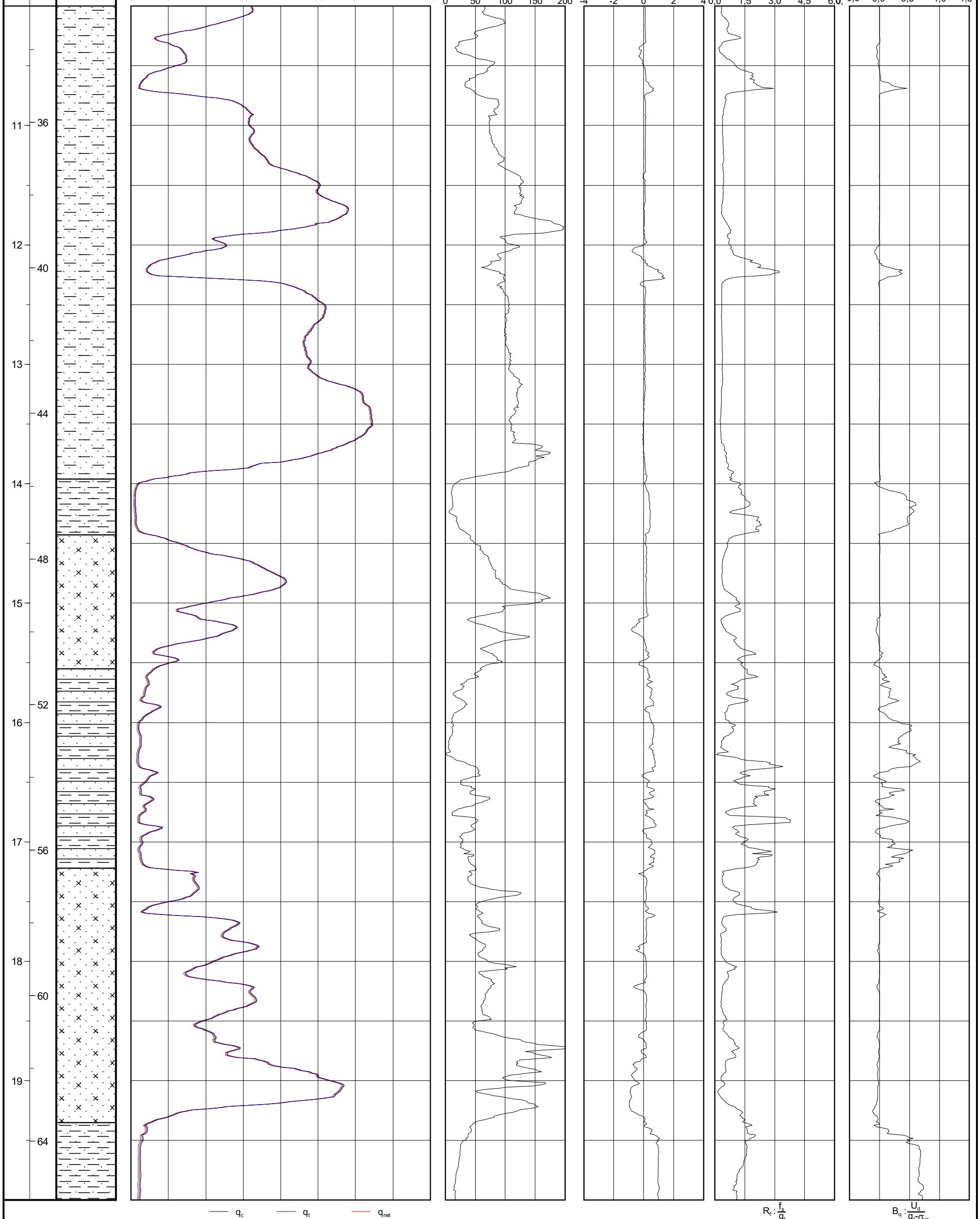
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



PCPT PROFILE

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Z2_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-94,14 m ZH
		Coordinates	E 626098,61m; N 4768886,32m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
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Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25 84
26 88
27 92
28 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-94,42 m ZH
		Coordinates	E 632657,34m; N 4770337,94m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,05 m ZH
		Coordinates	E 628660,88m; N 4772895,5m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,04 m ZH
		Coordinates	E 628669,72m; N 4772887,26m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,04 m ZH
		Coordinates	E 628669,72m; N 4772887,26m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25 84
26 88
27 92
28 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	21/03/2023
		Water Depth	-88,04 m ZH
		Coordinates	E 628669,72m; N 4772887,26m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22594 / 001

Z2_OWF_B13_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
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Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

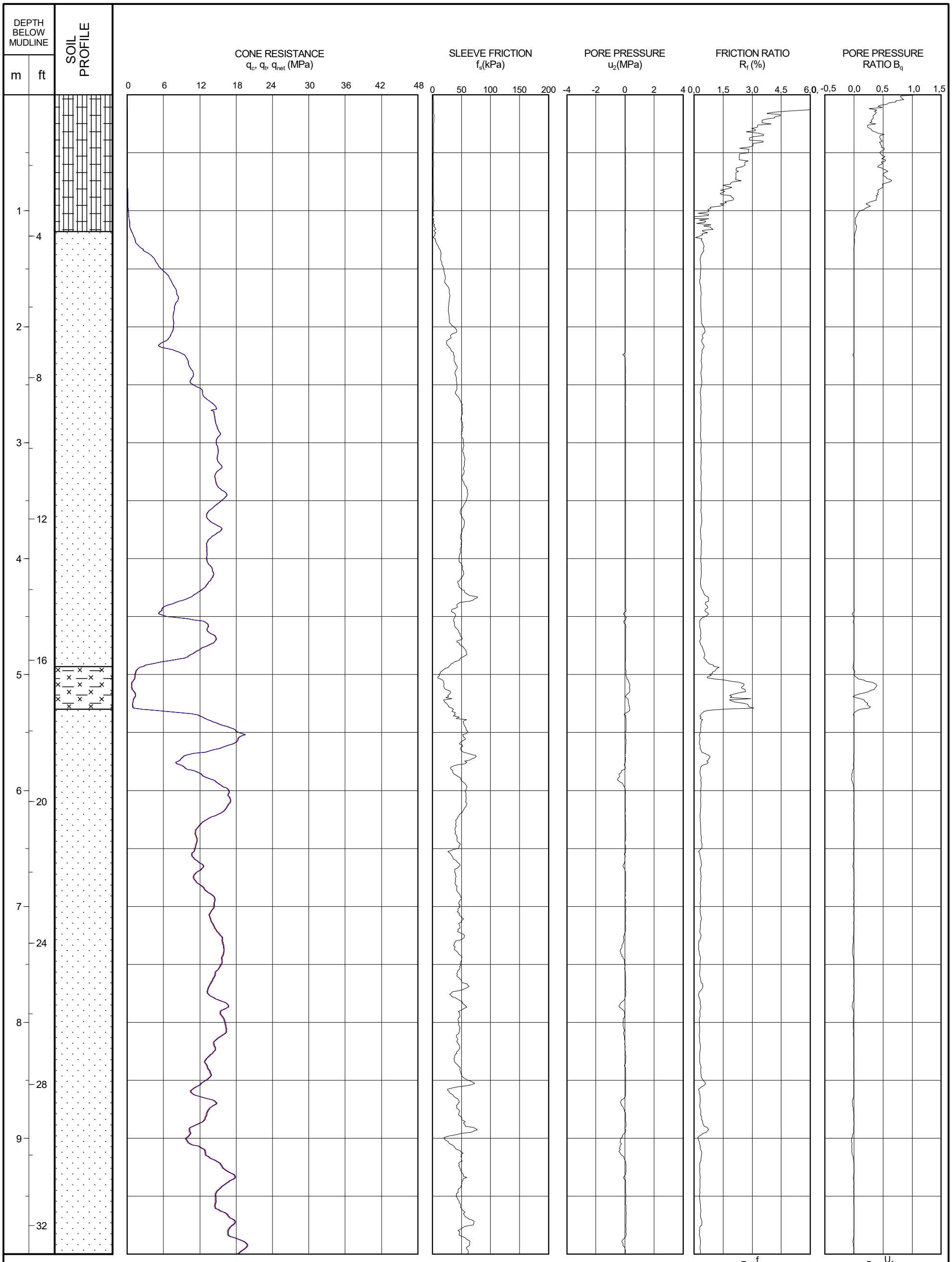
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



PCPT PROFILE

Alpha Value	0.8
Date Performed	29/04/2023
Water Depth	-80,82 m ZH
Coordinates	E 626463,06m; N 4776487,28m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-80,82 m ZH
		Coordinates	E 626463,06m; N 4776487,28m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

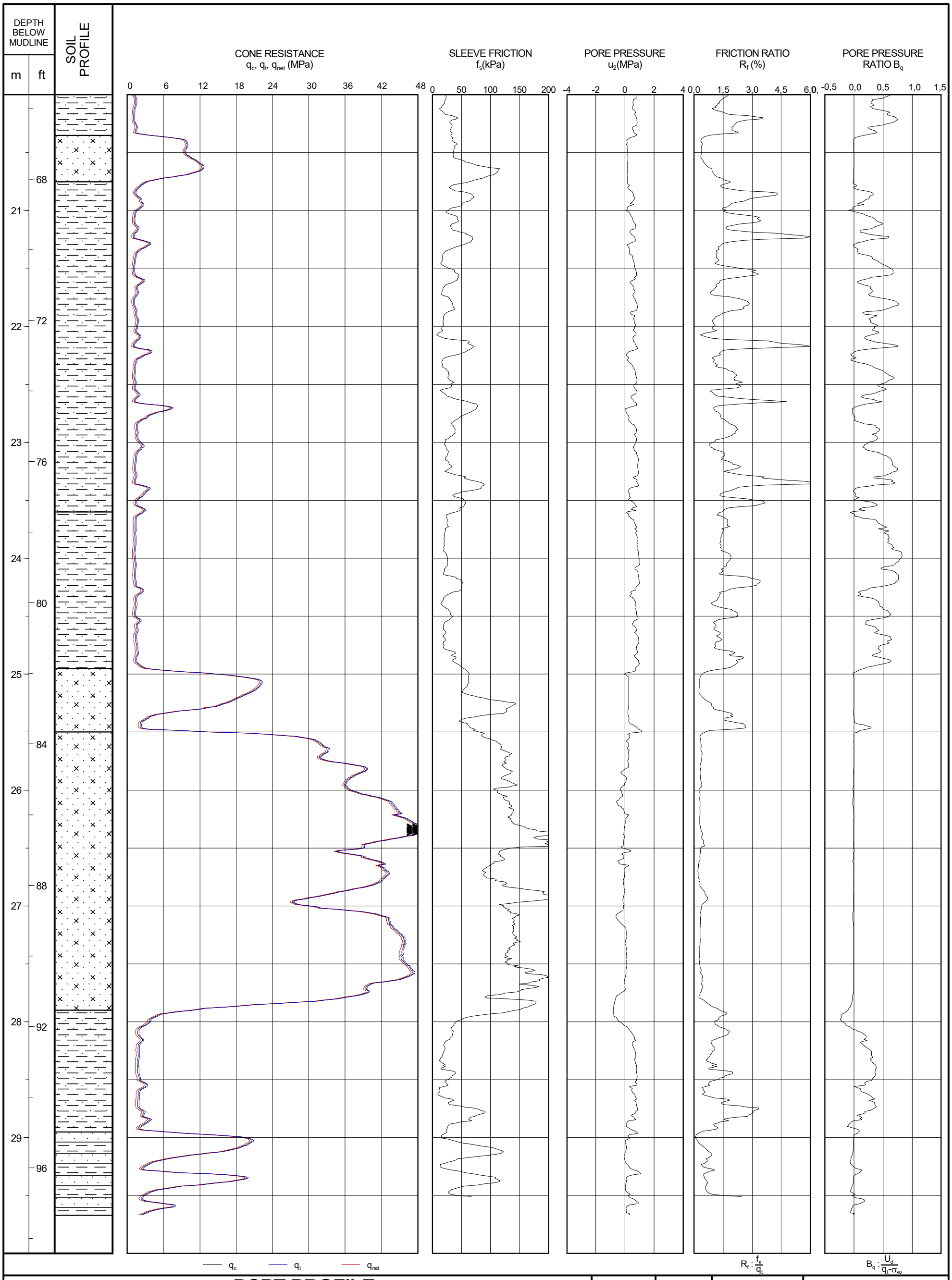
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-80,82 m ZH
		Coordinates	E 626463,06m; N 4776487,28m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B14A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-83,46 m ZH
		Coordinates	E 624295,46m; N 4773987,6m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Z2_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-83,46 m ZH
		Coordinates	E 624295,46m; N 4773987,6m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	29/04/2023
		Water Depth	-83,46 m ZH
		Coordinates	E 624295,46m; N 4773987,6m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22598 / 001

Z2_OWF_B15_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

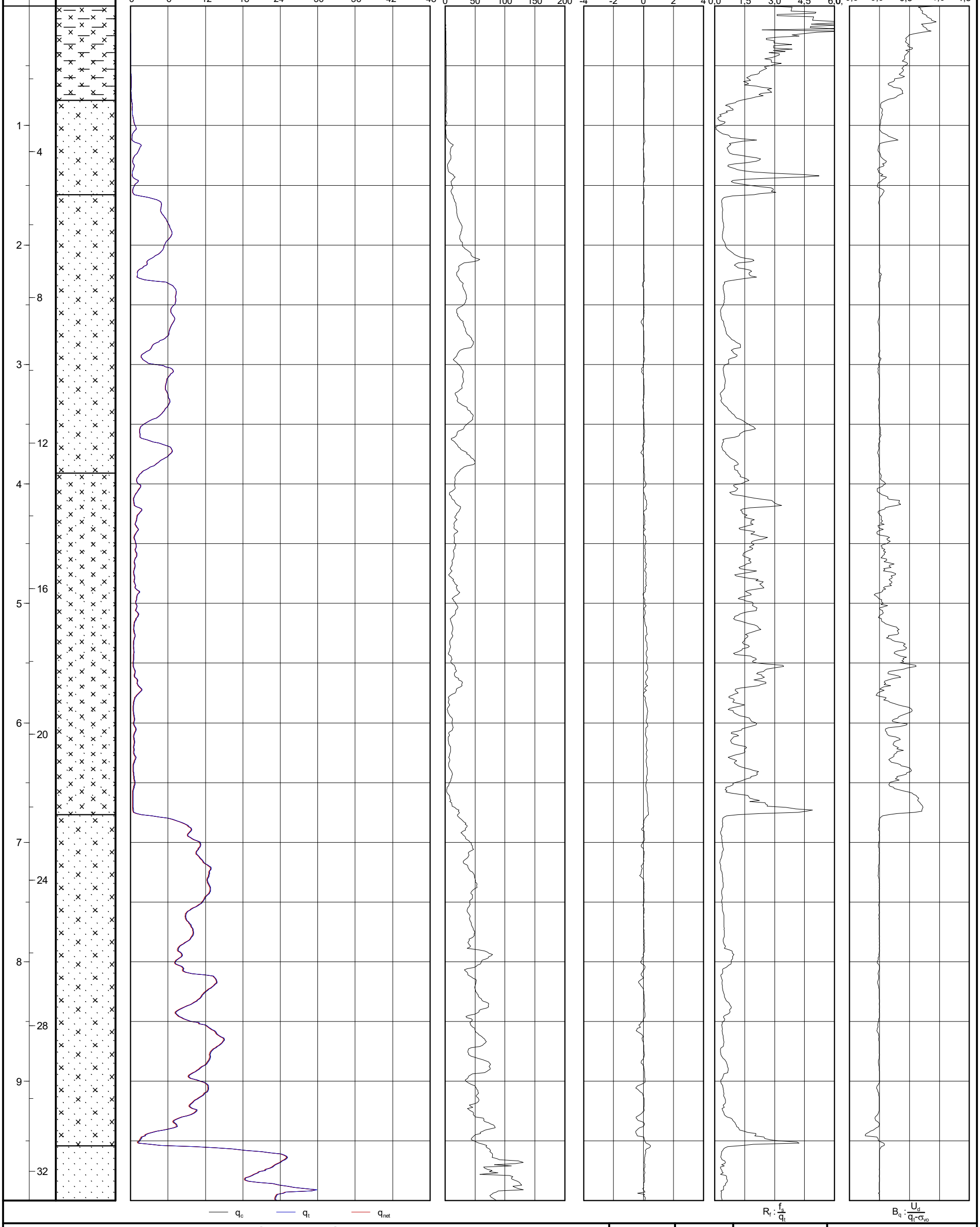
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	03/05/2023
		Water Depth	-89,37 m ZH
		Coordinates	E 618838,51m; N 4770756,04m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	DS10CFIIP.S22602 / 001

Z2_OWF_B18A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5
6 20
7 24
8 28
9
32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	05/05/2023
		Water Depth	-83,40 m ZH
		Coordinates	E 619896,41m; N 4775039,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B19A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8
Date Performed	05/05/2023
Water Depth	-83,40 m ZH
Coordinates	E 619896,41m; N 4775039,43m
Made By/Date	SC - 14/11/2023
Checked By/Date	AN - 17/11/2023
Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B19A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42 48

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

PCPT PROFILE

Alpha Value	0.8	Date Performed	05/05/2023
		Water Depth	-83,40 m ZH
		Coordinates	E 619896,41m; N 4775039,43m
		Made By/Date	SC - 14/11/2023
		Checked By/Date	AN - 17/11/2023
		Cone Number	S10CFIIP.S22602 / 001

Z2_OWF_B19A_CPT
MED-TEC_A06
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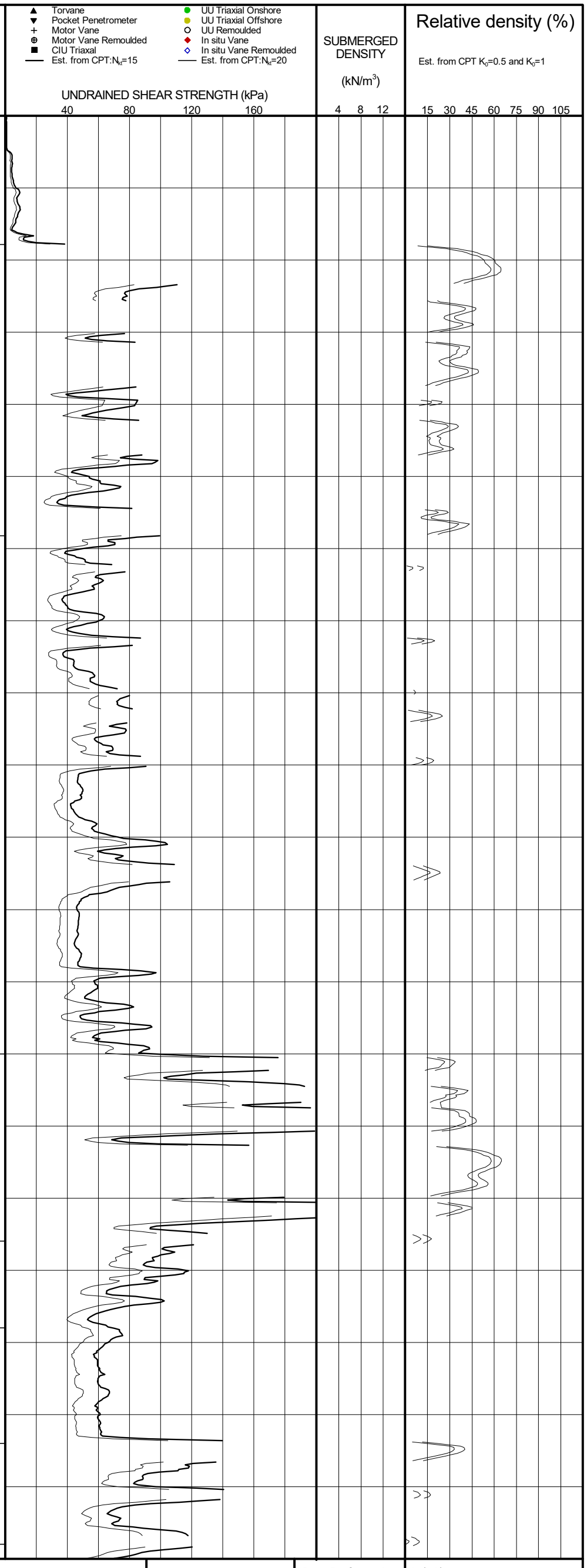
MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente

APPENDIX X – CPT LOGS - AO6 OWF ZONE 3

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
0					0,0m Extremely low shear strength silty CLAY
1	4				0,9m Medium to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND
3	12				2,9m Medium shear strength sandy CLAY with partings of very loose to loose sand
6	20				6,5m Medium to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND
8	28				7,8m Medium shear strength sandy CLAY
9	32				8,4m Medium shear strength CLAY
					9,2m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND



FINAL CPTU LOG

Z3_OWF_B02_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-100.92 m ZH
Coordinates	E 542916.24 m; N 4724851.18 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

DEPTH m | ft

SOIL PROFILE

SAMPLE NO

SEABED CPT

SOIL DESCRIPTION

9,9m Medium to high shear strength sandy CLAY *(continued)*

14,0m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND

15,1m Medium to high shear strength sandy CLAY

17,3m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND

17,7m Medium to high shear strength slightly sandy CLAY

18,4m Medium shear strength CLAY

19,7m Medium to high shear strength sandy CLAY

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B02_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

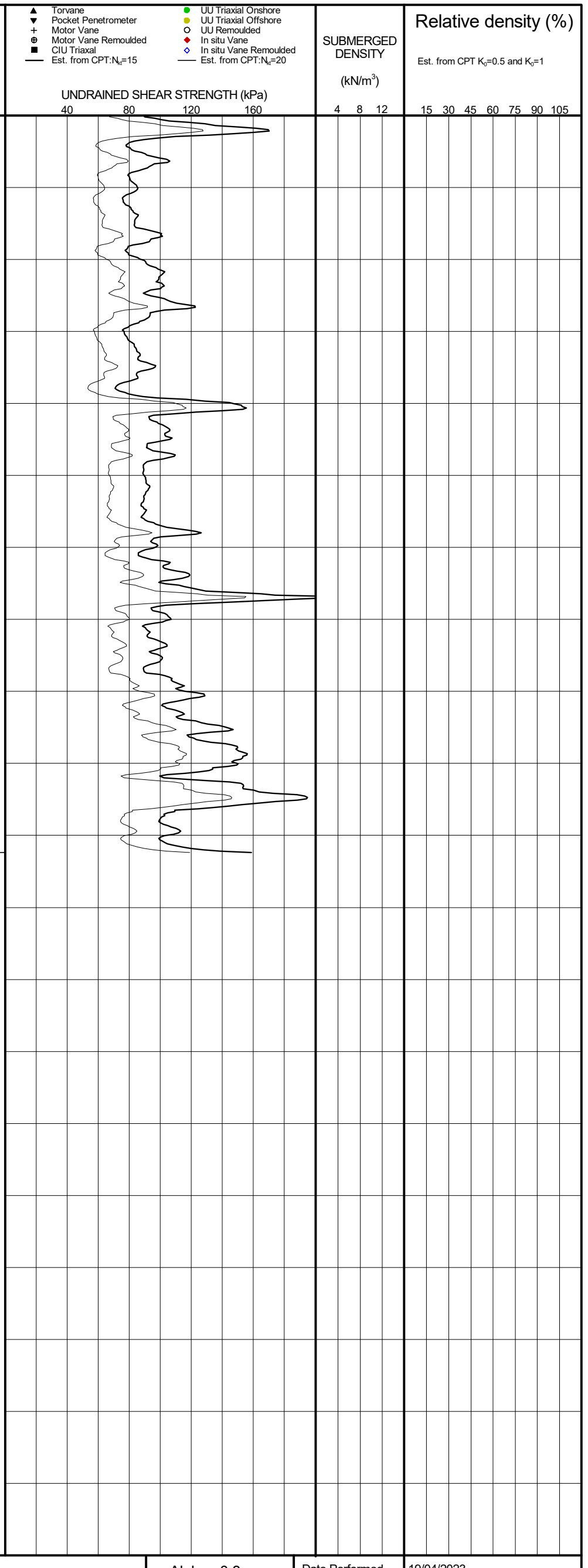
Date Performed	19/04/2023
Water Depth	-100.92 m ZH
Coordinates	E 542916.24 m; N 4724851.18 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					19,7m Medium to high shear strength sandy CLAY *(continued)*
21	68				
22	72				
23	76				
24	80				
25					
	84				Final Depth 25.12m. Depth ended due to Maximum Cone Inclination Approx. Settlement 0.66m
26					
	88				
27					
28	92				
29	96				



SUBMERGED DENSITY (kN/m³)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B02_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-100.92 m ZH
Coordinates	E 542916.24 m; N 4724851.18 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

Torvane; Pocket Penetrometer; Motor Vane; Motor Vane Remoulded; CIU Triaxal; Est. from CPT:N_{kt}=15; UU Triaxial Onshore; UU Triaxial Offshore; UU Remoulded; In situ Vane; In situ Vane Remoulded; Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

0,0m Extremely low shear strength silty CLAY

... becoming very low to medium shear strength sand clay below 0.55m

0,7m Medium dense to dense silty SAND

2,0m Very dense SAND

5,7m Very dense silty SAND

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

FINAL CPTU LOG

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

▲ Torvane ▼ Pocket Penetrometer + Motor Vane ⊕ Motor Vane Remoulded ■ CIU Triaxal — Est. from CPT:N_{kt}=15
● UU Triaxial Onshore ● UU Triaxial Offshore ○ UU Remoulded ◆ In situ Vane ◇ In situ Vane Remoulded — Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED DENSITY (kN/m^3): 4 8 12

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1: 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

5,7m Very dense silty SAND *(continued)*

... becoming medium dense to dense between 10.64m - 10.87m

... becoming dense between 11.86m - 12.27m

13,6m Medium dense to dense silty SAND

18,1m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND

FINAL CPTU LOG

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m | ft

SOIL PROFILE

SAMPLE NO

SEABED CPT

SOIL DESCRIPTION

18,1m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND *(continued)*

21,2m High shear strength sandy CLAY

22,4m Medium to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND

23,0m High shear strength sandy CLAY

23,7m Medium shear strength CLAY

24,5m High shear strength sandy CLAY with sand partings

28,3m High shear strength slightly sandy CLAY

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

FINAL CPTU LOG

Alpha =0.8

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

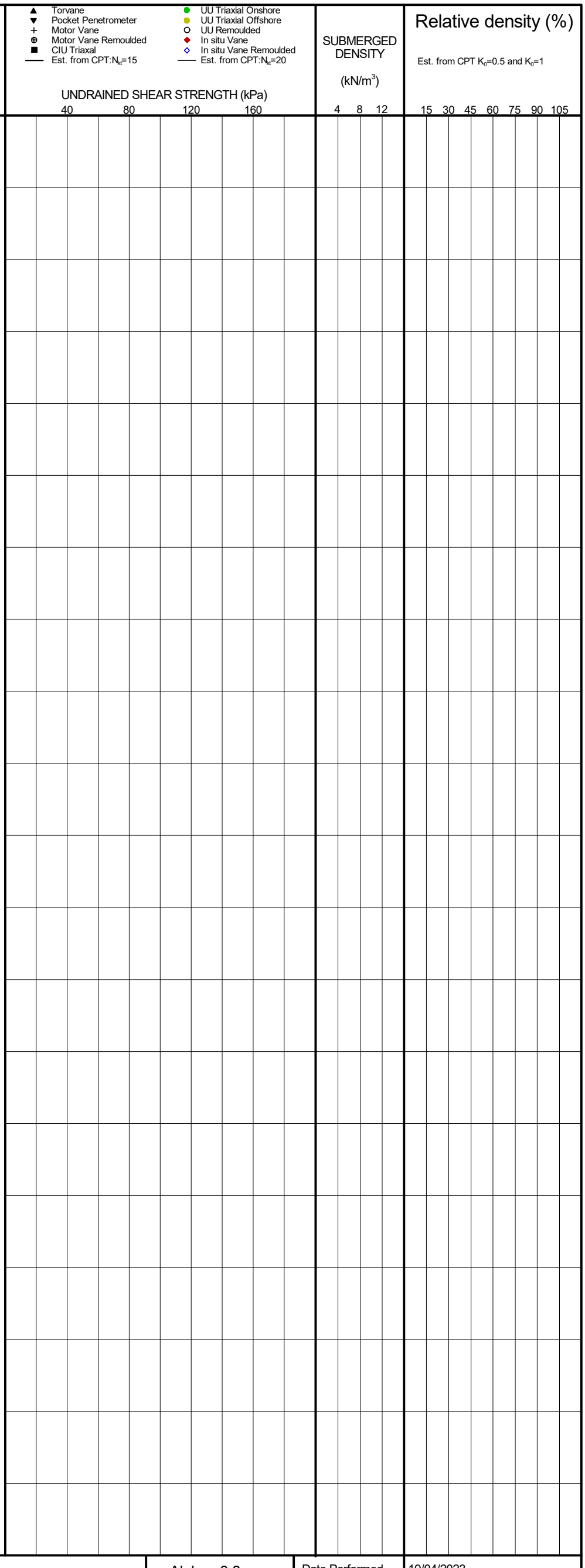
Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Final Depth 29.82m. Depth ended due to Target Depth reached Approx. Settlement 0.66m



SUBMERGED DENSITY (kN/m³)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

31 100
32 104
33 108
34 112
35 116
36 120
37 124
38
39 128

FINAL CPTU LOG

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1d

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

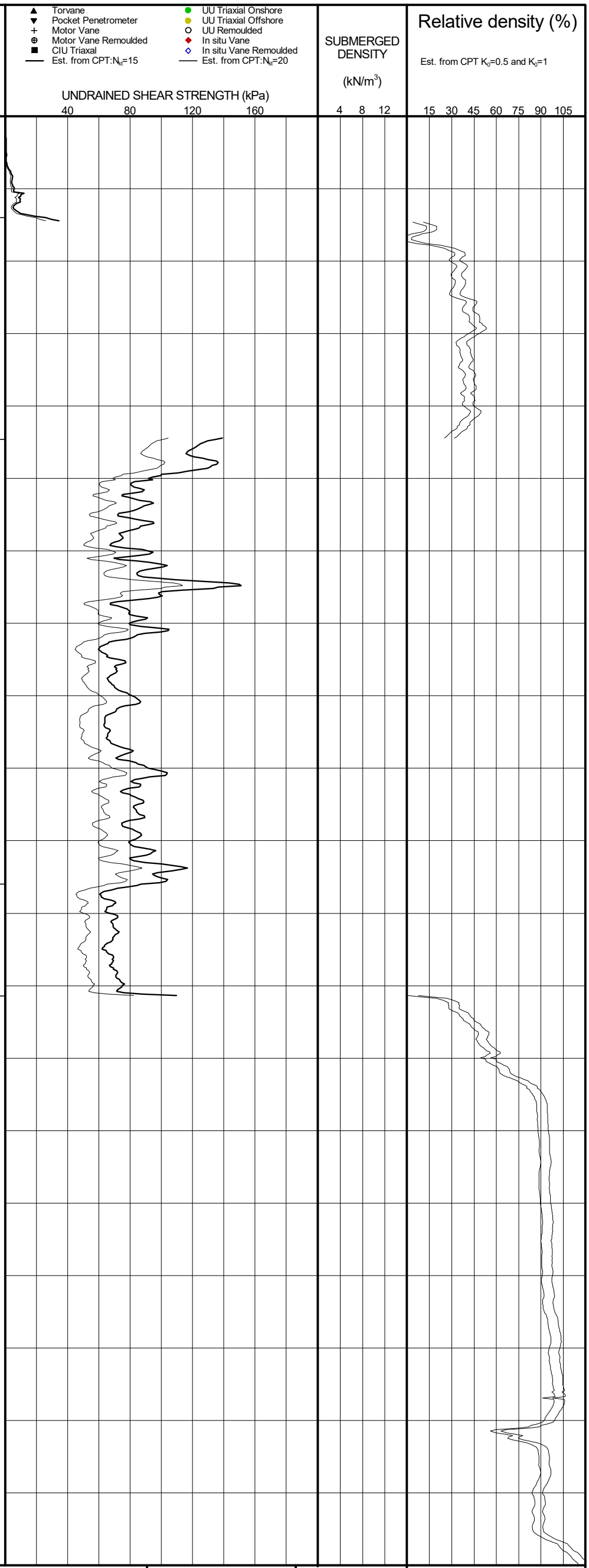
0,7m Medium dense silty SAND
... very loose to loose between 0.70m - 0.93m

2,2m Medium to high shear strength slightly sandy CLAY

5,3m Medium shear strength sandy CLAY

6,1m Very dense gravelly SAND
... medium dense to dense between 6.05m - 6.72m

... becoming medium dense between 9.05m - 9.15m



FINAL CPTU LOG

Z3_OWF_B06A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-103.84 m ZH
Coordinates	E 539895.75 m; N 4729322.42 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					6,1m Very dense gravelly SAND *(continued)*
11	36				Final Depth 10,95m. Depth ended due to Maximum Thrust Approx. Settlement 0.63m
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B06A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-103.84 m ZH
Coordinates	E 539895.75 m; N 4729322.42 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,7m Medium dense silty SAND

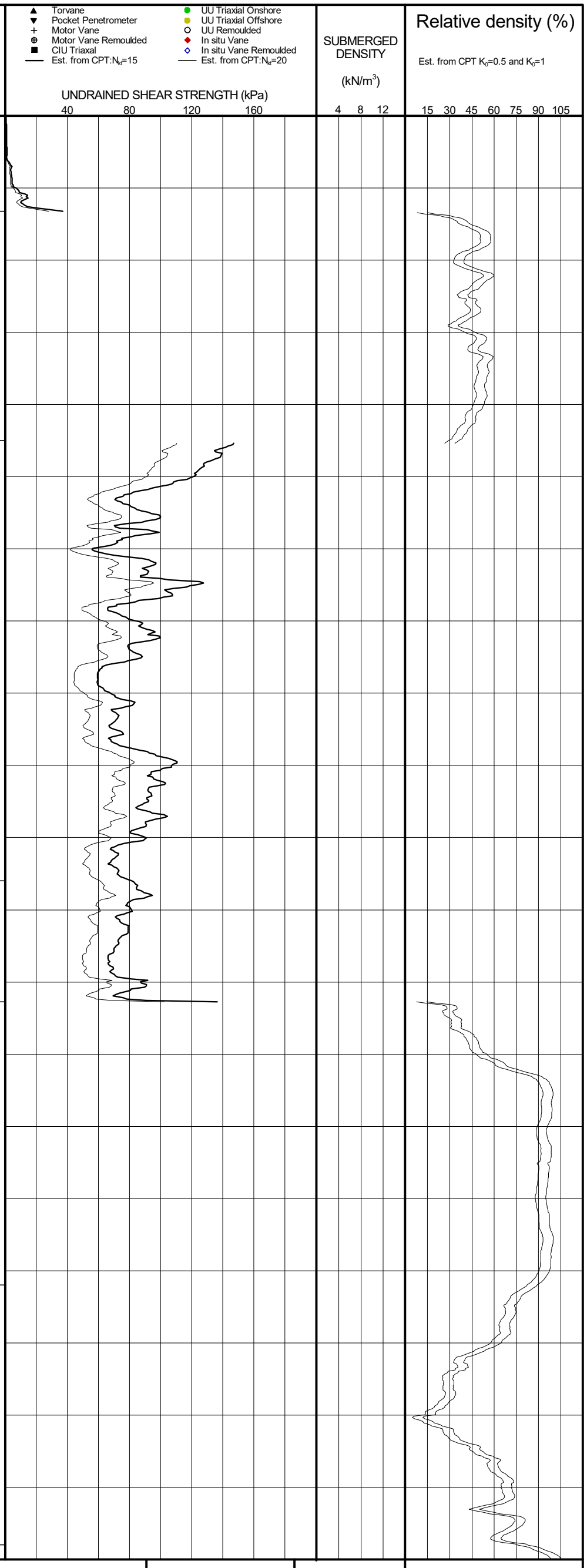
2,3m Medium to high shear strength slightly sandy CLAY

5,3m Medium shear strength sandy CLAY

6,1m Very dense gravelly SAND
... medium dense to dense between 6.15m - 6.65m

8,1m Medium dense to dense gravelly SAND

... becoming very loose to loose between 8.70m - 9.18m



FINAL CPTU LOG

Alpha =0.8

Z3_OWF_B06A_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/04/2023
Water Depth	-103.75 m ZH
Coordinates	E 539897.74 m; N 4729312.85 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					9,9m Very dense gravelly SAND *(continued)*
11	36				Final Depth 10.81m. Depth ended due to Operational Issues Approx. Settlement 0.67m
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B06A_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/04/2023
Water Depth	-103.75 m ZH
Coordinates	E 539897.74 m; N 4729312.85 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

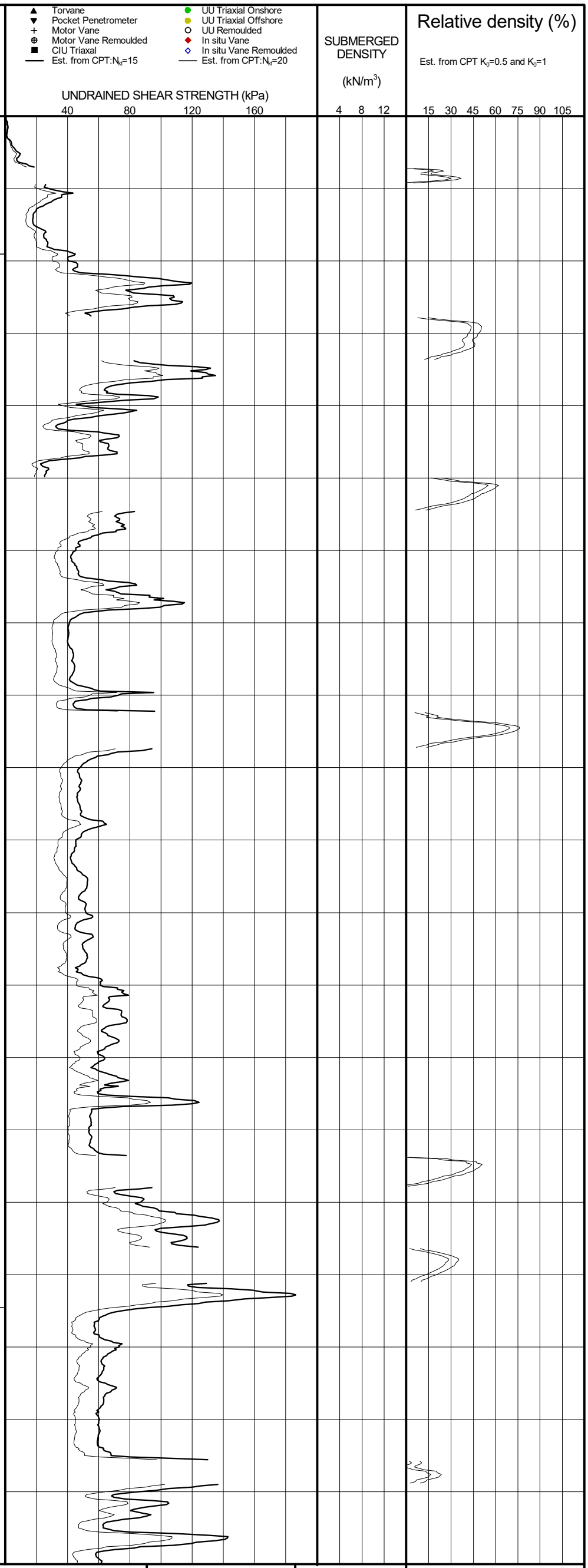
Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

0,0m Extremely low to low shear strength sandy CLAY with partings of loose sand

1,0m Medium to high shear strength sandy CLAY with partings of medium dense to dense sand

8,2m Medium to high shear strength slightly sandy CLAY



FINAL CPTU LOG

Z3_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

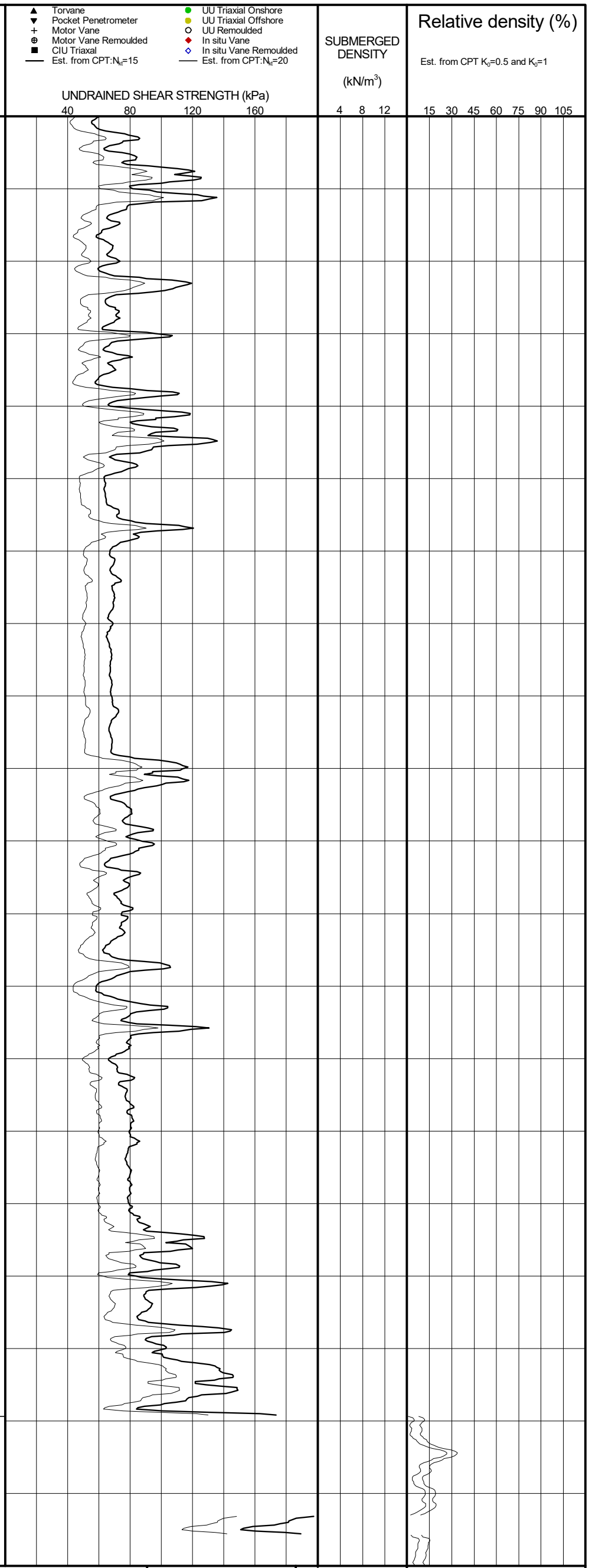
Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544441.62 m; N 4732360.75 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					8,2m Medium to high shear strength slightly sandy CLAY *(continued)*
11	36				
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					19,0m Very loose to loose sandy SILT



FINAL CPTU LOG

Z3_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544441.62 m; N 4732360.75 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

19,0m Very loose to loose sandy SILT
(continued)

20,7m Medium to high shear strength slightly sandy CLAY

24,5m Dense to very dense sandy GRAVEL

26,2m Very dense sandy GRAVEL

Final Depth 26.60m. Depth ended due to Total Force
Approx. Settlement 0.65m

Torvane
Pocket Penetrometer
Motor Vane
Motor Vane Remoulded
CIU Triaxal
Est. from CPT:N_{kt}=15
UU Triaxial Onshore
UU Triaxial Offshore
UU Remoulded
In situ Vane
In situ Vane Remoulded
Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

FINAL CPTU LOG

Z3_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544441.62 m; N 4732360.75 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low to low shear strength sandy CLAY with partings of loose sand

... becoming low shear strength below 0.57m

1,0m Low to medium shear strength sandy CLAY with partings of loose to medium dense sand

8,6m Medium to high shear strength slightly sandy CLAY

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

Alpha =0.8	
Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544440.47 m; N 4732355.59 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

FINAL CPTU LOG

Z3_OWF_B07_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

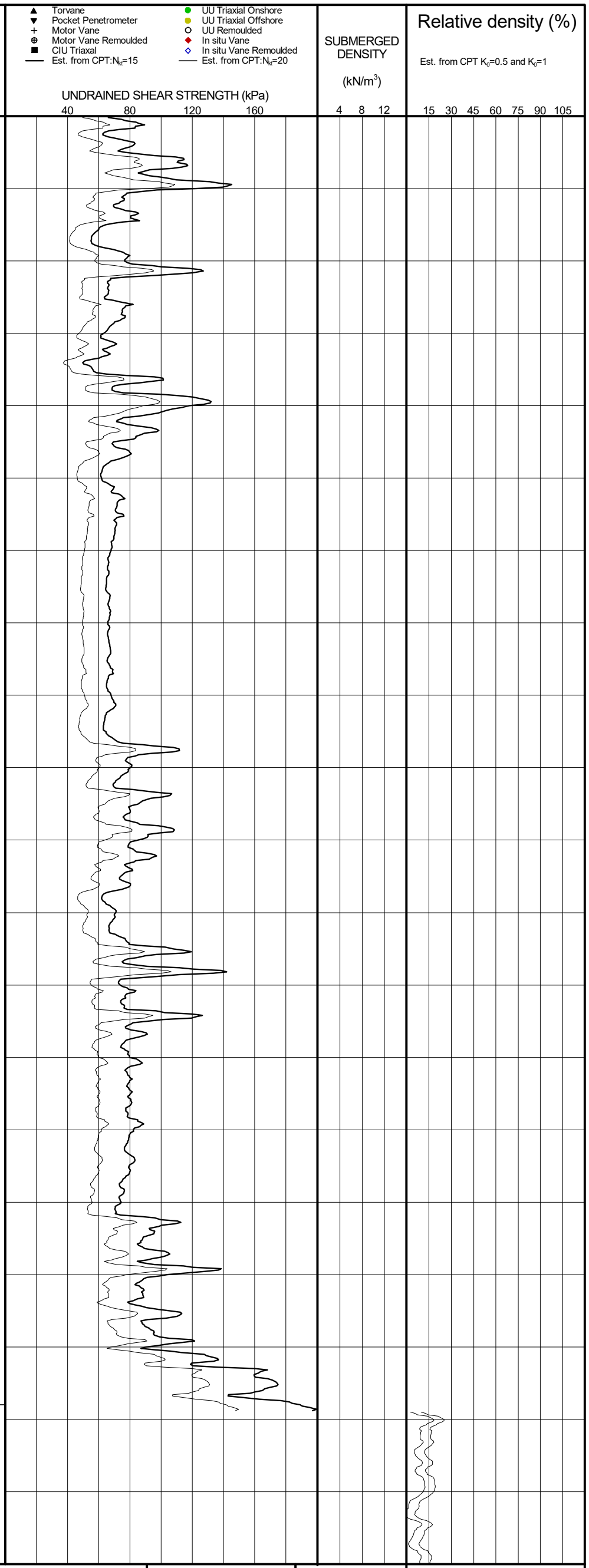
MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
11	36				8,6m Medium to high shear strength slightly sandy CLAY *(continued)*
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					18,9m Very loose to loose sandy SILT



FINAL CPTU LOG

Z3_OWF_B07_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544440.47 m; N 4732355.59 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

18,9m Very loose to loose sandy SILT *(continued)*

20,6m Medium to high shear strength slightly sandy CLAY

24,4m Dense to very dense sandy GRAVEL

26,0m Very dense sandy GRAVEL

Final Depth 26.32m. Depth ended due to Total Force.
Approx. Settlement 0.54m

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

FINAL CPTU LOG

Z3_OWF_B07_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544440.47 m; N 4732355.59 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane | Pocket Penetrometer | Motor Vane | Motor Vane Remoulded | CIU Triaxal | Est. from CPT:N_{kt}=15
UU Triaxial Onshore | UU Triaxial Offshore | UU Remoulded | In situ Vane | In situ Vane Remoulded | Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

SUBMERGED DENSITY (kN/m^3)

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1

0,0m Extremely low to low shear strength slightly silty CLAY

... becoming silty below 0.55m

0,9m Low to medium shear strength slightly sandy CLAY

5,1m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND

6,7m Medium shear strength sandy CLAY

7,2m Very loose to medium dense silty SAND

... becoming dense to very dense below 8.20m

FINAL CPTU LOG

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

7,2m Very loose to medium dense silty SAND
(continued)
... becoming very loose between 10.28m - 10.33m

... becoming very loose to medium dense below 11.15m

11,3m Medium to high shear strength sandy CLAY interbedded with medium dense silty SAND

11,8m Dense to very dense silty SAND

14,8m Very loose to medium dense clayey SAND

... becoming dense to very dense between 16.1m - 16.4m

16,6m High shear strength sandy CLAY interbedded with medium dense silty SAND

17,3m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

Alpha =0.8	
Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

FINAL CPTU LOG

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

▲ Torvane ▼ Pocket Penetrometer + Motor Vane ⊕ Motor Vane Remoulded ■ CIU Triaxal — Est. from CPT:N_{kt}=15
● UU Triaxial Onshore ● UU Triaxial Offshore ○ UU Remoulded ◆ In situ Vane ◇ In situ Vane Remoulded — Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

SUBMERGED DENSITY (kN/m^3)

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

m	ft	UNDRAINED SHEAR STRENGTH (kPa)	SUBMERGED DENSITY (kN/m^3)	Relative density (%)
		40 80 120 160	4 8 12	15 30 45 60 75 90 105
21	68			
22	72			
23	76			
24	80			
25	84			
26	88			
27	92			
28	96			
29				

17,3m Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND *(continued)*

25,8m Medium to high shear strength slightly sandy CLAY with occasional sand partings

28,0m High shear strength sandy CLAY interbedded with very loose to loose silty SAND

FINAL CPTU LOG

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane | Pocket Penetrometer | Motor Vane | Motor Vane Remoulded | CIU Triaxal | Est. from CPT:N_{kt}=15
UU Triaxial Onshore | UU Triaxial Offshore | UU Remoulded | In situ Vane | In situ Vane Remoulded | Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

Termination depth 30.10m. Test ended due to Target Depth reached
Approx. Settlement 0.50m

m	ft
	100
31	
	104
32	
	108
33	
	112
34	
	116
35	
	120
36	
	124
37	
	128
38	
39	

FINAL CPTU LOG

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

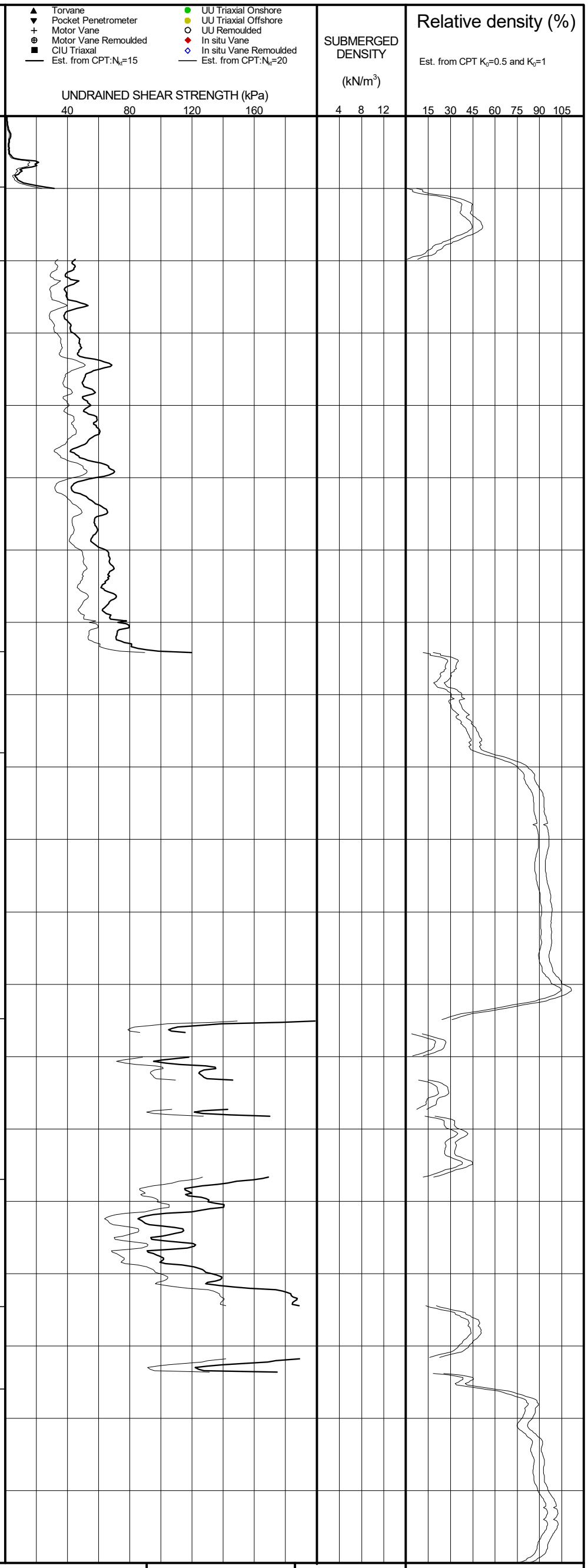
Project Number 113401341

Plate 1d

DEPTH (m / ft) | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

- 0,0m Extremely low to low shear strength slightly silty CLAY
  ... becoming silty below 0.26m
- 0,5m Medium dense silty SAND
- 1,0m Medium to high shear strength sandy CLAY
- 3,7m Loose to medium dense silty SAND
- 4,4m Dense to very dense silty SAND
- 6,2m High shear strength sandy CLAY interbedded with very loose to loose silty SAND
- 7,4m Medium to high shear strength sandy CLAY
- 8,2m Loose to medium dense clayey SAND
- 8,8m Dense to very dense silty SAND



FINAL CPTU LOG

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

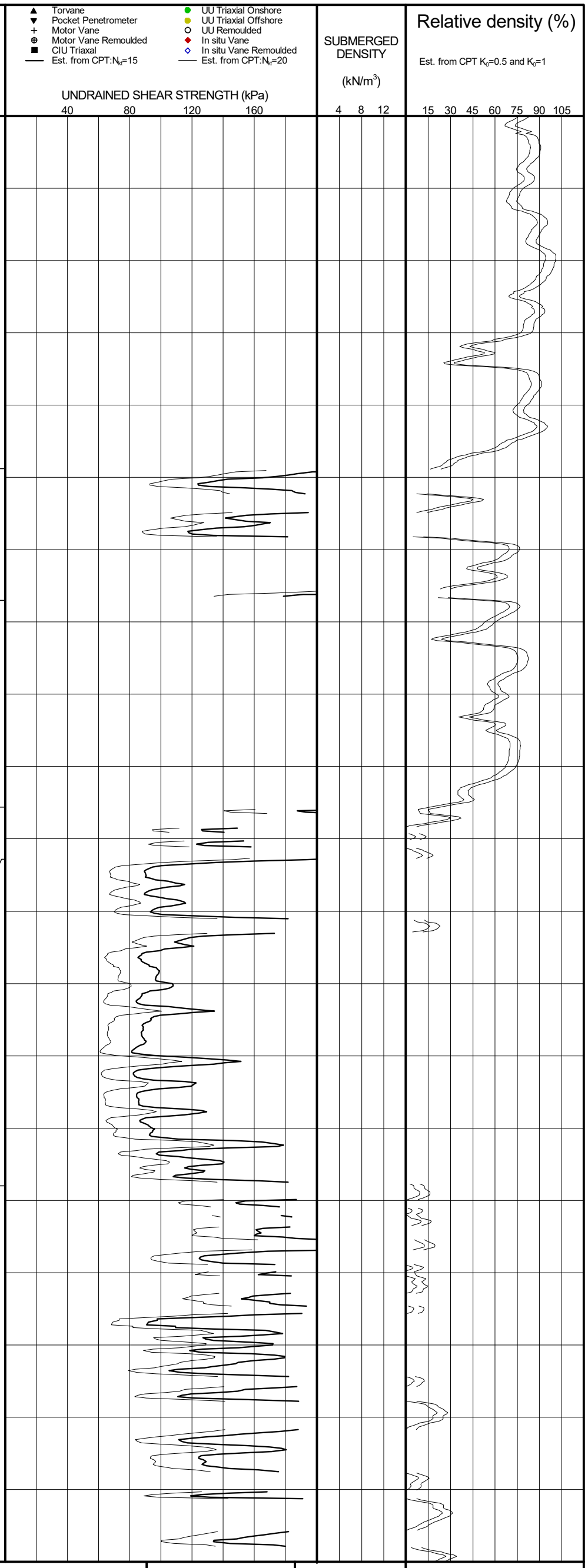
Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
11	36				8,8m Dense to very dense silty SAND *(continued)*
					... becoming silty between 11.55m - 11.70m
12	40				12,4m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND
13	44				13,4m Loose to dense silty SAND
14	48				14,8m High shear strength sandy CLAY interbedded with very lose to loose silty SAND
15	52				15,1m Medium to high shear strength sandy CLAY with occasional sand partings
16	56				
17	60				17,4m High shear strength sandy CLAY interbedded with very loose to loose silty SAND
18	64				
19					



FINAL CPTU LOG

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

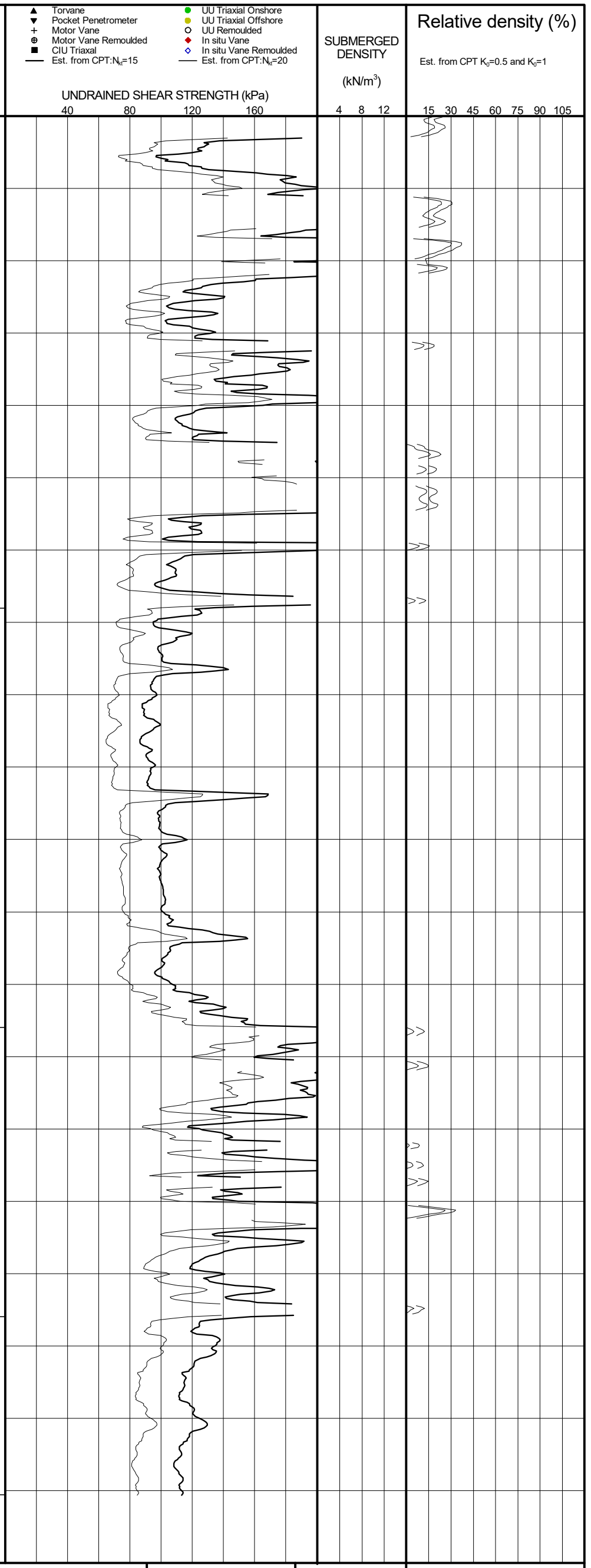
Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					17,4m High shear strength sandy CLAY interbedded with very loose to loose silty SAND *(continued)*
21	68				
22	72				
23	76				23,4m Medium to high shear strength sandy CLAY with occasional sand partings
24	80				
25	84				
26	88				26,3m High shear strength sandy CLAY interbedded with very loose to loose silty SAND
27					
28	92				28,3m High shear strength slightly sandy CLAY
29	96				Termination depth 29.53m. Test ended due to Target Depth reached



FINAL CPTU LOG

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Approx. Settlement 0.50m
31	100				
32	104				
33	108				
34	112				
35	116				
36	120				
37	124				
38	128				
39					

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1d

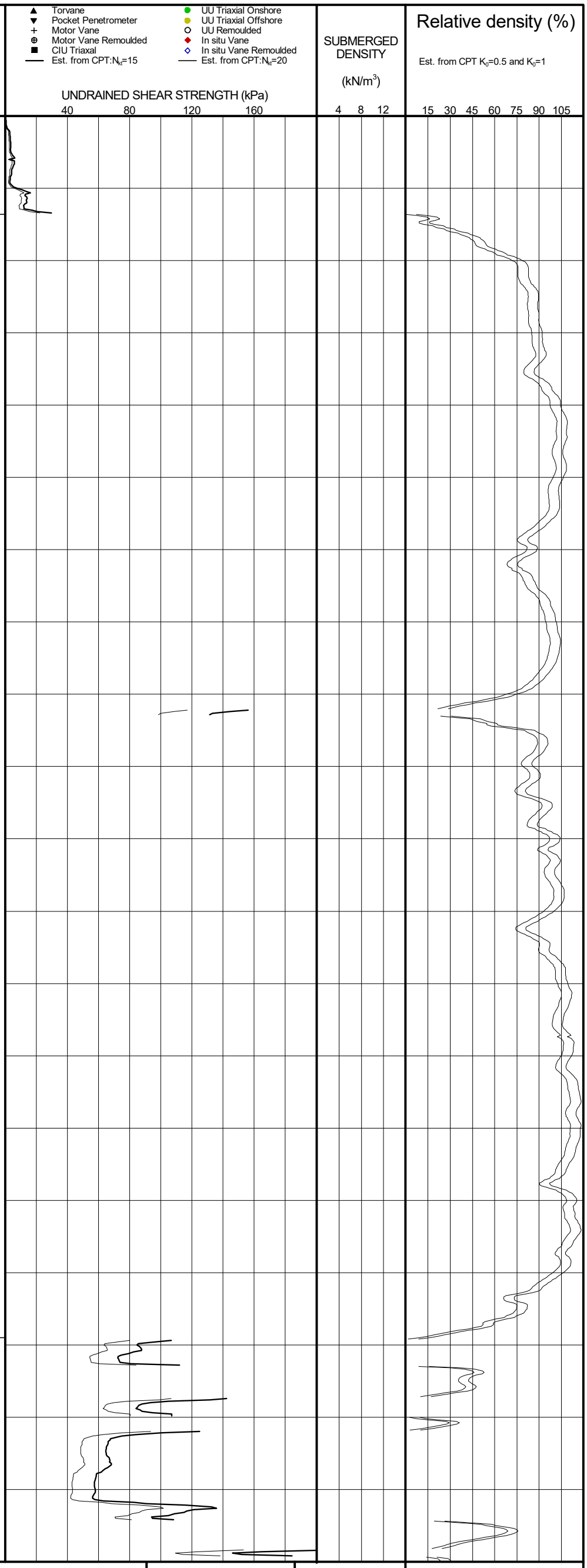
DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,7m Dense to very dense slightly gravelly silty SAND to sandy GRAVEL

4.11m-4.14m: loose silty sand

8,5m Loose to medium dense silty SAND interbedded with low to medium shear stength sandy CLAY



FINAL CPTU LOG

Z3_OWF_B12_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538575.51 m; N 4732342.03 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m | ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

8,5m Loose to medium dense silty SAND interbedded with low to medium shear stength sandy CLAY *(continued)*

10,4m Dense to very dense gravelly SAND

10.80m-10.85m: loose silty sand

18,4m High to very high shear strength sandy CLAY

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

FINAL CPTU LOG

Z3_OWF_B12_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538575.51 m; N 4732342.03 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					18,4m High to very high shear strength sandy CLAY *(continued)*
21	68				20,5m Very dense sandy GRAVEL
22	72				Final Depth 21.49m. Depth ended due to Total Force .Approx. Settlement 0.55m
23	76				
24	80				
25	84				
26	88				
27	92				
28	96				
29					

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B12_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538575.51 m; N 4732342.03 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,7m Dense to very dense slightly gravelly silty SAND to sandy GRAVEL

8,8m Loose to medium dense silty SAND interbedded with low to medium shear stength sandy CLAY

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B12_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538576.28 m; N 4732345.76 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

8,8m Loose to medium dense silty SAND interbedded with low to medium shear stength sandy CLAY *(continued)*

10,7m Dense to very dense SAND

17,0m Medium dense to dense clayey SAND

18,9m Very high shear strength sandy CLAY

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m: 11 12 13 14 15 16 17 18 19
ft: 36 40 44 48 52 56 60 64

FINAL CPTU LOG

Alpha =0.8

Z3_OWF_B12_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538576.28 m; N 4732345.76 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22664 / 001

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					18,9m Very high shear strength sandy CLAY *(continued)*
					20,4m Very dense sandy GRAVEL
					Final Depth 21.09m. Depth ended due to Total Force. Approx. Settlement 0.55m
21	68				
22	72				
23	76				
24	80				
25	84				
26	88				
27	92				
28	96				
29					

▲ Torvane ▼ Pocket Penetrometer + Motor Vane ⊕ Motor Vane Remoulded ■ CIU Triaxal — Est. from CPT:N_{kt}=15

● UU Triaxial Onshore ● UU Triaxial Offshore ○ UU Remoulded ◆ In situ Vane ◇ In situ Vane Remoulded — Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B12_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538576.28 m; N 4732345.76 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

0,0m Extremely low to very low shear strength silty CLAY

... becoming low to medium shear strength below 0.55m

1,4m Dense to very dense silty SAND

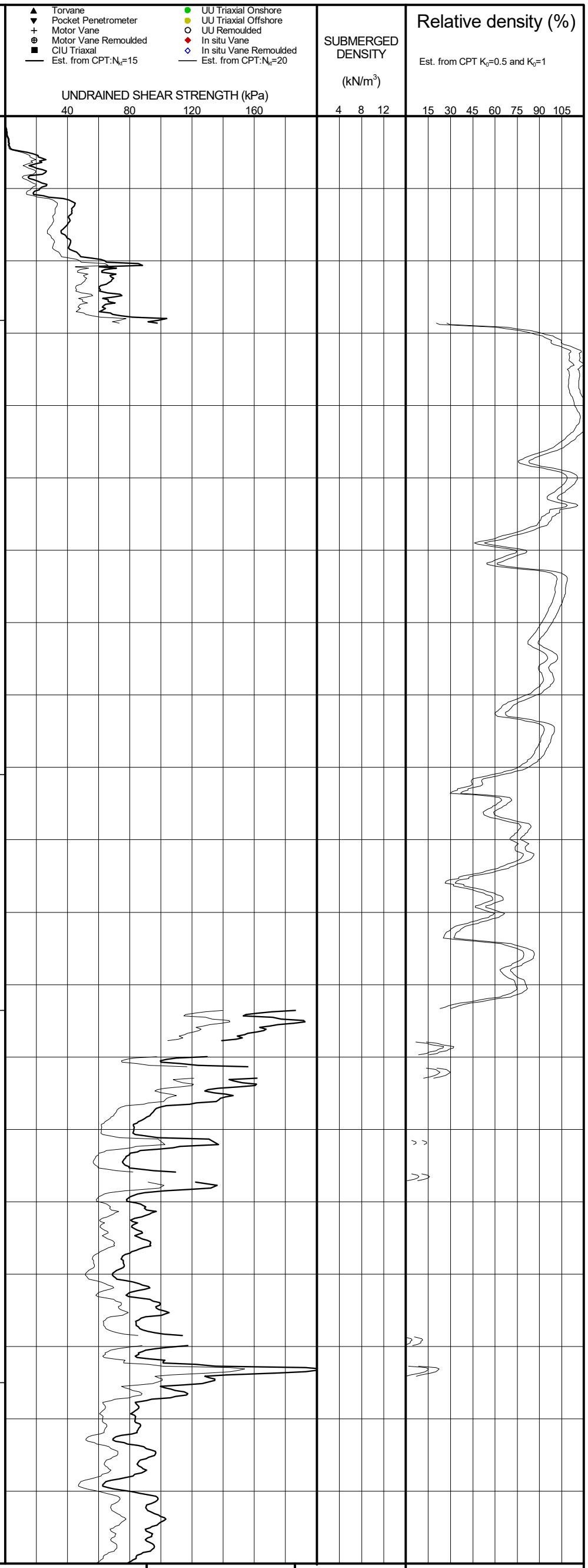
... becoming medium dense between 2.92m - 3.10m

4,6m Medium dense to dense silty SAND

... becoming loose to medium dense between 5.25m - 5.70m

6,2m Medium to high shear strength sandy CLAY with occasional sand partings

8,8m Medium to high shear strength slightly sandy CLAY



FINAL CPTU LOG

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

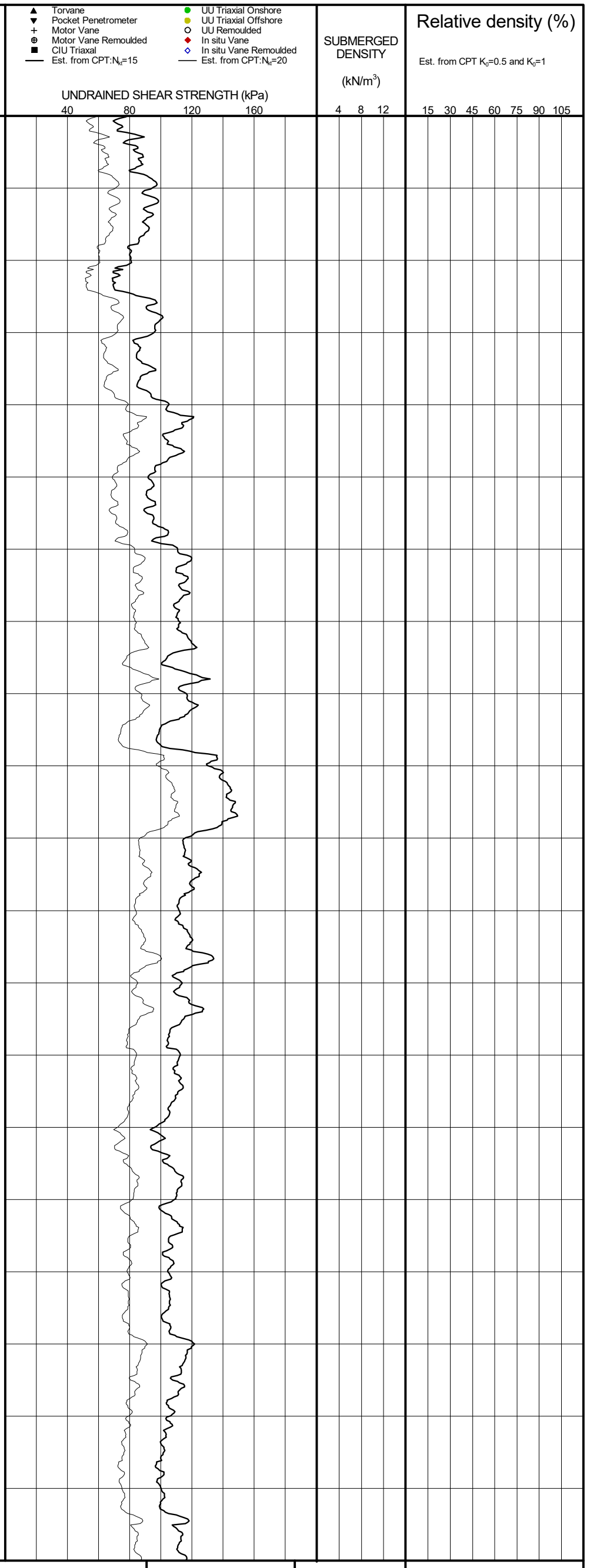
Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					8,8m Medium to high shear strength slightly sandy CLAY *(continued)*
11	36				
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					



SUBMERGED DENSITY (kN/m³)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane | Pocket Penetrometer | Motor Vane | Motor Vane Remoulded | CIU Triaxal | Est. from CPT:N_{kt}=15
UU Triaxial Onshore | UU Triaxial Offshore | UU Remoulded | In situ Vane | In situ Vane Remoulded | Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

SUBMERGED DENSITY (kN/m^3)

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

m	ft	UNDRAINED SHEAR STRENGTH (kPa)	SUBMERGED DENSITY (kN/m^3)	Relative density (%)
		40 80 120 160	4 8 12	15 30 45 60 75 90 105
	68	8,8m Medium to high shear strength slightly sandy CLAY *(continued)*		
21				
	72			
22				
		... with occasional sand partings between below 22.70m		
23				
	76			
24				
	80			
25				
	84			
26				
	88			
27				
	92			
28				
	96			
29				

FINAL CPTU LOG

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					8,8m Medium to high shear strength slightly sandy CLAY *(continued)*
	100				
					Termination depth 30.41m. Test ended due to Target Depth reached Approx. Settlement 0.55m
31					
	104				
32					
	108				
33					
34					
	112				
35					
	116				
36					
	120				
37					
	124				
38					
39	128				

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1d

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength slightly silty CLAY

... becoming silty below 0.40m

0,8m Low to medium shear strength slightly sandy CLAY

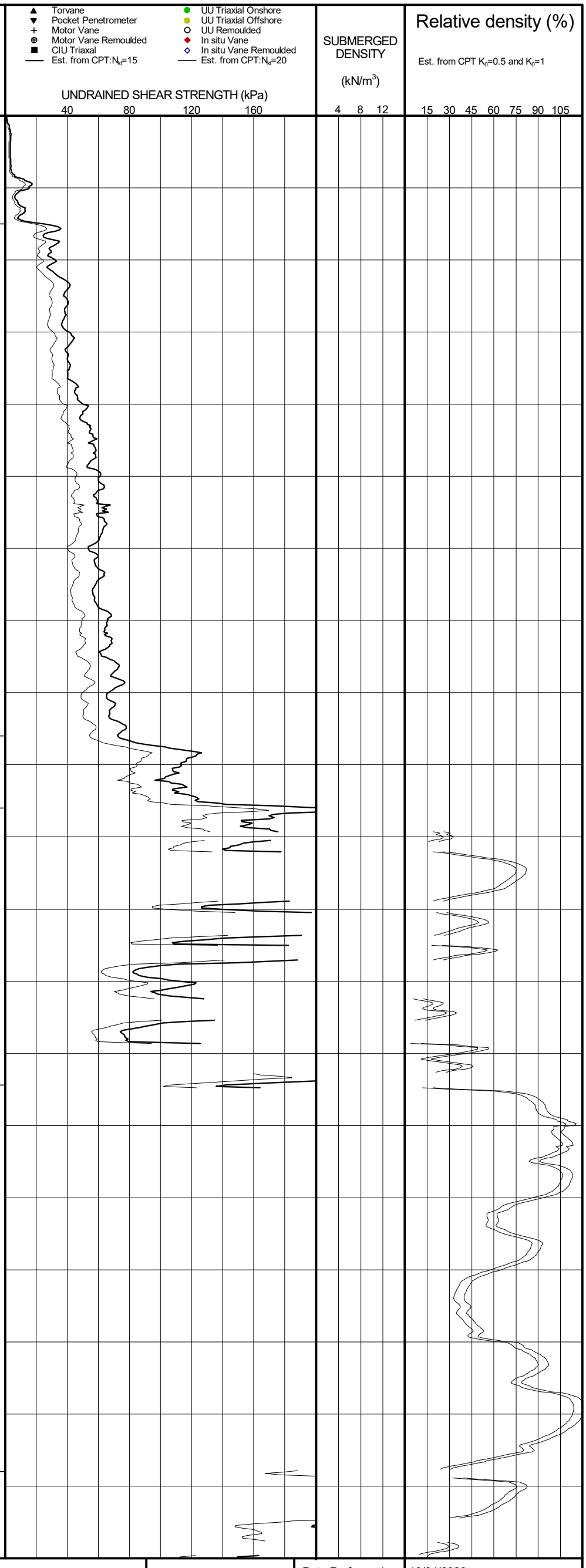
4,3m High shear strength sandy CLAY

4,8m High shear strength sandy CLAY interbedded with very loose to medium dense silty SAND

6,7m Dense to very dense slightly gravelly silty SAND

... becoming medium dense between 7.95m - 8.50m

9,4m Loose to medium dense clayey SAND



FINAL CPTU LOG

Alpha =0.8

Z3_OWF_B17B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-98.18 m ZH
Coordinates	E 538433.7 m; N 4741362.31 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

▲ Torvane ▼ Pocket Penetrometer + Motor Vane ⊕ Motor Vane Remoulded ■ CIU Triaxal — Est. from CPT:N_{kt}=15
● UU Triaxial Onshore ● UU Triaxial Offshore ○ UU Remoulded ◆ In situ Vane ◇ In situ Vane Remoulded — Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

SUBMERGED DENSITY (kN/m³)

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

10,2m Medium to high shear strength slightly sandy CLAY

11,2m High to very high shear strength sandy CLAY interbedded with very loose to loose silty SAND

16,1m High shear strength slightly sandy CLAY

FINAL CPTU LOG

Z3_OWF_B17B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE A TRADEBE COMPANY

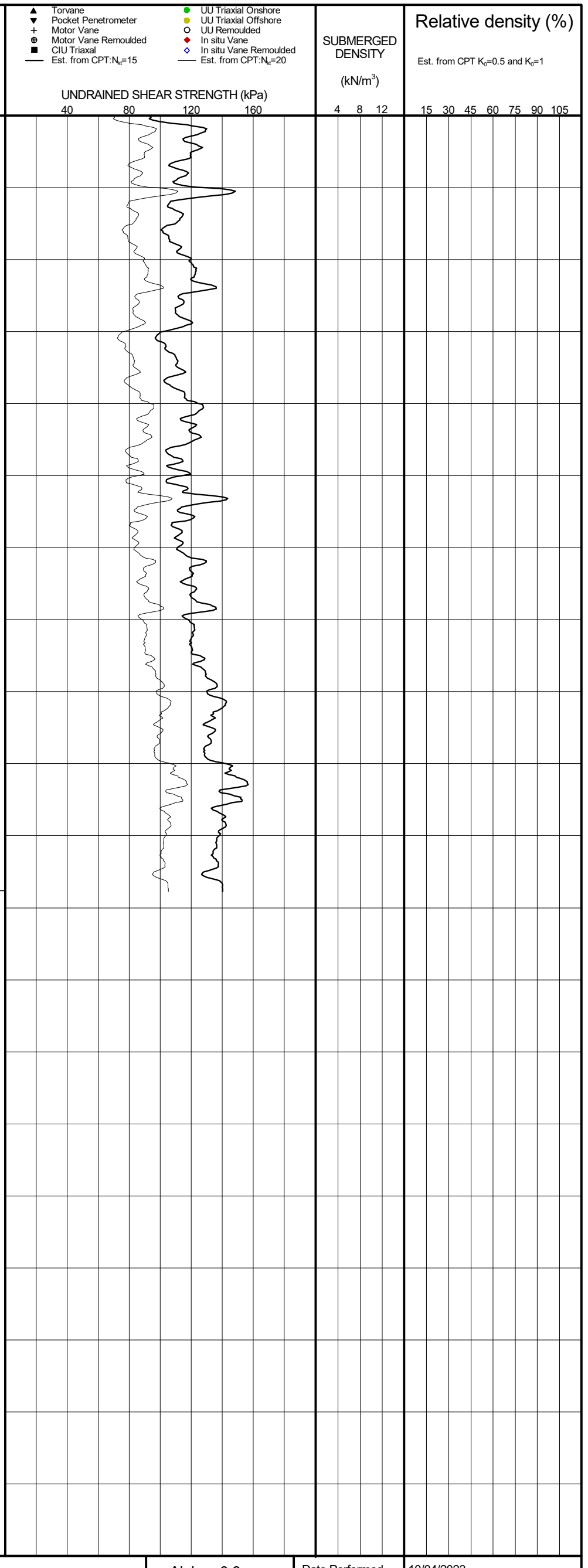
Date Performed	10/04/2023
Water Depth	-98.18 m ZH
Coordinates	E 538433.7 m; N 4741362.31 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					16,1m High shear strength slightly sandy CLAY *(continued)*
21	68				
22	72				
23	76				
24	80				
25					
	84				Termination depth 25,38m. Test ended due to Maximum Cone Inclination Approx. Settlement 0.50m
26					
	88				
27					
28	92				
29	96				



SUBMERGED DENSITY (kN/m³)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B17B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-98.18 m ZH
Coordinates	E 538433.7 m; N 4741362.31 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

0,0m	Extremely low shear strength slightly silty CLAY
1,4m	Extremely low to very low shear strength silty CLAY
2,1m	Low to medium shear strength slightly sandy CLAY
4,5m	High shear strength sandy CLAY
4,6m	Medium dense silty SAND
4,8m	Medium to high shear strength silty CLAY
6,1m	Medium to high shear strength sandy CLAY interbedded with very loose to loose silty SAND
7,0m	Medium to high shear strength slightly sandy CLAY

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

FINAL CPTU LOG

Alpha =0.8

Z3_OWF_B19B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

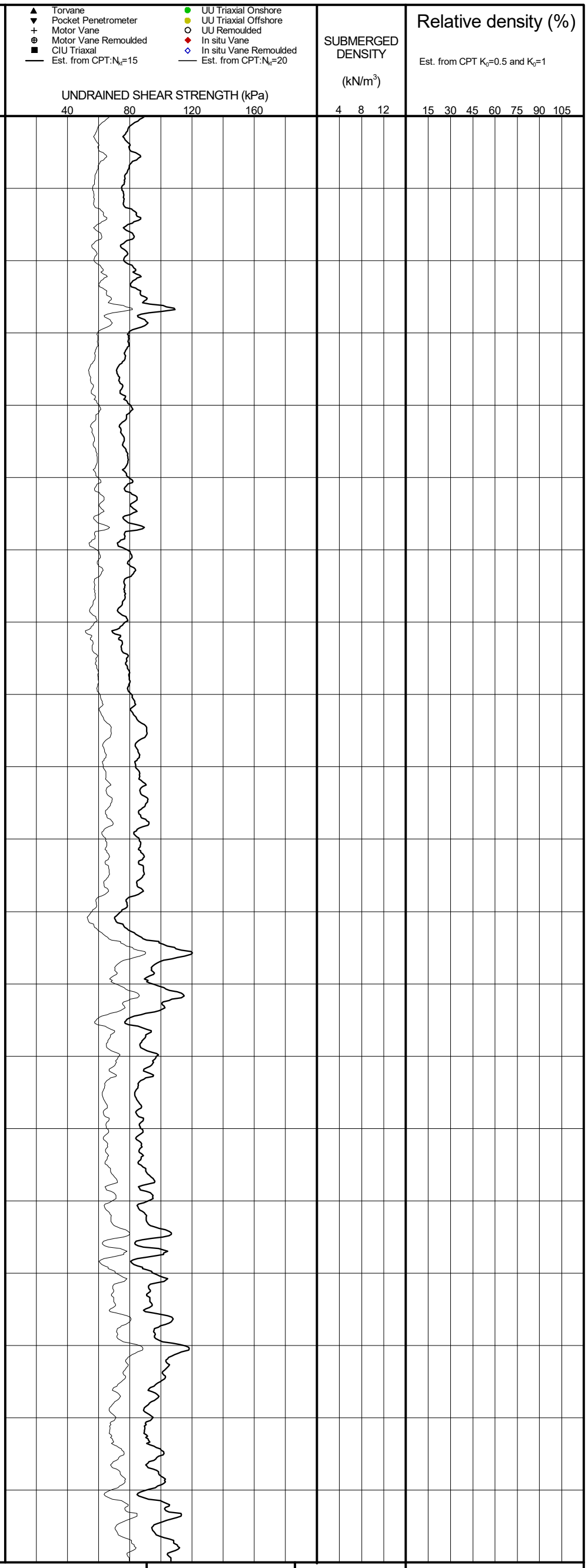
Date Performed	10/04/2023
Water Depth	-89.77 m ZH
Coordinates	E 530959.69 m; N 4744344.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22596 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					7,0m Medium to high shear strength slightly sandy CLAY *(continued)*
11	36				
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					



SUBMERGED DENSITY (kN/m³)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z3_OWF_B19B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-89.77 m ZH
Coordinates	E 530959.69 m; N 4744344.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22596 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

7,0m Medium to high shear strength slightly sandy CLAY *(continued)*

22,0m Medium to high shear strength sandy CLAY

22,4m Medium dense to dense SAND

Termination depth 22.48m. Test ended due to Maximum Cone Inclination
Approx. Settlement 0.90m

FINAL CPTU LOG

Z3_OWF_B19B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-89.77 m ZH
Coordinates	E 530959.69 m; N 4744344.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22596 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

APPENDIX XI – CPT DETAILS - AO6 OWF ZONE 3

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B02_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-100.92 m ZH
Coordinates	E 542916.24 m; N 4724851.18 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B02_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-100.92 m ZH
Coordinates	E 542916.24 m; N 4724851.18 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B02_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	19/04/2023
Water Depth	-100.92 m ZH
Coordinates	E 542916.24 m; N 4724851.18 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B04_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-96.59 m ZH
Coordinates	E 532420.52 m; N 4726323.57 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B06A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	19/04/2023
Water Depth	-103.84 m ZH
Coordinates	E 539895.75 m; N 4729322.42 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 36
12 40
13 44
14 48
15 52
16 56
17 60
18 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B06A_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	19/04/2023
Water Depth	-103.84 m ZH
Coordinates	E 539895.75 m; N 4729322.42 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B06A_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/04/2023
Water Depth	-103.75 m ZH
Coordinates	E 539897.74 m; N 4729312.85 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 36
12 40
13 44
14 48
15 52
16 56
17 60
18 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B06A_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/04/2023
Water Depth	-103.75 m ZH
Coordinates	E 539897.74 m; N 4729312.85 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544441.62 m; N 4732360.75 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544441.62 m; N 4732360.75 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B07_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544441.62 m; N 4732360.75 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B07_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544440.47 m; N 4732355.59 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B07_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544440.47 m; N 4732355.59 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25 84
26 88
27 92
28 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B07_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	27/07/2023
Water Depth	98.98 m ZH
Coordinates	E 544440.47 m; N 4732355.59 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

SOIL PROFILE

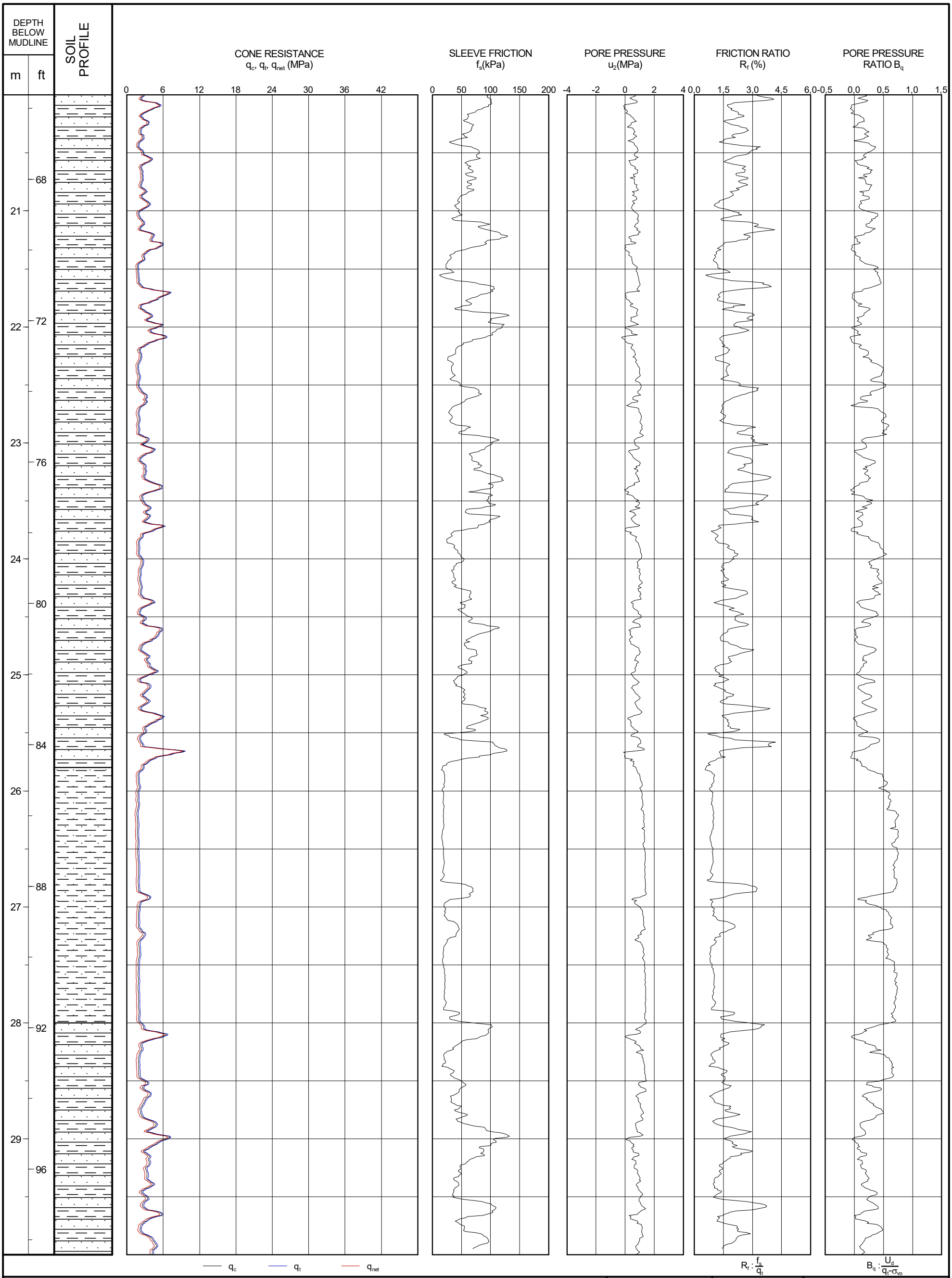
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
	100
31	
	104
32	
	108
33	
	112
34	
	116
35	
	120
36	
	124
37	
	128
38	
39	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B09_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	10/04/2023
Water Depth	-102.04 m ZH
Coordinates	E 542910.17 m; N 4739851.35 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Z3_OWF_B10B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	11/04/2023
Water Depth	-101.59 m ZH
Coordinates	E 539952.73 m; N 4736847.78 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B12_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538575.51 m; N 4732342.03 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22664 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B12_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538575.51 m; N 4732342.03 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B12_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538575.51 m; N 4732342.03 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B12_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538576.28 m; N 4732345.76 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

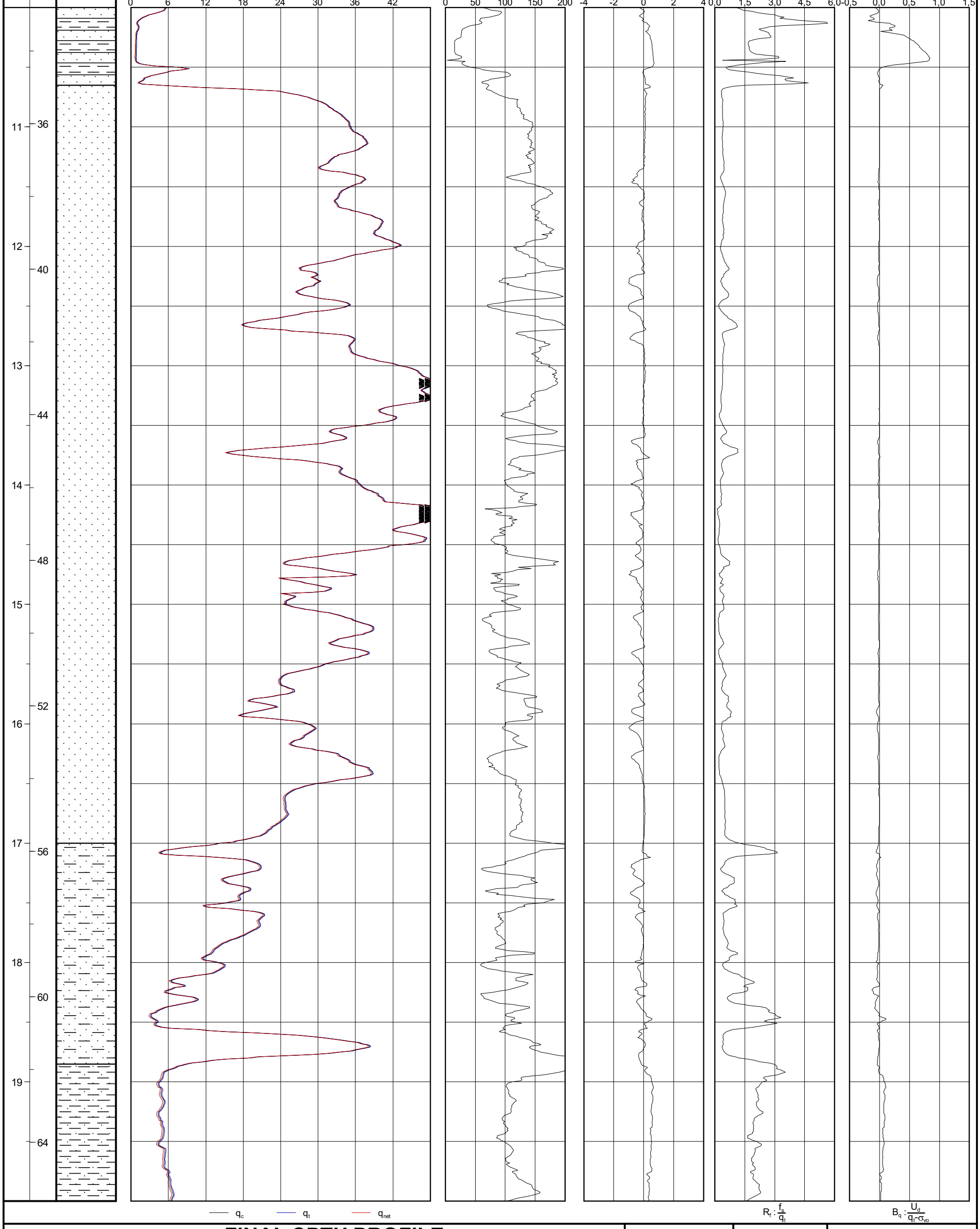
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B12_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538576.28 m; N 4732345.76 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25
26 84
27 88
28 92
29 96

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B12_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
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TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	26/07/2023
Water Depth	100.38 m ZH
Coordinates	E 538576.28 m; N 4732345.76 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22664 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

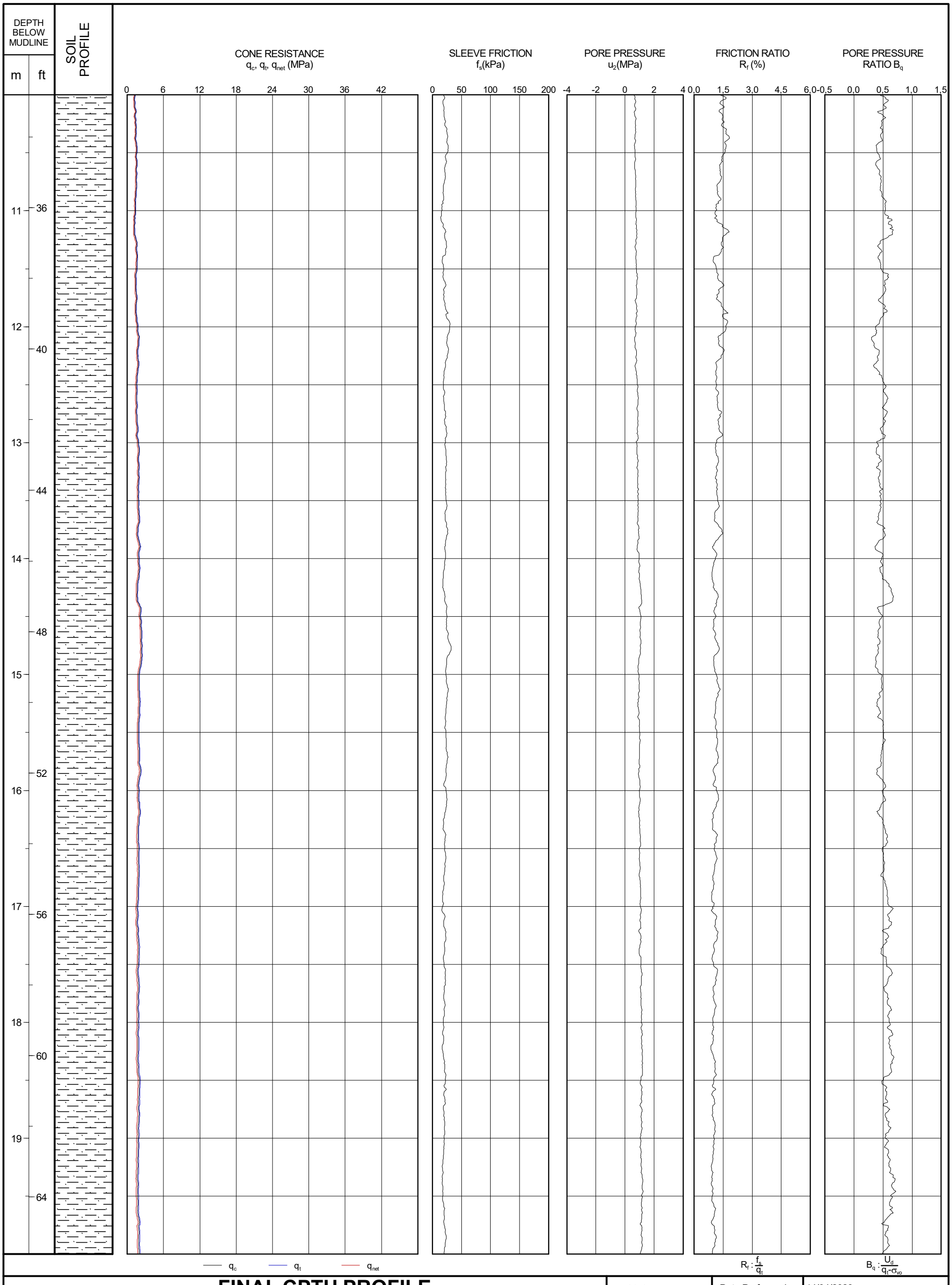
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a



FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
	100
31	
	104
32	
	108
33	
	112
34	
	116
35	
	120
36	
	124
37	
	128
38	
39	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	14/04/2023
Water Depth	-93.01 m ZH
Coordinates	E 530948.94 m; N 4735899.4 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3d

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B17B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-98.18 m ZH
Coordinates	E 538433.7 m; N 4741362.31 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q

0 6 12 18 24 30 36 42

0 50 100 150 200

-4 -2 0 2 4

0,0 1,5 3,0 4,5 6,0

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B17B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-98.18 m ZH
Coordinates	E 538433.7 m; N 4741362.31 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B17B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	10/04/2023
Water Depth	-98.18 m ZH
Coordinates	E 538433.7 m; N 4741362.31 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22597 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Z3_OWF_B19B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-89.77 m ZH
Coordinates	E 530959.69 m; N 4744344.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22596 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B19B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	10/04/2023
Water Depth	-89.77 m ZH
Coordinates	E 530959.69 m; N 4744344.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22596 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z3_OWF_B19B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	10/04/2023
Water Depth	-89.77 m ZH
Coordinates	E 530959.69 m; N 4744344.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22596 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

APPENDIX XII – CPT LOGS - AO6 OWF ZONE 4

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

0,0m Extremely low to very low shear strength silty CLAY

... becoming sandy below 0.37m

0,6m Dense slightly silty SAND

1,2m Very dense slightly silty SAND

... becoming silty below 3.45m

7,2m Dense to very dense silty SAND

8,2m Dense silty SAND

1	4
2	8
3	12
4	16
5	20
6	24
7	28
8	32
9	

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

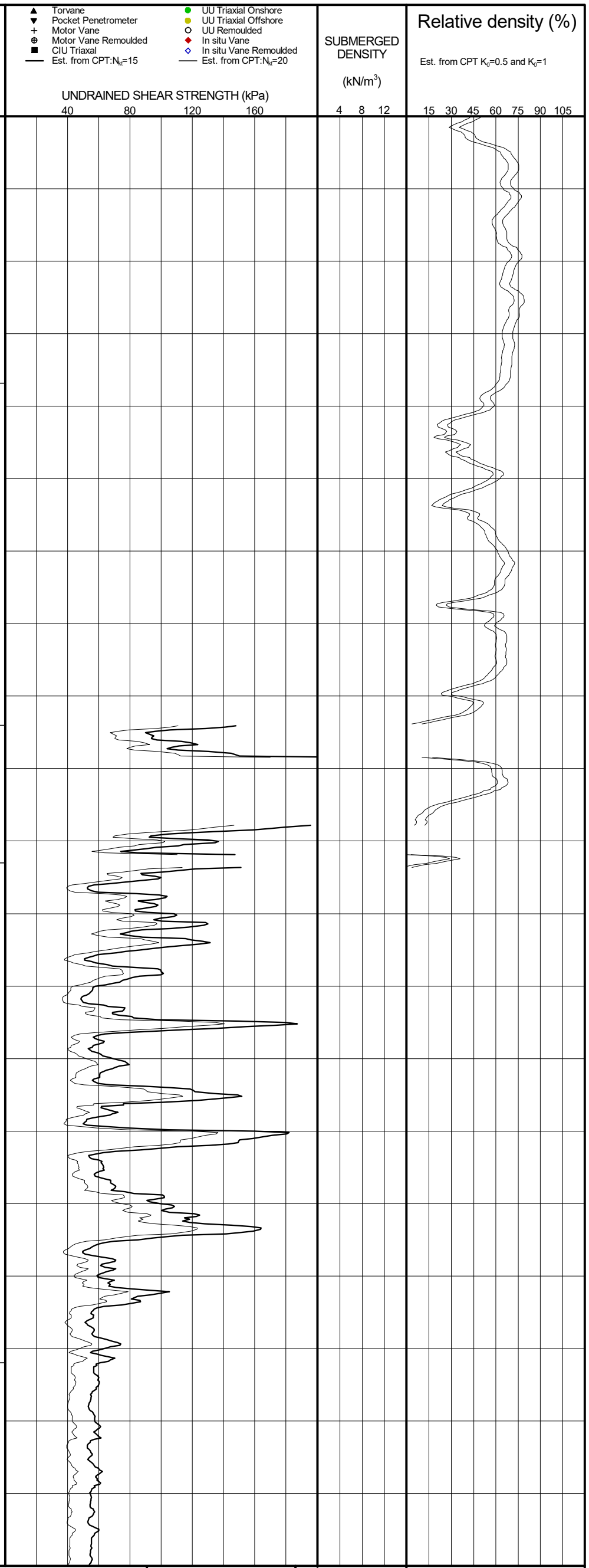
Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					8,2m Dense silty SAND *(continued)* ... medium dense between 9.89 - 10.25m
11	36				
					11,8m Loose to medium dense silty SAND
12	40				
13	44				
14					14,2m High shear strength sandy CLAY interbedded with medium dense silty SAND
	48				
15					15,2m Medium to high shear strength sandy CLAY
	52				
16					
17	56				
18	60				18,6m Medium shear strength slightly sandy CLAY
19					
	64				



FINAL CPTU LOG

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

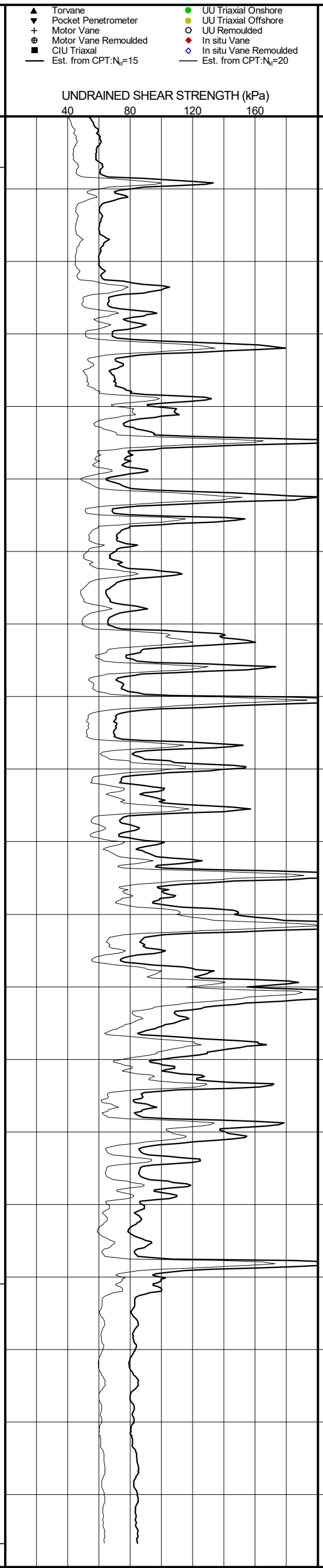
Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					18,6m Medium shear strength slightly sandy CLAY *(continued)*
					20,4m Medium to high shear strength sandy CLAY
21	68				
22	72				
23	76				
24	80				
25	84				
26	88				
27					
28	92				28,1m Medium to high shear strength slightly sandy CLAY
29	96				



SUBMERGED DENSITY (kN/m³)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Final Depth 29.84m. Depth ended due to Target Depth reached Approx. Settlement 0.57m

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

m: 31 32 33 34 35 36 37 38 39

ft: 100 104 108 112 116 120 124 128

FINAL CPTU LOG

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1d

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

0,0m Extremely low shear strength silty CLAY

0,5m Medium dense to dense gravelly SAND

1,0m Very dense gravelly SAND

... dense between 5.49m - 5.60m

8,2m Dense slightly gravelly SAND

9,5m Dense silty SAND

FINAL CPTU LOG

Z4_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-93.48 m ZH
Coordinates	E 604966.32 m; N 4757946.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane; Pocket Penetrometer; Motor Vane; Motor Vane Remoulded; CIU Triaxal; Est. from CPT:N_{kt}=15; UU Triaxial Onshore; UU Triaxial Offshore; UU Remoulded; In situ Vane; In situ Vane Remoulded; Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa) 40 80 120 160

SUBMERGED DENSITY (kN/m^3) 4 8 12

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1 — 15 30 45 60 75 90 105

9,5m Dense silty SAND *(continued)*

... clayey sand between 10.48m - 10.51m

13,7m Loose to medium dense silty SAND

16,7m Medium to high shear strength sandy CLAY

18,7m Low to medium shear strength sandy CLAY

m: 11, 12, 13, 14, 15, 16, 17, 18, 19

ft: 36, 40, 44, 48, 52, 56, 60, 64

FINAL CPTU LOG

Z4_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-93.48 m ZH
Coordinates	E 604966.32 m; N 4757946.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m | ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

18,7m Low to medium shear strength sandy CLAY *(continued)*

21,6m Medium to high shear strength slightly sandy CLAY

25,3m Dense to very dense slightly gravelly SAND

28,5m Very dense gravelly SAND

Final Depth 28.87m. Depth ended due to Maximum Thrust
Approx. Settlement 0.59m

Torvane
Pocket Penetrometer
Motor Vane
Motor Vane Remoulded
CIU Triaxal
Est. from CPT:N_{kt}=15
UU Triaxial Onshore
UU Triaxial Offshore
UU Remoulded
In situ Vane
In situ Vane Remoulded
Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

FINAL CPTU LOG

Z4_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-93.48 m ZH
Coordinates	E 604966.32 m; N 4757946.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,5m Dense to very dense slightly gravelly silty SAND

3,8m Loose to medium dense silty SAND interbedded with medium to high shear stength sandy CLAY

5,4m Dense to very dense silty SAND

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B05B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

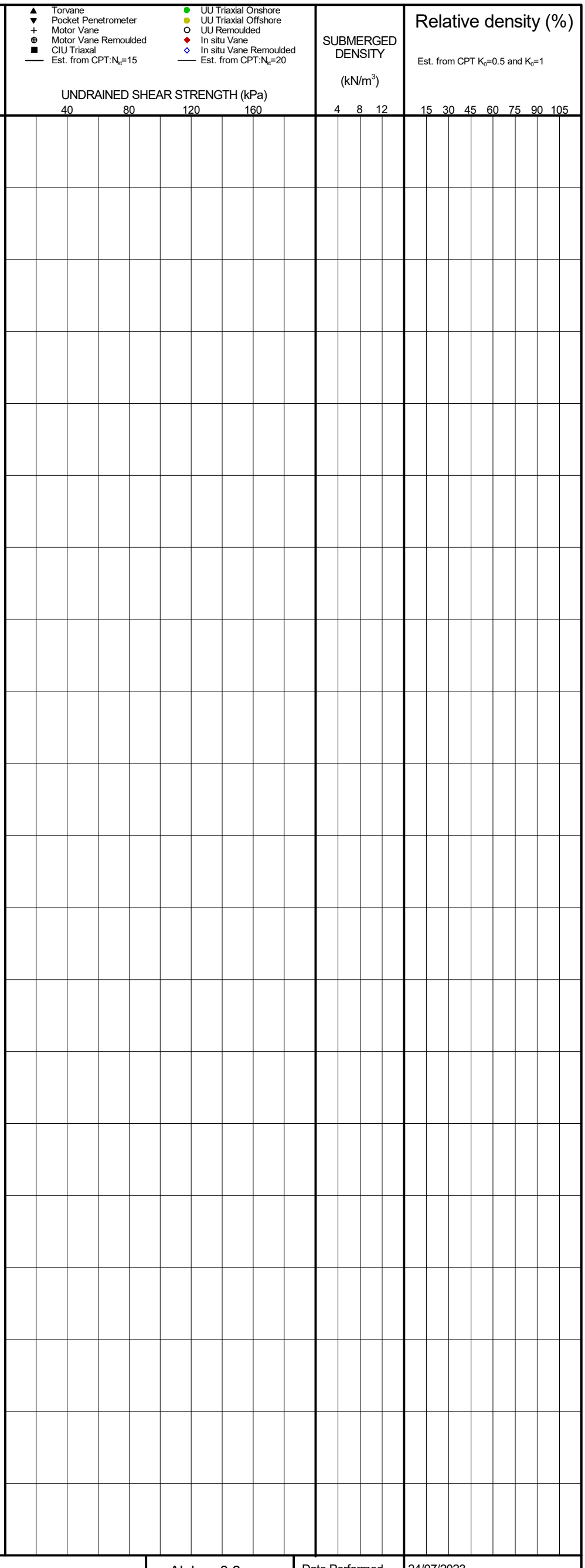
Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609356.13 m; N 4767063.14 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Final Depth 9.82m. Depth ended due to Equipment Failure Approx. Settlement 0.55m
11	36				
12	40				
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					



FINAL CPTU LOG

Z4_OWF_B05B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

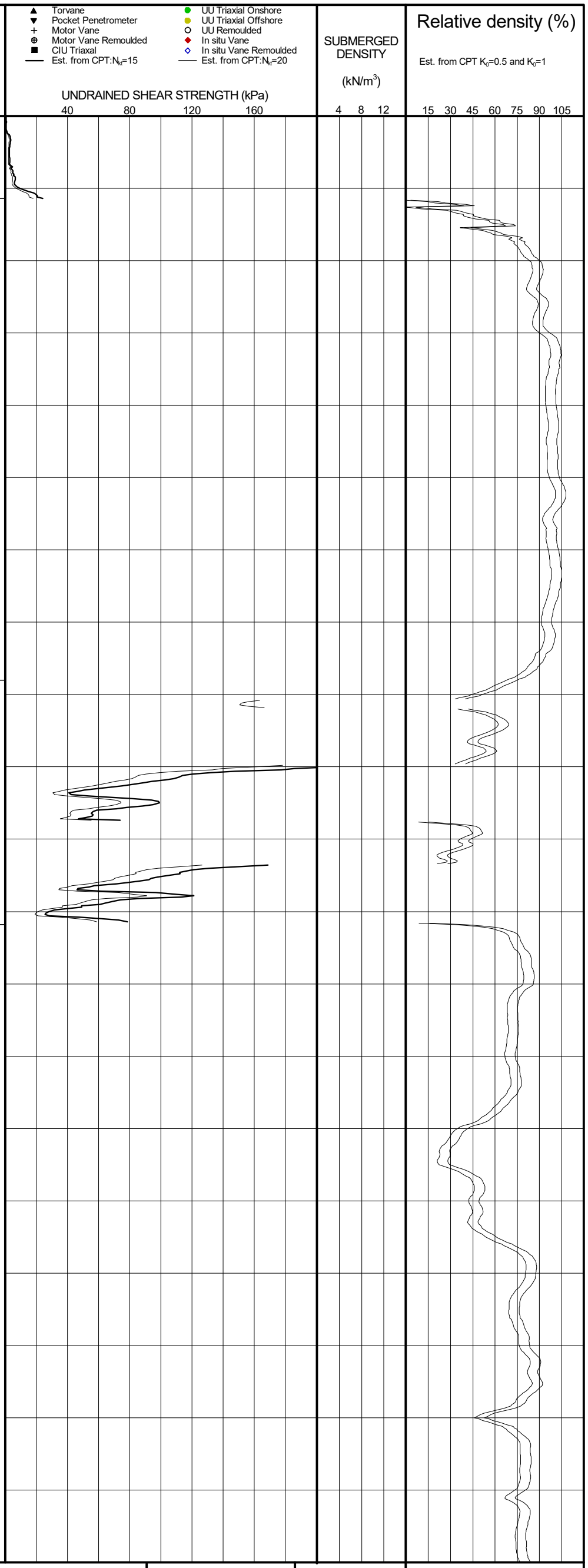
Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609356.13 m; N 4767063.14 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					0,0m Extremely low shear strength silty CLAY
					0,6m Dense to very dense slightly gravelly silty SAND
					3,9m Medium dense silty SAND interbedded with medium to high shear stength sandy CLAY
					5,6m Medium dense to dense silty SAND with partings of loose to medium dense sandy SILT



FINAL CPTU LOG

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

▲ Torvane ▼ Pocket Penetrometer + Motor Vane ⊕ Motor Vane Remoulded ■ CIU Triaxal — Est. from CPT:N_{kt}=15
● UU Triaxial Onshore ● UU Triaxial Offshore ○ UU Remoulded ◆ In situ Vane ◇ In situ Vane Remoulded — Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

SUBMERGED DENSITY (kN/m^3)

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

m	ft	UNDRAINED SHEAR STRENGTH (kPa)	SUBMERGED DENSITY (kN/m^3)	Relative density (%)
		40 80 120 160	4 8 12	15 30 45 60 75 90 105
11	36			
12	40			
13	44			
14	48			
15	52			
16	56			
17	60			
18	64			
19				

5,6m Medium dense to dense silty SAND with partings of loose to medium dense sandy SILT *(continued)*

10,5m Low to medium shear strength sandy CLAY

11,1m Medium dense clayey SAND

12,6m Low to medium shear strength sandy CLAY with partings of very loose to loose sand

16,4m Dense to very dense gravelly SAND

FINAL CPTU LOG

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					16,4m Dense to very dense gravelly SAND *(continued)*
	68				
21					20,8m Dense gravelly SAND
22	72				
23	76				
					23,6m High shear strength sandy CLAY
24					24,0m Very dense gravelly SAND
	80				
25					
	84				
26					
					26,5m Dense gravelly SAND
	88				
27					
28	92				
29					29,0m Loose to medium dense clayey SAND
	96				
					29,5m Dense gravelly SAND

Torvane
Pocket Penetrometer
Motor Vane
Motor Vane Remoulded
CIU Triaxal
Est. from CPT:N_{kt}=15
UU Triaxial Onshore
UU Triaxial Offshore
UU Remoulded
In situ Vane
In situ Vane Remoulded
Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

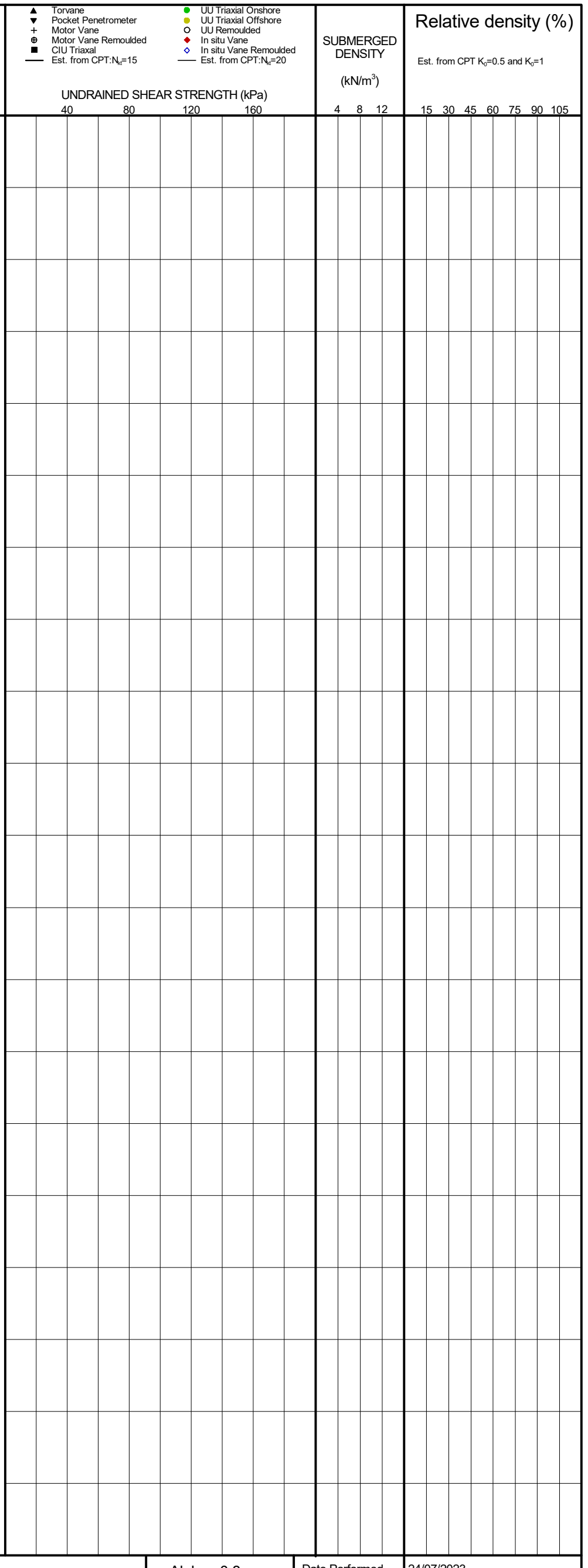
Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Final Depth 29.81m. Depth ended due to Target Depth. Approx. Settlement 0.55m



FINAL CPTU LOG

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1d

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

Torvane; Pocket Penetrometer; Motor Vane; Motor Vane Remoulded; CIU Triaxal; Est. from CPT:N_{kt}=15; UU Triaxial Onshore; UU Triaxial Offshore; UU Remoulded; In situ Vane; In situ Vane Remoulded; Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

m	ft
1	4
2	8
3	12
4	16
5	20
6	24
7	28
8	32
9	

0,0m Extremely low shear strength silty CLAY

1,0m Very loose silty SAND

2,0m Medium dense silty SAND

2,6m Dense silty SAND

... medium dense between 4.47m - 4.73m

7,1m Medium to high shear strength sandy CLAY

8,5m Low shear strength slightly sandy CLAY interbedded with medium dense silty SAND

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B06_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-87.83 m ZH
Coordinates	E 609199.29 m; N 4773006.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m | ft

SOIL PROFILE

SAMPLE NO

SEABED CPT

SOIL DESCRIPTION

8,5m Low shear strength slightly sandy CLAY interbedded with medium dense silty SAND *(continued)*

11,8m Low to high shear strength sandy CLAY interbedded with loose to medium dense silty SAND

12,5m Very dense gravelly SAND

... dense silty sand between 15.5m - 16.3m

17,4m Medium dense slightly gravelly silty SAND

19,2m Very dense gravelly SAND

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B06_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-87.83 m ZH
Coordinates	E 609199.29 m; N 4773006.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Final Depth 19.88m. Depth ended due to Maximum Thrust Approx. Settlement 0.71m

▲ Torvane ▼ Pocket Penetrometer + Motor Vane ⊕ Motor Vane Remoulded ■ CIU Triaxal — Est. from CPT:N_{kt}=15
● UU Triaxial Onshore ● UU Triaxial Offshore ○ UU Remoulded ◆ In situ Vane ◇ In situ Vane Remoulded — Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

21 68
22 72
23 76
24 80
25 84
26 88
27 92
28 96
29

FINAL CPTU LOG

Z4_OWF_B06_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-87.83 m ZH
Coordinates	E 609199.29 m; N 4773006.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,8m Very loose clayey SAND

1,3m Loose to medium dense silty SAND

2,5m Dense to very dense slightly silty slightly gravelly SAND

... medium dense between 6.12 - 6.24m

6,7m Medium to high shear strength slightly sandy CLAY

Torvane; Pocket Penetrometer; Motor Vane; Motor Vane Remoulded; CIU Triaxal; Est. from CPT:N_{kt}=15; UU Triaxial Onshore; UU Triaxial Offshore; UU Remoulded; In situ Vane; In situ Vane Remoulded; Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa): 40 80 120 160

SUBMERGED DENSITY (kN/m^3): 4 8 12

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1: 15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B09B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.36 m ZH
Coordinates	E 600185.17 m; N 4771320.46 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane; Pocket Penetrometer; Motor Vane; Motor Vane Remoulded; CIU Triaxal; Est. from CPT:N_{kt}=15; UU Triaxial Onshore; UU Triaxial Offshore; UU Remoulded; In situ Vane; In situ Vane Remoulded; Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa) 40 80 120 160

SUBMERGED DENSITY (kN/m^3) 4 8 12

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1: 15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

6,7m Medium to high shear strength slightly sandy CLAY *(continued)*

13,2m Very dense slightly gravelly SAND

14,0m Loose clayey SAND

14,7m High to very high shear strength sandy CLAY

15,7m High shear strength slightly sandy CLAY

19,4m Dense to very dense slightly gravelly SAND
... medium dense down to 19.55m

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B09B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.36 m ZH
Coordinates	E 600185.17 m; N 4771320.46 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
	68				19,4m Dense to very dense slightly gravelly SAND *(continued)*
21					
	72				Final Depth 20.95m. Test ended due to Maximum Thrust Approx. Settlement 0.71m
22					
23	76				
24	80				
25					
	84				
26					
27	88				
28	92				
29	96				

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B09B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.36 m ZH
Coordinates	E 600185.17 m; N 4771320.46 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

... very loose silty sand between 0.74m - 0.83m

1,1m Very loose to loose silty SAND

1,4m Medium dense to dense silty SAND

2,9m Medium to high shear strength sandy CLAY

9,5m Medium dense to dense silty SAND

9,7m Very dense gravelly SAND

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-96.07 m ZH
Coordinates	E 591227.81 m; N 4771127.56 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
11	36				9,7m Very dense gravelly SAND *(continued)* ... becoming dense between 10.17m - 10.25m
12	40				Final Depth 11.23m. Depth ended due to Maximum Thrust Approx. Settlement 0.70m
13	44				
14	48				
15	52				
16	56				
17	60				
18	64				
19					

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-96.07 m ZH
Coordinates	E 591227.81 m; N 4771127.56 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

0,0m Extremely low to very low shear strength silty CLAY

0,7m Very dense gravelly SAND
... medium dense to dense down to 1.40m

... becoming medium dense to dense below 3.13m

3,3m Low to medium shear strength sandy CLAY interbedded with loose to dense silty SAND

4,5m Very dense gravelly SAND

... dense between 6.75m - 7.5m

8,2m Dense silty SAND

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B12B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

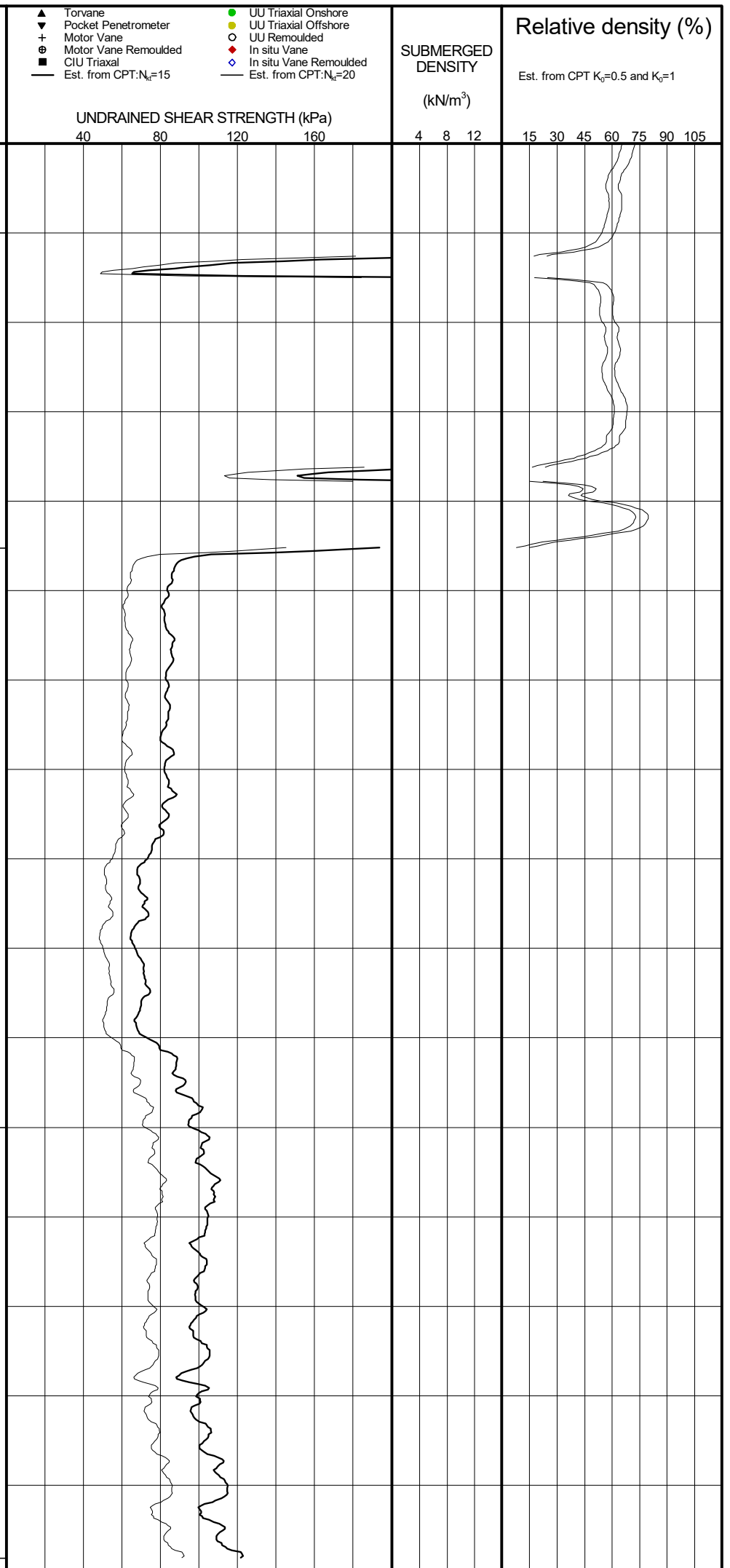
Date Performed	07/05/2023
Water Depth	-91.84 m ZH
Coordinates	E 595852.07 m; N 4766736.2 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					8,2m Dense silty SAND *(continued)*
11	36				10,5m Medium to high shear strength sandy CLAY interbedded with medium dense to dense silty SAND
12	40				12,3m Medium to high shear strength CLAY
13	44				... medium shear strength between 13.9 - 15.1m
14	48				
15					15,5m High shear strength slightly sandy CLAY
16	52				
17	56				
18	60				Final Depth 17.91m. Depth ended due to Operational Issues Approx. Settlement 0.82m
19	64				



FINAL CPTU LOG

Z4_OWF_B12B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.84 m ZH
Coordinates	E 595852.07 m; N 4766736.2 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane | Pocket Penetrometer | Motor Vane | Motor Vane Remoulded | CIU Triaxal | Est. from CPT:N_{kt}=15
UU Triaxial Onshore | UU Triaxial Offshore | UU Remoulded | In situ Vane | In situ Vane Remoulded | Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

SUBMERGED DENSITY (kN/m^3)

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

0,0m Extremely low to very low shear strength silty CLAY

0,7m Very dense gravelly SAND

... medium dense to dense down to 1.07m

... becoming dense to very dense below 3.35m

4,0m Low shear strength sandy CLAY

4,3m Medium dense gravelly SAND

4,5m Very dense gravelly SAND

... dense between 6.40m - 6.65m

8,2m Dense silty SAND

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B12B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.86 m ZH
Coordinates	E 595850.64 m; N 4766733.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

8,2m Dense silty SAND *(continued)*

10,5m Low to high shear strength sandy CLAY interbedded with medium dense to dense silty SAND

12,1m Medium shear strength CLAY

15,0m Medium to high shear strength slightly sandy CLAY

17,6m High shear strength slightly sandy CLAY

... becoming high to very high shear strength below 19.8m

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

FINAL CPTU LOG

Z4_OWF_B12B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

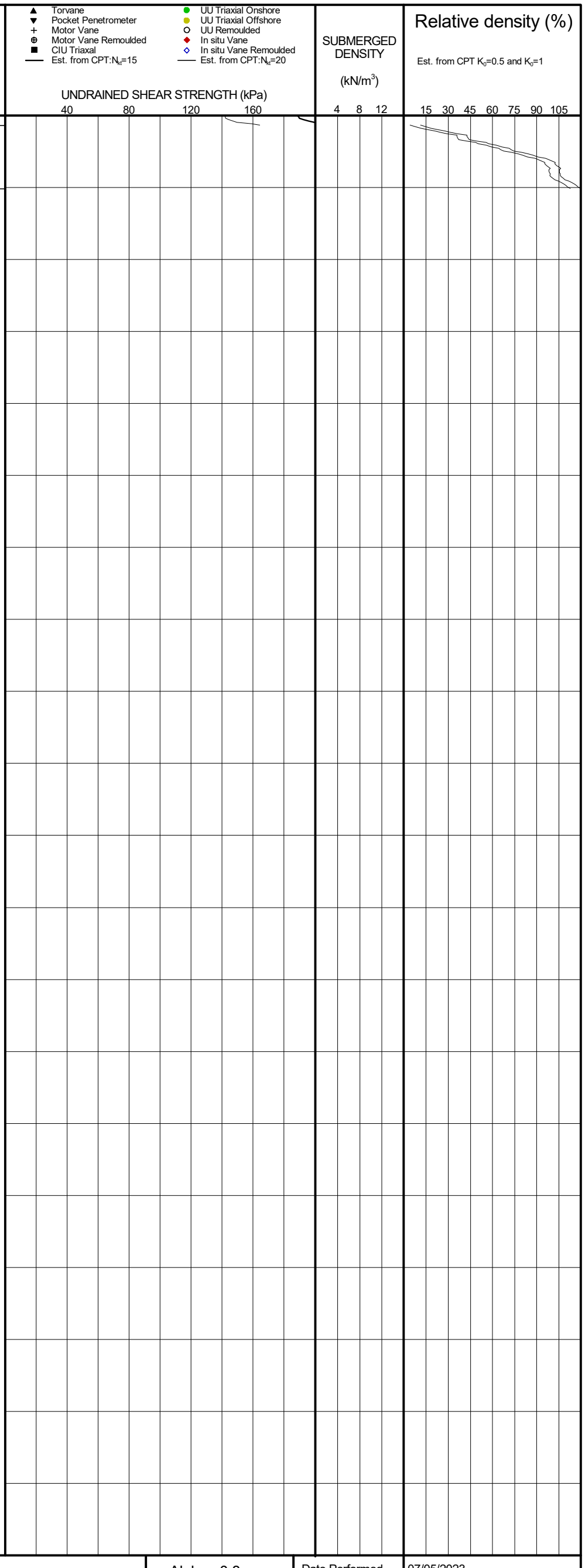
Date Performed	07/05/2023
Water Depth	-91.86 m ZH
Coordinates	E 595850.64 m; N 4766733.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					20,1m Dense to very dense gravelly SAND
					Final Depth 20.51m. Depth ended due to Maximum Thrust Approx. Settlement 0.58m
21	68				
22	72				
23	76				
24	80				
25	84				
26	88				
27	92				
28	96				
29					



FINAL CPTU LOG

Z4_OWF_B12B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.86 m ZH
Coordinates	E 595850.64 m; N 4766733.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

0,0m Extremely low shear strength silty CLAY

0,6m Medium dense to dense gravelly SAND

1,2m Very dense gravelly SAND

... dense between 7.87m - 8.30m

8,9m Medium dense to dense silty SAND with partings of high shear strength sandy CLAY

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT | SOIL DESCRIPTION

Torvane; Pocket Penetrometer; Motor Vane; Motor Vane Remoulded; CIU Triaxial; Est. from CPT:N_{kt}=15; UU Triaxial Onshore; UU Triaxial Offshore; UU Remoulded; In situ Vane; In situ Vane Remoulded; Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa) 40 80 120 160

SUBMERGED DENSITY (kN/m^3) 4 8 12

Relative density (%) — Est. from CPT K_0=0.5 and K_0=1 — 15 30 45 60 75 90 105

8,9m Medium dense to dense silty SAND with partings of high shear strength sandy CLAY *(continued)*

11,0m Medium to high shear strength sandy CLAY interbedded with medium dense to dense silty SAND

16,0m Medium dense to dense silty SAND with occasional partings of very high shear strength sandy CLAY

19,0m High shear strength sandy CLAY interbedded with loose to medium dense silty SAND

m	ft
11	36
12	40
13	44
14	48
15	52
16	56
17	60
18	64
19	

FINAL CPTU LOG

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

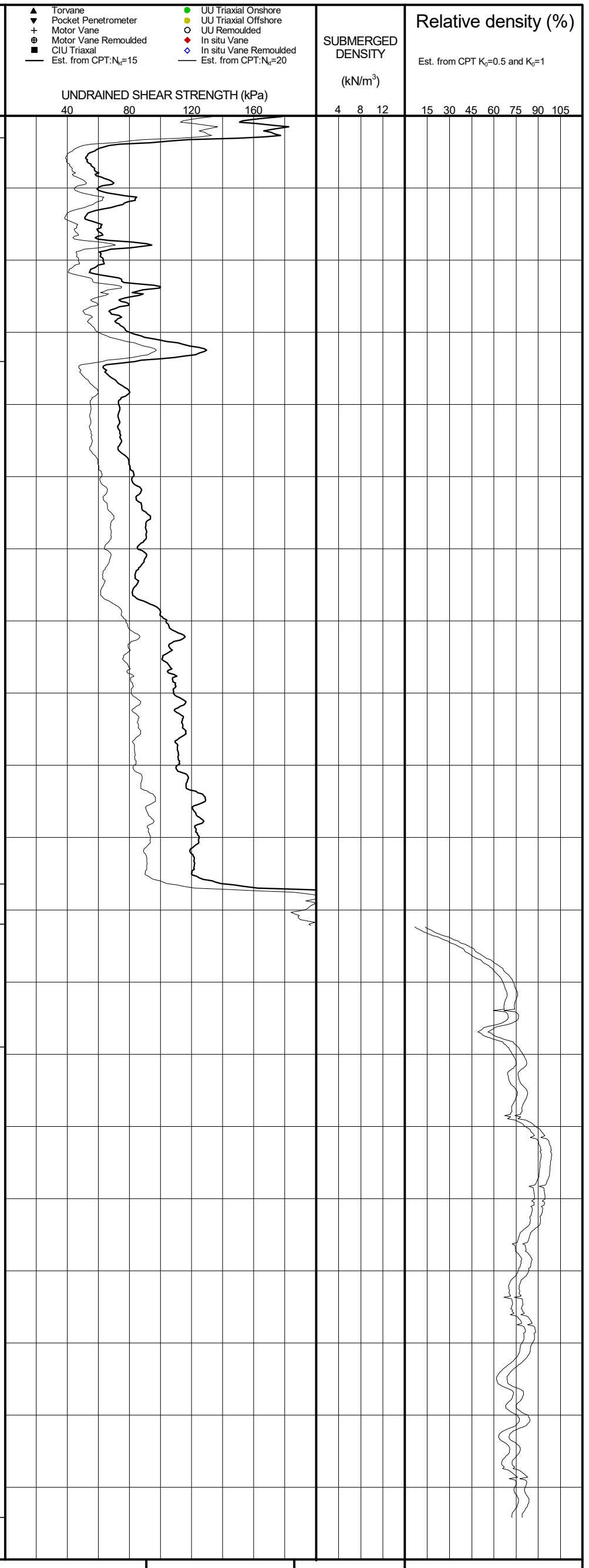
Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
21	68				20,2m Medium to high shear strength sandy CLAY
22	72				21,7m Medium to high shear strength slightly sandy CLAY
23	76				
24	80				
25					
	84				25,3m Very high shear strength sandy CLAY
26					25,6m Medium dense to dense slightly gravelly SAND
27	88				26,5m Dense to very dense gravelly SAND
28	92				
29	96				



FINAL CPTU LOG

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					Final Depth 29.71m. Depth ended due to Target Depth reached Approx. Settlement 0.59m

UNDRAINED SHEAR STRENGTH (kPa)

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
—— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
—— Est. from CPT:N_{kt}=20

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

31 100
32 104
33 108
34 112
35 116
36 120
37 124
38 128
39

FINAL CPTU LOG

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1d

DEPTH m ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low to very low shear strength silty CLAY

... becoming sandy below 0.47m

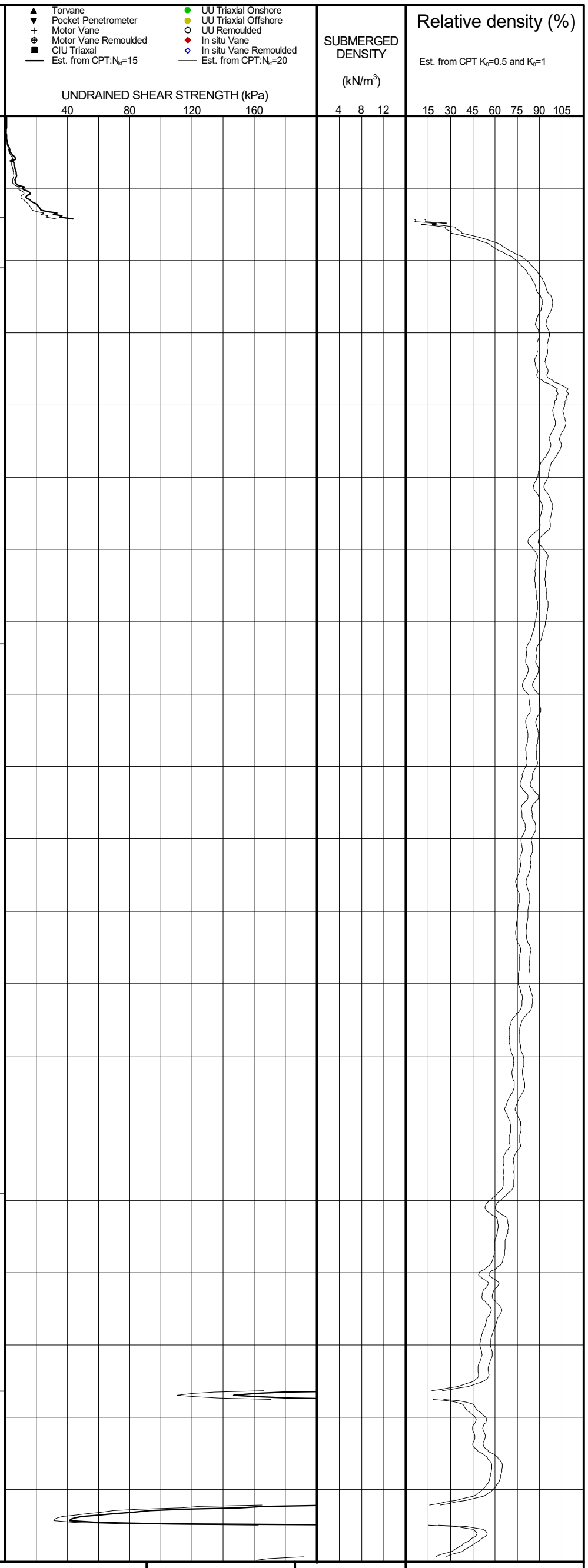
0,7m Medium dense to dense slightly silty SAND

1,1m Very dense slightly silty SAND

3,7m Dense slightly silty SAND

7,5m Medium dense silty SAND

8,8m Medium dense silty SAND interbedded with low to high shear strength sandy CLAY



FINAL CPTU LOG

Z4_OWF_B17_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.01 m ZH
Coordinates	E 600421.96 m; N 4762317.84 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

10,1m Medium dense silty SAND

12,0m Medium to high shear strength sandy CLAY interbedded with medium dense silty SAND

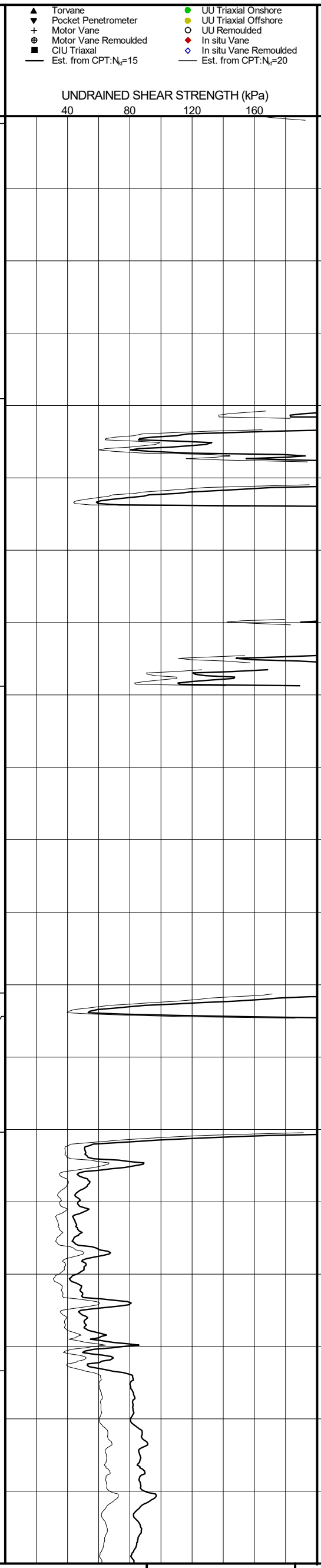
13,9m Loose to medium dense silty SAND

16,1m Medium shear strength sandy CLAY

16,2m Loose to medium dense silty SAND

17,0m Low to medium shear strength sandy CLAY

18,7m Medium to high shear strength slightly sandy CLAY





FINAL CPTU LOG

Z4_OWF_B17_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.01 m ZH
Coordinates	E 600421.96 m; N 4762317.84 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
					18,7m Medium to high shear strength slightly sandy CLAY *(continued)*
21	68				
22	72				22,1m High shear strength slightly sandy CLAY
23	76				
24	80				24,7m Very high shear strength sandy CLAY
25					25,0m Loose to medium dense silty SAND
	84				25,5m Dense to very dense silty SAND
26					
	88				
27					27,6m Loose to medium dense clayey SAND
28	92				28,2m Dense silty SAND
29	96				Final Depth 28.53m. Depth ended due to High Risk of Breakage Approx. Settlement 0.67m

▲ Torvane
▼ Pocket Penetrometer
\+ Motor Vane
⊕ Motor Vane Remoulded
■ CIU Triaxal
— Est. from CPT:N_{kt}=15
● UU Triaxial Onshore
● UU Triaxial Offshore
○ UU Remoulded
◆ In situ Vane
◇ In situ Vane Remoulded
— Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B17_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.01 m ZH
Coordinates	E 600421.96 m; N 4762317.84 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

DEPTH m / ft | SOIL PROFILE | SAMPLE NO | SEABED CPT

SOIL DESCRIPTION

0,0m Extremely low shear strength silty CLAY

0,7m Loose silty SAND

1,5m Low to medium shear strength sandy CLAY interbedded with loose silty SAND

2,3m Extremely low to very low shear strength silty CLAY

... becoming medium shear strength sandy clay below 2.95m

3,1m Medium dense silty SAND with partings of medium shear strength sandy clay

3,8m Dense silty SAND

5,3m Medium dense silty SAND

6,6m Very low to high shear strength sandy CLAY with beds of very loose to loose sand

8,7m Very low to low shear strength slightly silty CLAY

Torvane
Pocket Penetrometer
Motor Vane
Motor Vane Remoulded
CIU Triaxal
Est. from CPT:N_{kt}=15
UU Triaxial Onshore
UU Triaxial Offshore
UU Remoulded
In situ Vane
In situ Vane Remoulded
Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)
40 80 120 160

SUBMERGED DENSITY (kN/m^3)
4 8 12

Relative density (%)
Est. from CPT K_0=0.5 and K_0=1
15 30 45 60 75 90 105

FINAL CPTU LOG

Z4_OWF_B20B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité
TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	06/05/2023
Water Depth	-107 m ZH
Coordinates	E 605066.05 m; N 4753455.1 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1a

DEPTH m | ft

SOIL PROFILE

SAMPLE NO

SEABED CPT

SOIL DESCRIPTION

8,7m Very low to low shear strength slightly silty CLAY *(continued)*

10,6m Low to medium shear strength sandy CLAY

10,9m Medium shear strength slightly sandy CLAY

12,6m Medium to high shear strength slightly sandy CLAY

16,5m Dense slightly gravelly SAND

17,5m Very dense gravelly SAND

18,6m Dense silty SAND

19,7m Dense silty SAND with partings of very loose to medium dense clayey sand

Torvane
Pocket Penetrometer
Motor Vane
Motor Vane Remoulded
CIU Triaxal
Est. from CPT:N_{kt}=15
UU Triaxial Onshore
UU Triaxial Offshore
UU Remoulded
In situ Vane
In situ Vane Remoulded
Est. from CPT:N_{kt}=20

UNDRAINED SHEAR STRENGTH (kPa)

40 80 120 160

SUBMERGED DENSITY (kN/m^3)

4 8 12

Relative density (%)

Est. from CPT K_0=0.5 and K_0=1

15 30 45 60 75 90 105

m: 11 12 13 14 15 16 17 18 19

ft: 36 40 44 48 52 56 60 64

FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B20B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

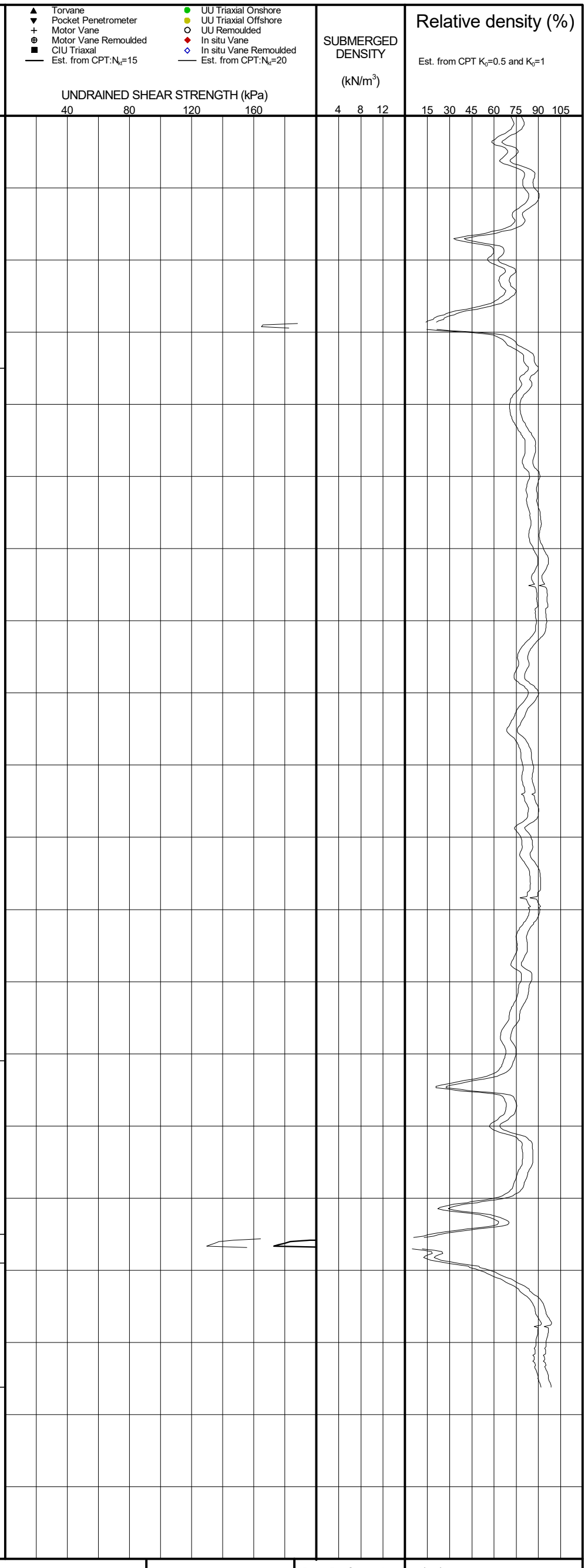
Date Performed	06/05/2023
Water Depth	-107 m ZH
Coordinates	E 605066.05 m; N 4753455.1 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1b

DEPTH m	DEPTH ft	SOIL PROFILE	SAMPLE NO	SEABED CPT	SOIL DESCRIPTION
21	68				19,7m Dense silty SAND with partings of very loose to medium dense clayey sand *(continued)*
22	72				21,8m Dense to very dense slightly gravelly SAND
23	76				... gravelly between 23.0m - 23.5m
24	80				
25	84				
26	88				26,6m Loose to dense silty SAND
27					
28	92				27,8m High shear strength sandy CLAY 28,0m Very dense gravelly SAND ... dense down to 28.2m
29	96				Final Depth 28.81m. Depth ended due to Maximum Thrust Approx. Settlement 0.62m



FINAL CPTU LOG

Alpha =0.8

Z4_OWF_B20B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	06/05/2023
Water Depth	-107 m ZH
Coordinates	E 605066.05 m; N 4753455.1 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone number	S10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 1c

APPENDIX XIII – CPT DETAILS - AO6 OWF ZONE 4

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

SOIL PROFILE

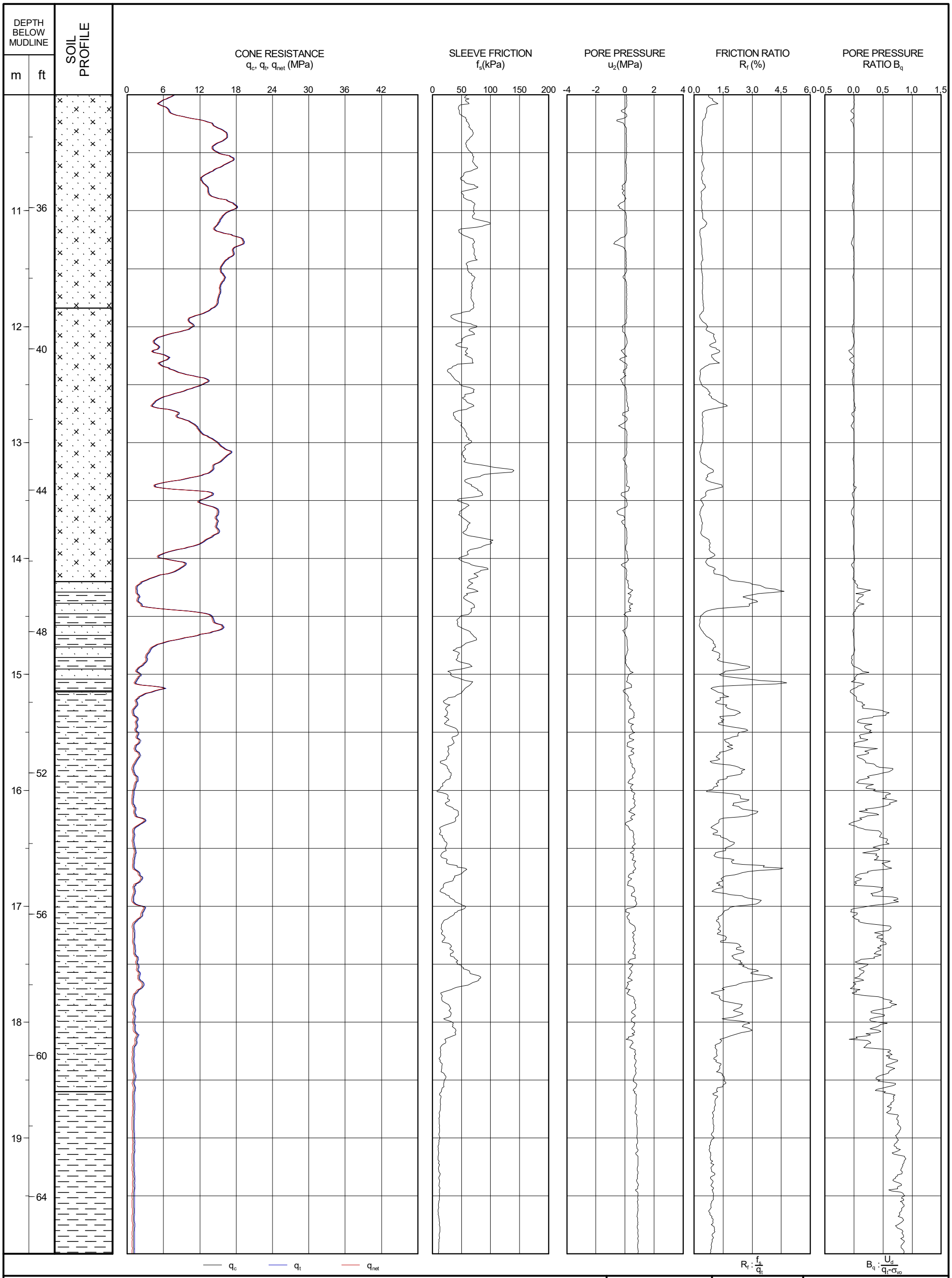
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B01_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-99.57 m ZH
Coordinates	E 608023.9 m; N 4756472.12 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-93.48 m ZH
Coordinates	E 604966.32 m; N 4757946.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

SOIL PROFILE

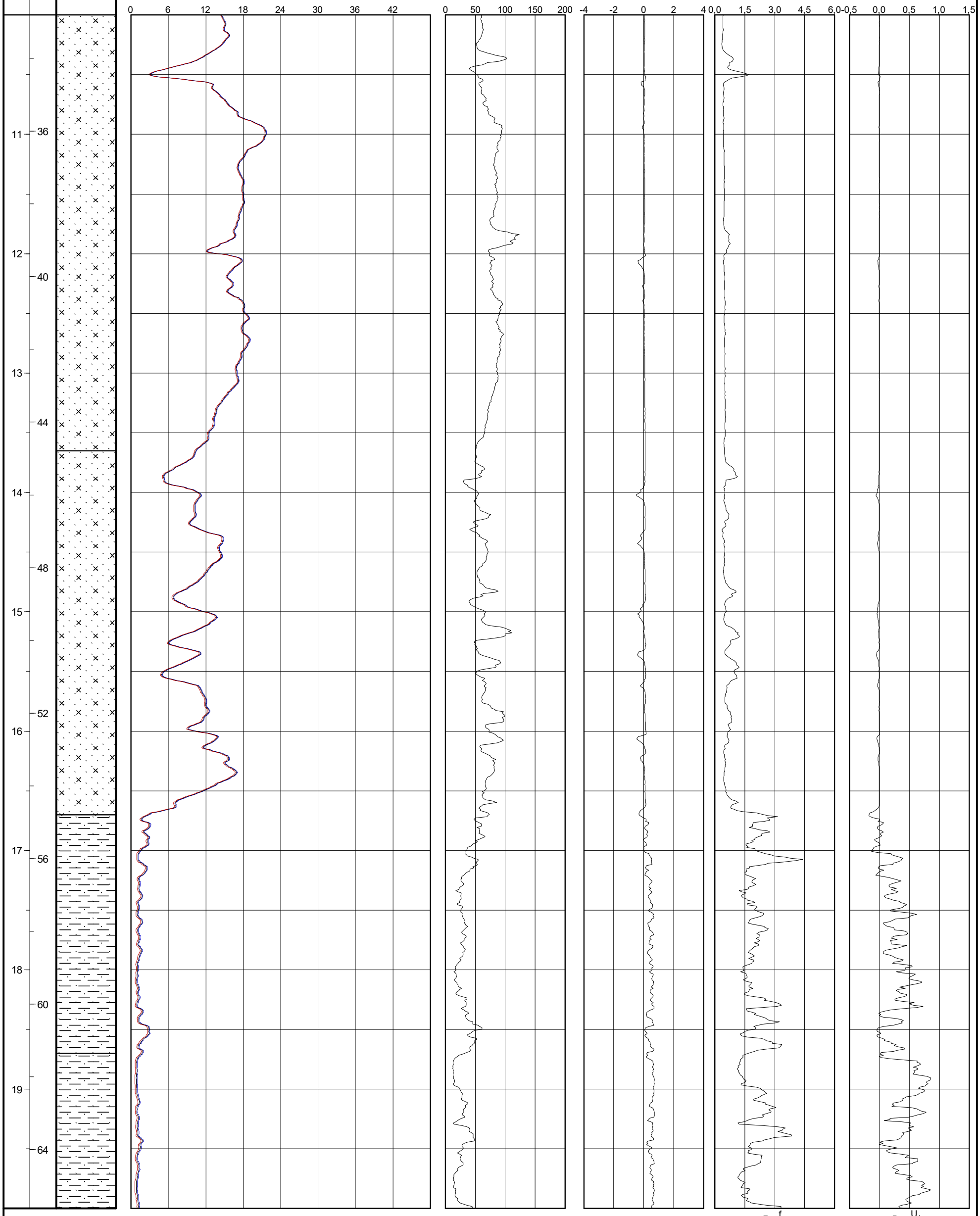
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-93.48 m ZH
Coordinates	E 604966.32 m; N 4757946.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 68
22 72
23 76
24 80
25
26 84
27 88
28 92
29 96

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B02B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-93.48 m ZH
Coordinates	E 604966.32 m; N 4757946.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Z4_OWF_B05B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609356.13 m; N 4767063.14 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

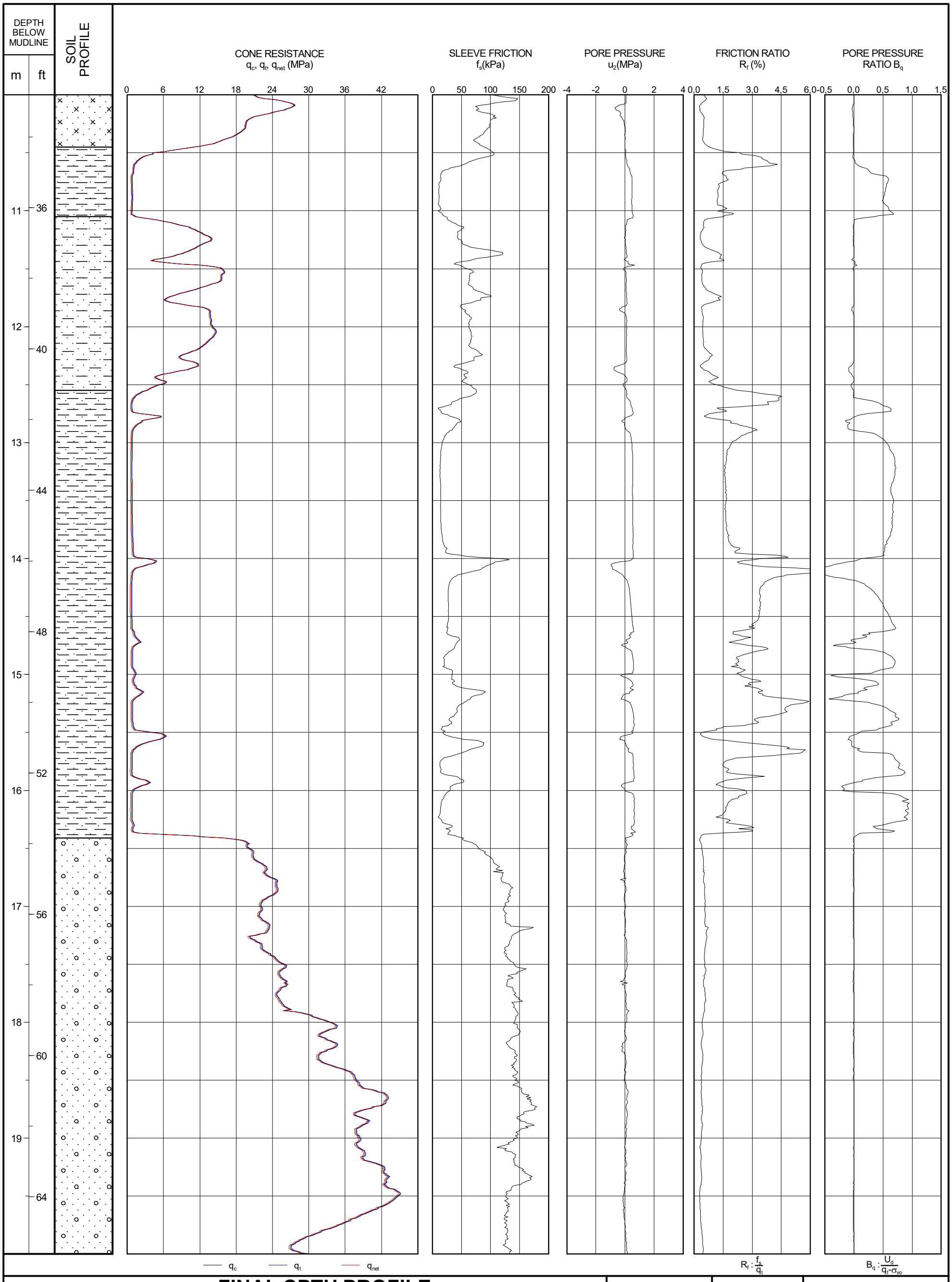
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B05B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	24/07/2023
Water Depth	90.88 m ZH
Coordinates	E 609357.65 m; N 4767069.74 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S19196 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m: 1 2 3 4 5 6 7 8 9

ft: 4 8 12 16 20 24 28 32

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B06_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-87.83 m ZH
Coordinates	E 609199.29 m; N 4773006.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 36
12 40
13 44
14 48
15 52
16 56
17 60
18 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B06_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-87.83 m ZH
Coordinates	E 609199.29 m; N 4773006.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B09B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.36 m ZH
Coordinates	E 600185.17 m; N 4771320.46 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B09B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.36 m ZH
Coordinates	E 600185.17 m; N 4771320.46 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

21 | 68
22 | 72
23 | 76
24 | 80
25 | 84
26 | 88
27 | 92
28 | 96
29

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B09B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
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Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	04/05/2023
Water Depth	-93.36 m ZH
Coordinates	E 600185.17 m; N 4771320.46 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-96.07 m ZH
Coordinates	E 591227.81 m; N 4771127.56 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B11_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEME COMPANY

Date Performed	04/05/2023
Water Depth	-96.07 m ZH
Coordinates	E 591227.81 m; N 4771127.56 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B12B_CPT
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Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
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TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.84 m ZH
Coordinates	E 595852.07 m; N 4766736.2 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B12B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
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TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.84 m ZH
Coordinates	E 595852.07 m; N 4766736.2 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B12B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
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MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
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TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.86 m ZH
Coordinates	E 595850.64 m; N 4766733.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B12B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.86 m ZH
Coordinates	E 595850.64 m; N 4766733.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

m	ft
21	68
22	72
23	76
24	80
25	84
26	88
27	92
28	96
29	

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B12B_CPTa
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-91.86 m ZH
Coordinates	E 595850.64 m; N 4766733.06 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

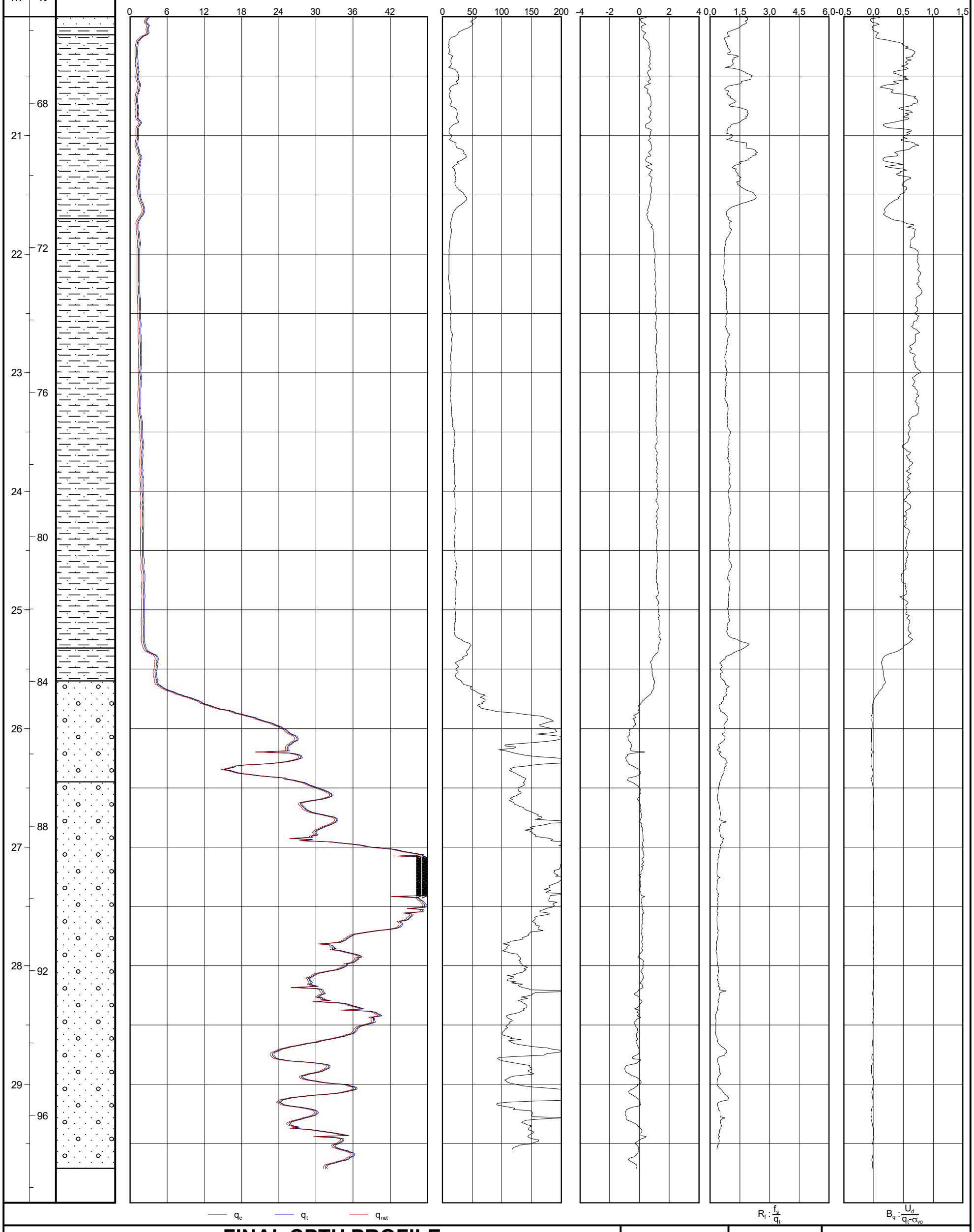
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B16B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	07/05/2023
Water Depth	-89.53 m ZH
Coordinates	E 604923.8 m; N 4762366.32 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B17_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.01 m ZH
Coordinates	E 600421.96 m; N 4762317.84 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B17_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.01 m ZH
Coordinates	E 600421.96 m; N 4762317.84 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

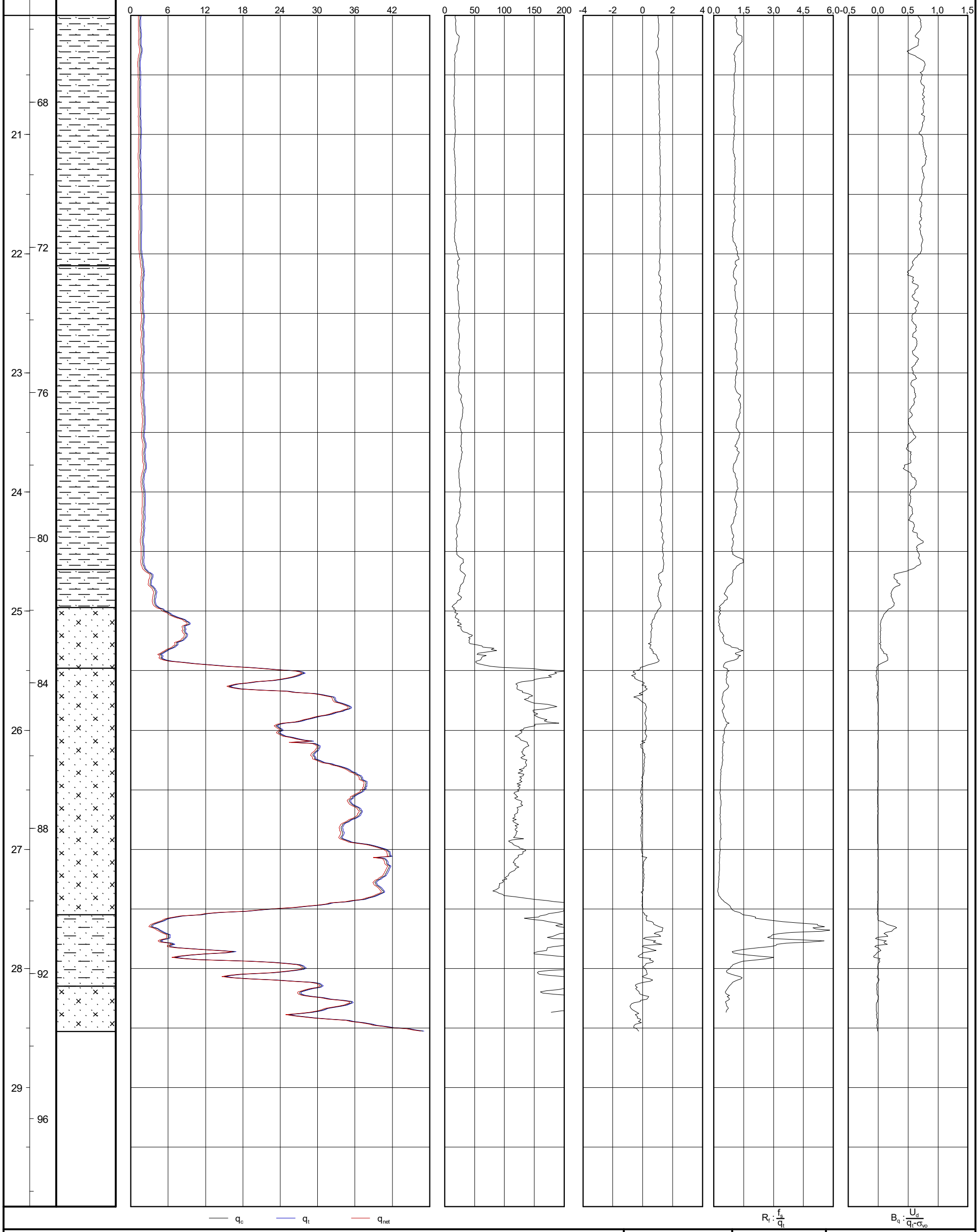
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B17_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté
Égalité
Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	04/05/2023
Water Depth	-93.01 m ZH
Coordinates	E 600421.96 m; N 4762317.84 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	DS10CFIIP.S22598 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

1 4
2 8
3 12
4 16
5 20
6 24
7 28
8 32
9

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B20B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	06/05/2023
Water Depth	-107 m ZH
Coordinates	E 605066.05 m; N 4753455.1 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3a

DEPTH BELOW MUDLINE

m | ft

SOIL PROFILE

CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

0 6 12 18 24 30 36 42

SLEEVE FRICTION
f_s(kPa)

0 50 100 150 200

PORE PRESSURE
u_2(MPa)

-4 -2 0 2 4

FRICTION RATIO
R_f (%)

0,0 1,5 3,0 4,5 6,0

PORE PRESSURE RATIO B_q

-0,5 0,0 0,5 1,0 1,5

11 — 36
12 — 40
13 — 44
14 — 48
15 — 52
16 — 56
17 — 60
18 — 64
19

q_c q_t q_{net}

$R_f : \frac{f_s}{q_t}$

$B_q : \frac{U_d}{q_t - \sigma_{vo}}$

FINAL CPTU PROFILE

Alpha =0.8

Z4_OWF_B20B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE
A TRADEBE COMPANY

Date Performed	06/05/2023
Water Depth	-107 m ZH
Coordinates	E 605066.05 m; N 4753455.1 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3b

DEPTH BELOW MUDLINE

SOIL PROFILE

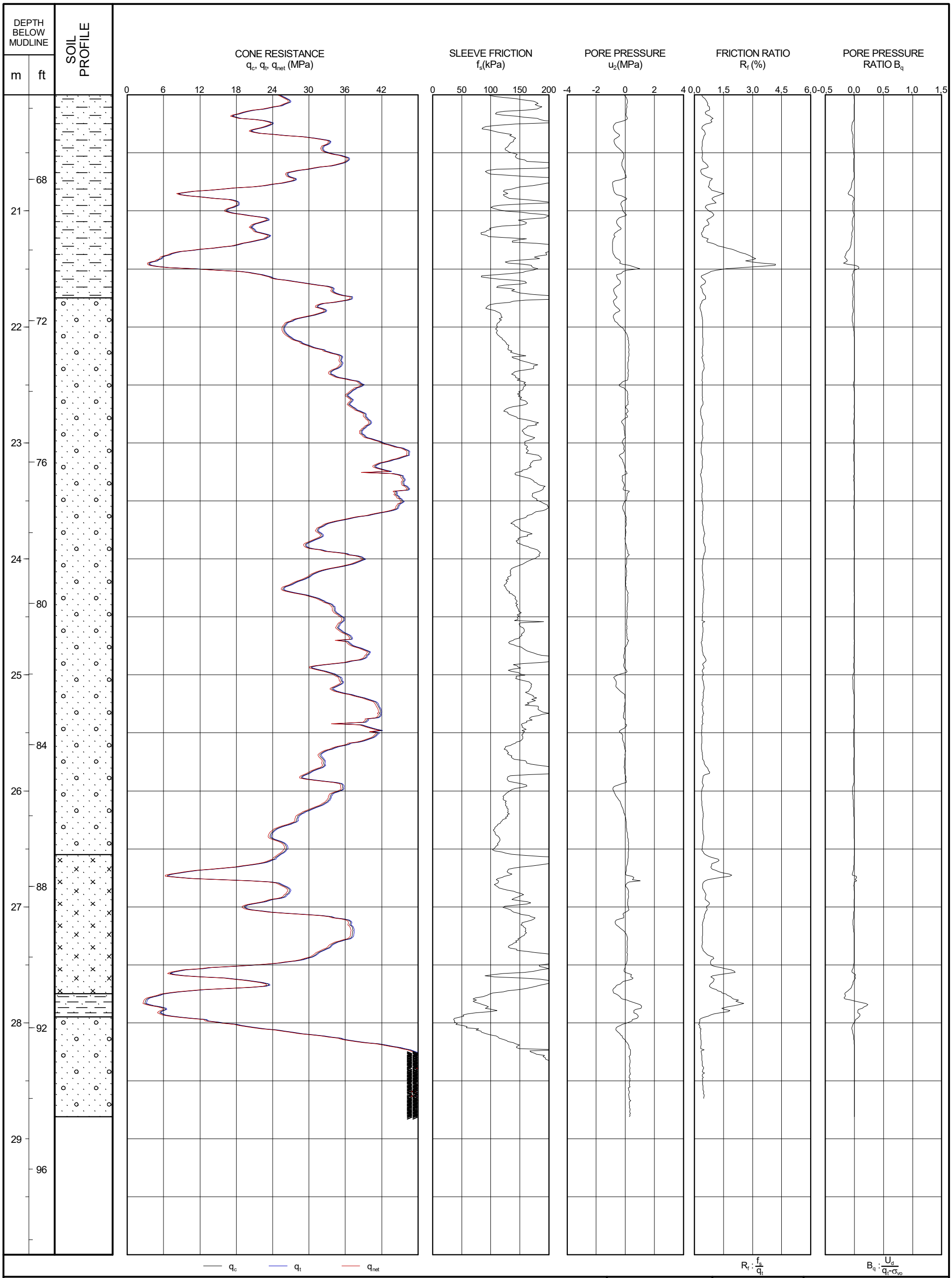
CONE RESISTANCE
q_c, q_t, q_{net} (MPa)

SLEEVE FRICTION
f_s(kPa)

PORE PRESSURE
u_2(MPa)

FRICTION RATIO
R_f (%)

PORE PRESSURE RATIO B_q



FINAL CPTU PROFILE

Z4_OWF_B20B_CPT
MED-TEC_A06
Offshore Gulf de Lyon
DGEC

Alpha =0.8

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE
Liberté Égalité Fraternité

TECNOAMBIENTE

Date Performed	06/05/2023
Water Depth	-107 m ZH
Coordinates	E 605066.05 m; N 4753455.1 m
Made By/Date	SC - 08/09/2023
Checked By/Date	AN - 08/09/2023
Cone Number	S10CFIIP.S22602 / 001

Tecnoambiente REV. 1

Project Number 113401341

Plate 3c

APPENDIX XIV – ONSHORE LAB RESULTS CERTIFICATES – AO6 OWF ZONE 1 AND ZONE 2

This appendix is provided separately as a compressed folder

APPENDIX XV – CPT DIGITAL DATA (Z1-Z2-Z3-Z4)

This appendix is provided separately as a compressed folder