

MALTA (Magthag)

REPORT ON ENVIRONMENTAL GEOGNOSTIC INVESTIGATIONS

(Mechanical core drilling and sampling)

WORKS: execution of surveys aimed at excavated earth and rocks and geotechnical
characterization, for planning “Interconnector 2 Malta-Italy” FEED CT
3013/2022”- RG.

Customer: *TECHFEM S.p.a. Lamezia Terme (CZ)*

**THE
COMPANY**

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1.0 PREMISE

On behalf of the company TECHFEM S.p.a. of Lamezia Terme (CZ) a campaign of environmental geognostic investigations was carried out with continuous dry core drilling, in the territory of Malta (Magthag)

The works consisted of:

- *N.4 mechanical core borings, called TP44/TP47 pushed to a depth of 2.00m from the land surface.*

Below are the technical standards of the surveys and the characteristics of the machinery used.

2.0 GEOGNOSTIC SURVEYS

2.1 *CONTINUOUS DRILLING MECHANICAL SURVEY*


A CMV 720 brand tracked hydraulic probe was used to carry out the surveys, equipped with a 720 Kgf rotation head driven by a variable displacement hydraulic motor and a five-speed mechanical gearbox.

The drilling was performed with a simple $\varnothing = 101$ mm core barrel with widia crowns without fluid.


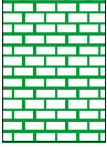

The extracted carrots were placed in special PVC cataloging boxes with dividing compartments, on which were reported: the name of the survey, the box number and the progressive withdrawal quotas.

The cataloging boxes were individually photographed and placed on site, available to the Works Management.


The lithostratigraphic sections found during the mechanical boreholes are described and schematized in the annex, with indications of the drilling diameter and type.

	Applicant: TECHFEM S.p.a.	Survey Tp44
	Location: Malta_Magatab	
	Project: Surveys aimed at excavated earth and rocks and geotechnical characterization, for the design "Interconnector 2 Malta-Italy" FEED CT 3013/2022"	


Driller: CMV 600 MK Coating pipe diameter Drilling diameter: 101 mm, vertical survey
 Drilling method: Simple Widia and diamond core barrel Start Drilling :10/03/2023, End Drilling: 10/03/2023 Sampler type:

depth m	Stratigraphy	Thickness	Lithological description	Samples	SPT	RQD % 25 50 75	flap	Trial Lefranc	Trial Lugeon	Piezometer	DI tube
0,40		0,40	Greyish sandy coloured road surface with calcareous stone elements								
2,00		1,60	Soft whitish sometimes yellowish limestones								
											

Anomalies found none Notes: cataloging boxes N.1; Firma D.L.: Resp. Di Sito:	Mod.RT.01-02.01.2020
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	Applicant: TECHFEM S.p.a.	Survey Tp45
	Location: Malta_Magatab	
	Project: Surveys aimed at excavated earth and rocks and geotechnical characterization, for the design "Interconnector 2 Malta-Italy" FEED CT 3013/2022"	

Driller: CMV 600 MK Coating pipe diameter Drilling diameter: 101 mm, vertical survey
 Drilling method: Simple Widia and diamond core barrel Start Drilling :10/03/2023, End Drilling: 10/03/2023 sampler type:


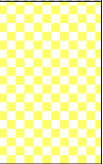

depth m	Stratigraphy	Thickness	Lithological description	Samples	SPT	RQD %	flap	Trial Lefranc	Trial Luigeon	Piezometer	DI tube
						25 50 75					
0,80		0,80	Weakly silty brown sands with limestone stone elements								
2,00		1,20	Calcari biancastri a tratti giallastri, teneri.	1,6 C11 1,7							




Anomalies found none Notes: cataloging boxes N.I; Firma D.L.: Resp. Di Sito:	Mod.RT.01-02.01.2020
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	Applicant: TECHFEM S.p.a. Location: Malta_ Magatab Project: Surveys aimed at excavated earth and rocks and geotechnical characterization, for the design "Interconnector 2 Malta-Italy" FEED CT 3013/2022"	Survey TP46
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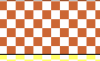


Driller: CMV 600 MK Coating pipe diameter Drilling diameter: 101 mm, vertical survey
 Drilling method: Simple Widia and diamond core barrel Start Drilling :10/03/2023, End Drilling: 10/03/2023 sampler type:


depth m	Stratigraphy	Thickness	Lithological description	Samples	SPT	RQD % 25 50 75	flap	Trial Lefranc	Trial Luqeon	Piezometer	Df tube
0,40		0,40	Grayish sandy roadbed with calcareous stone elements								
2,00		1,60	Slightly silty yellowish sands with at times limestone elements of a calcareous nature	0,6 Cr1 1,0							
											

Anomalies found none
 Notes: cataloging boxes N.1;
 Firma D.L.:
 Resp. Di Sito: Mod.RT.01-02.01.2020

	Applicant: TECHFEM S.p.a. Location: Malta_ Magatab Project: Surveys aimed at excavated earth and rocks and geotechnical characterization, for the design "Interconnector 2 Malta-Italy" FEED CT 3013/2022"	Survey Tp47
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Driller: CMV 600 MK Coating pipe diameter Drilling diameter: 101 mm, vertical survey
 Drilling method: Simple Widia and diamond core barrel Start Drilling : 10/03/2023, End Drilling: 10/03/2023 sampler type:

depth m	Stratigraphy	Thickness	Lithological description	Samples	SPT	RQD % 25 50 75	flap	Trial Lefranc	Trial Luqeon	Piezometer	DI tube
0,50		0,50	Weakly silty brown sands with limestone stone elements								
1,50		1,00	Slightly silty yellowish sands with at times limestone elemens of a calcareous nature								
2,00		0,50	Soft whitish sometimes yellowish limestones								



Anomalies found none
 Notes: cataloging boxes N.1;
 Firma D.L.:
 Resp. Di Sito: Mod.RT.01-02.01.2020

3.0 TAKING OF REVISED SAMPLES

During the survey campaign a total of No. 8 samples were taken, two for each survey carried out and precisely the first at the depth between 0.0-1.0m while the second between the depth of -1.0m and -1.60m in two portions.

4.0 SAMPLING FOR GEOTECHNICAL ANALYSIS

The following samples were chosen by D.L. for the study of geotechnical samples:

Poll	Geotechnical sampling - Height in metres
TP45	CL1 (1,60 - 1,70)
TP46	CR1 (0,60 – 1,00)