

Martin Melton
7 Station Road
Tydd Gote
Wisbech

Our Ref: GJ392-01-R001

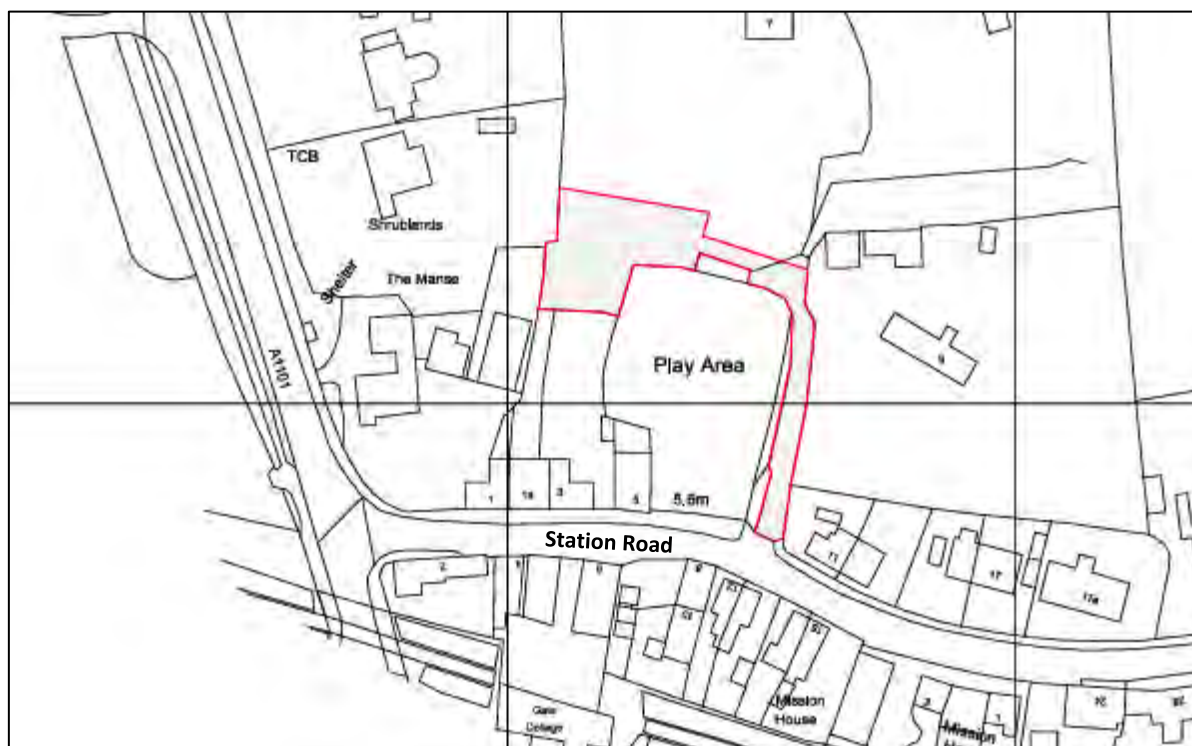
18 March 2026

Station Road, Tydd Gote – Site investigation

Background

A plot of land that formed part of the grounds of 7 Station Road, Tydd Gote, Wisbech, has been developed as a single detached residential unit. The site was previously used as a builder's storage compound, associated with the construction of 7 Station Road to the north. Prior to this, the site had contained (presumed) residential buildings from the late 19th century, which were replaced by three 'outbuildings' (sheds etc) around the mid-20th century. The site location is shown in Figure 1.

Figure 1 Site Location



The site is shown to be underlain by Tidal Flat Deposits (silt and clay), which in turn are underlain by the Ampthill Clay Formation.

A Phase I Desk Study was undertaken for the site in 2022, as referenced below, which provides greater detail of the site setting and history;

- '*Phase I Desk Study Report, 7 Station Road, Tydd Gote, Wisbech*', Ground Engineering, Report Ref: C15738, September 2022

The conclusions of the desk study were that the risks from land contamination were low. However, a ground investigation was recommended for both geotechnical and contamination purposes, to include the sampling of soil and groundwater samples, and a programme of gas monitoring.

The building has now been completed and ground investigation works had not been undertaken prior to construction works. As such, G&J were instructed to undertake a review of the available information and appropriate investigation works to ensure that there were no significant risks associated with the development.

Works Undertaken

G&J undertook a review of the desk study information, together with information provided by the client, which primarily comprised detailed photographs of excavations undertaken during the construction. The desk study considered potential risks to be from the presence of Made Ground on the site, which may be contaminated with substances including metals, hydrocarbons and asbestos, and the possibility of ground gas originating from the degradation of organic material in the soil.

Photographs taken during the construction works, showing foundation excavations and a deeper excavation for a septic tank, are included in Appendix A. The photographs appear to show a thin layer of topsoil / Made Ground over natural silt / clay. No groundwater is evident in any of the excavations, including the septic tank excavation which extended to around 3mbgl. No obvious evidence of potential contamination or waste materials is apparent in the photographs. An Architects Inspection Certificate detailing an inspection of the trenches is included in Appendix B.

Based on the available information, including the findings of the desk study and the ground conditions revealed by the excavations undertaken during the construction works, the only realistic potential risks to site users are from exposure to the limited Made Ground, which could contain substances such as metals, PAHs and asbestos.

There are not considered to be any significant risks from ground gases, given there is no evidence of significant degradable materials in the soil (waste, natural peat) and there were no potentially significant sources identified by the desk-study. The monitoring of ground gases is therefore not considered to be necessary.

Similarly, given the apparent low permeability of the underlying deposits, the lack of any groundwater and the absence of evidence of significant contamination, it is considered that the risks to the water environment are very low, and groundwater sampling is not necessary.

Site Investigation

Site investigation works were designed to address the potential risks from the limited Made Ground. Five hand pits were excavated in the garden area to allow the underlying near-surface ground conditions to be inspected and samples taken for chemical analysis. The garden was the only area where soft landscaping was present and was therefore the only area where there was considered to be potential for exposure to the underlying soils.

Each pit, named S1 to S5, was excavated to a depth of approximately 0.9mbgl. Photographs of each location are included in Appendix A. The ground conditions were essentially the same in each location. A surface layer of turf was underlain by Made Ground / Topsoil to a depth of approximately 0.4mbgl, beneath which was a natural clayey, sandy silt. The locations of the pits are shown in Figure 2.

Figure 2 Hand-Pit Locations



The Made Ground / Topsoil was generally described as a dark-brown / brown, clayey silt which contained occasional brick and rare glass. The natural deposits were described as a light-brown, clayey, sandy silt, and were assumed to represent the Tidal Flat Deposits.

No evidence of contamination was encountered at any location, and the ground conditions were generally consistent with those expected based on the foundation trench photographs. Samples were taken from each of the five pits from the Made Ground / Topsoil encountered between 0.1-0.4mbgl, and were sent for chemical analysis for a suite comprising metals, PAHs, asbestos and Extractable Petroleum Hydrocarbons.

Results

The results of chemical analysis on the five soil samples are summarised in Table 1. The table includes the maximum recorded concentration of each contaminant, together with the relevant Generic Assessment Criteria (GAC) for a residential land use with gardens. The GAC are benchmark concentrations which, if exceeded, may indicate a potentially significant risk is present, or that further assessment is required to evaluate the significance of any risk in line with the current UK tiered risk assessment framework.

The GAC that have been used are Category 4 Screening Levels (C4SLs, CL:AIRE 2014) in the first instance, and LQM Sutable 4 Use Levels (S4ULs, LQM/CIEH 2015, S4UL3312) in the absence of a C4SL, as detailed in Appendix C.

Table 1 Summary of Chemical Analysis Results

Substance	Units	Max	GAC	No. >GAC
Arsenic	mg/kg	11	37	0
W/S Boron	mg/kg	1.3	290	0
Cadmium	mg/kg	0.1	22	0
Chromium	mg/kg	19	910	0
Copper	mg/kg	17	2400	0
Lead	mg/kg	25	200	0
Mercury	mg/kg	0.12	40	0
Nickel	mg/kg	26	130	0
Selenium	mg/kg	<0.5	250	0
Zinc	mg/kg	64	3700	0
Naphthalene*	mg/kg	<0.03	15	0
Benzo(a)pyrene*	mg/kg	<0.03	5	0
Total PAHs*	mg/kg	0.16	NA	-
EPH C10-40	mg/kg	36	NA	-
Asbestos	Not detected in any sample			

*Key indicator compounds only. For full PAH results see Appendix D

The laboratory results revealed only very low concentrations of contaminants in all samples, that are well below the GAC for a residential land use, while asbestos was not detected in any sample. In general, the results are considered representative of what may be expected of natural, uncontaminated soils.

As such, there are not considered to be any significant risks to users of the residential development from land contamination.

Laboratory certificates are included in Appendix D.

Summary and Conclusions

The results of a site investigation, comprising the collection of samples from 0.9m deep hand-dug pits in the garden area of the newly constructed house, have been considered alongside all other available information to assess the potential contamination risks identified by the Phase I Desk Study.

The results of chemical analysis on the limited Made Ground / Topsoil found beneath the turf placed in the rear garden have revealed only very low contaminant concentrations that are not considered to present a risk to human health.

The encountered ground conditions, as identified in the hand pits and in excavations undertaken during construction, comprised only a very limited layer of Made Ground over natural silty deposits, with no groundwater encountered at the base of the excavations, which extended up to 3m deep.

No evidence of waste or significant organic material has been encountered, and therefore there are not considered to be any realistic sources of ground gas generation that could impact the site. Furthermore, given the low contaminant concentrations recorded in the soil samples and the absence of groundwater, there are not considered to be any significant risks to the water environment.

Overall, it is considered that the site is suitable for residential use and that no further investigation or mitigation measures for contamination are necessary.

I trust the above is self-explanatory, but should you have any queries, please do not hesitate to contact me.

Kind regards, for and on behalf of G&J Geoenvironmental Consultants Ltd.



Chris Hepworth (Managing Director)

Appendix A – Photographs



Building footprint after excavation of foundation trenches



Foundation excavations



Foundation excavation



Septic tank excavation



Completed house



Completed garden area



S1



S2



S3



S4



S5

Appendix B – Architects Inspection Report

ARCHITECT'S INSPECTION CERTIFICATE



CLIENT: PLATINUM BUILDS LTD
PROJECT: STAGE INSPECTIONS OF NEW BUNGALOW
ADDRESS: AT STATION ROAD, TYDD GOTE
DATE: 22 MAY 2023
STAGE OF WORKS: FOUNDATION STAGE
NOTE: THIS REPORT CONSISTS OF A TOTAL OF ONE PAGE

An inspection of foundations was undertaken by Trevor A Clay RIBA on 22 May 2023

Observations were as follows:

1. The trenches appeared to have been excavated.
2. It could be seen that a firm undisturbed silt bottom was generally reached.
3. The foundation layout appeared to correspond with the drawings with all walls, which appeared to be approximately 700mm wide and the appropriate depth.
4. Trench sides appeared generally to be self-supporting
5. There was no indication of roots, contamination or fill present at the time of inspection.

In summary, it appeared that foundations were satisfactory.

A handwritten signature in blue ink, appearing to read 'Trevor A Clay'.

Signed:

Date: 25/05/2023

Appendix C – Generic Assessment Criteria

Generic Assessment Criteria

Land Use **Residential (with gardens)**
SOM Content **1%**

Determinand	GAC (mg/kg)	Source*
Arsenic	37	C4SL
Antimony	550	SGAC
Barium	1300	SGAC
Beryllium	1.7	S4UL
Boron	290	S4UL
Cadmium	22	C4SL
Chromium III	910	S4UL
Chromium VI	21	C4SL
Copper	2400	S4UL
Lead	200	C4SL
Mercury (inorganic)	40	S4UL
Mercury (elemental)	1.2	S4UL
Mercury (methylmercury)	11	S4UL
Molybdenum	670	SGAC
Nickel	130	S4UL
Selenium	250	S4UL
Vanadium	410	S4UL
Zinc	3700	S4UL
Total Cyanide	74	Acute exposure calculation
Naphthalene	15	C4SL
Benzo(a)pyrene (as a surrogate for genotoxic PAHs – benz(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(ah)anthracene), indeno(123-cd)pyrene, benzo(ghi)perylene)	5	C4SL
Acenaphthene	210	S4UL
Acenaphthylene	170	S4UL
Anthracene	2400	S4UL
Fluoranthene	280	S4UL
Fluorene	170	S4UL
Phenanthrene	95	S4UL
Pyrene	620	S4UL
Aliphatic Hydrocarbons (C5-6)	42	S4UL
Aliphatic Hydrocarbons (C6-8)	100	S4UL
Aliphatic Hydrocarbons (C8-10)	27	S4UL
Aliphatic Hydrocarbons (C10-12)	130	S4UL
Aliphatic Hydrocarbons (C12-16)	1100	S4UL
Aliphatic Hydrocarbons (C16-44)	65000	S4UL
Aromatic Hydrocarbons (C5-7)	70	S4UL
Aromatic Hydrocarbons (C7-8)	130	S4UL
Aromatic Hydrocarbons (C8-10)	34	S4UL
Aromatic Hydrocarbons (C10-12)	74	S4UL
Aromatic Hydrocarbons (C12-16)	140	S4UL
Aromatic Hydrocarbons (C16-21)	260	S4UL
Aromatic Hydrocarbons (C21-44)	1100	S4UL
MTBE	49	SGAC

Determinand	GAC (mg/kg)	Source*
Benzene	0.2	C4SL
Toluene	130	S4UL
Ethylbenzene	47	S4UL
o-xylene	60	S4UL
m-xylene	59	S4UL
p-xylene	56	S4UL
Chlorobenzene	0.46	S4UL
1,2-dichlorobenzene	23	S4UL
1,3-dichlorobenzene	0.40	S4UL
1,4-dichlorobenzene	61	S4UL
1,2,3-trichlorobenzene	1.5	S4UL
1,2,4-trichlorobenzene	2.6	S4UL
1,3,5-trichlorobenzene	0.33	S4UL
1,2,4-trimethylbenzene	0.35	SGAC
Phenol	280	S4UL
Chlorophenols (except pentachlorophenol)	0.87	S4UL
Pentachlorophenol	0.22	S4UL
2,4-dimethylphenol	19	SGAC
Total cresols (2-, 3- and 4-methylphenol)	80	SGAC
Trichloroethene (TCE)	0.0093	C4SL
Vinyl Chloride	0.0064	C4SL
Tetrachloroethene (PCE)	0.31	C4SL
Tetrachloromethane (Carbon Tetrachloride)	0.026	S4UL
Trichloromethane (Chloroform)	0.91	S4UL
1,2-dichloroethane	0.11	C4SL
1,1,1-trichloroethane	8.8	S4UL
1,1,2,2-tetrachloroethane (PCA)	1.6	S4UL
1,1,1,2-tetrachloroethane (PCA)	1.2	S4UL
cis-1,2-dichloroethene	0.46	C4SL
trans-1,2-dichloroethene	0.90	C4SL
Dichloromethane	0.58	SGAC
Aldrin	5.7	S4UL
Dieldrin	0.97	S4UL
Atrazine	3.3	S4UL
Bis (2-ethylhexyl) phthalate	280	SGAC
Butyl benzyl phthalate	1400	SGAC
Diethyl phthalate	120	SGAC
Di-n-butyl phthalate	13	SGAC
Di-n-octyl phthalate	2300	SGAC
PCBs	Detection	-
Asbestos	Absence	-
PFOA	0.0076	C4SL
PFOS	0.013	C4SL
PFHxS	0.0081	C4SL
PFNA	0.0073	C4SL

*Based on Category 4 Screening Levels (C4SLs, Defra 2014) in the first instance, or where no C4SL exists, then on Suitable For Use Levels (S4ULs, Land Quality Press, 2015, Unique publication S4UL3312) or Soil Generic Assessment Criteria (SGAC, CL:AIRE 2010).

The above table includes the GACs for many of the more commonly encountered contaminants. Other contaminants to be screened against appropriate GAC (if available) based on the same hierarchy.

Appendix D – Chemical Laboratory Certificates

Certificate of Analysis

Certificate Number 26-05587

Issued: 18-Mar-26

Client G & J Geoenvironmental Consultants Ltd
35-37 High Street
Barrow-upon-Soar
Loughborough
Leicestershire
LE12 8PY

Our Reference 26-05587

Client Reference ~ GJ392

Order No ~ (not supplied)

Contract Title ~ Statin Road, Tydd Gote

Description 5 Soil samples.

Date Received 09-Mar-26

Date Started 09-Mar-26

Date Completed 18-Mar-26

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in black ink, appearing to read "R. Irfan".

Reyhan Irfan
Operations Manager



Summary of Chemical Analysis

Soil Samples

Our Ref 26-05587

Client Ref ~ GJ392

Contract Title ~ Statin Road, Tydd Gote

Lab No	2653087	2653088	2653089	2653090	2653091
Sample ID ~	S1	S2	S3	S4	S5
Depth ~	0.10-0.40	0.10-0.40	0.10-0.40	0.10-0.40	0.10-0.40
Other ID ~					
Sample Type ~	SOIL	SOIL	SOIL	SOIL	SOIL
Sampling Date ~	05/03/2026	05/03/2026	05/03/2026	05/03/2026	05/03/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Metals								
Arsenic	DETSC 2301#	0.2	mg/kg	7.0	11	11	10	9.6
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.9	1.3	1.2	0.9	1.1
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	19	17	18	17	16
Copper	DETSC 2301#	0.2	mg/kg	17	14	14	12	12
Lead	DETSC 2301#	0.3	mg/kg	24	21	25	20	24
Mercury	DETSC 2325#	0.05	mg/kg	0.08	0.09	0.12	0.09	0.10
Nickel	DETSC 2301#	1	mg/kg	26	16	17	16	16
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Zinc	DETSC 2301#	1	mg/kg	64	53	64	56	59
Petroleum Hydrocarbons								
EPH (C10-C40)	DETSC 3311#	10	mg/kg	< 10	< 10	< 10	36	< 10
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	0.05	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	0.06	0.07	0.05	0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.03	0.04	0.05	0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	0.10	0.16	< 0.10	< 0.10

Summary of Asbestos Analysis Soil Samples

Our Ref 26-05587

Client Ref ~ GJ392

Contract Title ~ Statin Road, Tydd Gote

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2653087	S1 0.10-0.40	SOIL	NAD	none	Jason Barsby
2653088	S2 0.10-0.40	SOIL	NAD	none	Jason Barsby
2653089	S3 0.10-0.40	SOIL	NAD	none	Jason Barsby
2653090	S4 0.10-0.40	SOIL	NAD	none	Jason Barsby
2653091	S5 0.10-0.40	SOIL	NAD	none	Jason Barsby

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-05587
 Client Ref ~ GJ392
 Contract ~ Statin Road, Tydd Gote

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2653087	S1 0.10-0.40 SOIL	05/03/26	GJ 250ml, PT 1L		
2653088	S2 0.10-0.40 SOIL	05/03/26	GJ 250ml, PT 1L		
2653089	S3 0.10-0.40 SOIL	05/03/26	GJ 250ml, PT 1L		
2653090	S4 0.10-0.40 SOIL	05/03/26	GJ 250ml, PT 1L		
2653091	S5 0.10-0.40 SOIL	05/03/26	GJ 250ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:

~ Sample details are provided by the client and can affect the validity of the results

* -not accredited.

-MCERTS (accreditation only applies if report carries the MCERTS logo).

\$ -subcontracted.

n/s -not supplied.

I/S -insufficient sample.

U/S -unsuitable sample.

t/f -to follow.

nd -not detected.

End of Report Ver 25.10.03