



Our Ref: 233060L-1

24<sup>th</sup> October 2023

FAO Eddie Caro  
D F Homes Limited  
5 Kings Road  
Clacton on Sea  
Essex  
CO15 1BG

Dear Sirs

### **Borehole Investigation at Montrose, Pork Lane, Great Holland, CO13 0JE**

Further to your recent instruction we have undertaken contamination testing on samples recovered from the above-named site during the borehole investigation. No visual or olfactory evidence of contamination was identified during the drilling operations or subsequent examination of the samples.

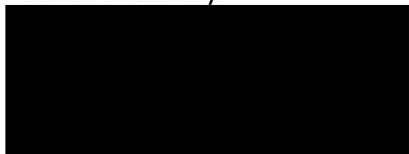
The samples, which have been tested for heavy metals, Total Petroleum Hydrocarbons (TPH) and Polyaromatic Hydrocarbons (PAHs), are from the near surface soils at 0.30m and 0.70m bgl and the laboratory test certificate accompanies this letter.

The results have been compared with the current UK guidelines for a residential end use with consumption of home grown produce and do not indicate the presence of unacceptable levels of heavy metals. No TPHs or PAHs were detected in the samples tested.

The investigation undertaken to date has not indicated the presence of contamination at the site.

If we can provide any further assistance please contact the undersigned.

Yours faithfully



Rachel Foord BSc (Hons), MSc, MCSM, CGeol, FGS  
Director  
**Compass Geotechnical Limited**



# Final Report

**Report No.:** 23-32763-1

**Initial Date of Issue:** 05-Oct-2023

**Re-Issue Details:**

**Client** Compass Geotechnical Limited

**Client Address:** 13 Willow Park, Upton Lane  
Stoke Golding  
Warwickshire  
CV13 6EU

**Contact(s):**

**Project** Pork Lane

**Quotation No.:** Q19-18078 **Date Received:** 01-Oct-2023

**Order No.:** 233060-1 **Date Instructed:** 01-Oct-2023

**No. of Samples:** 3

**Turnaround (Wkdays):** 5 **Results Due:** 05-Oct-2023

**Date Approved:** 05-Oct-2023

**Approved By:**

**Details:** Stuart Henderson, Technical Manager

## Results - Soil

**Project: Pork Lane**

Client: Compass Geotechnical Limited		Chemtest Job No.:			23-32763	23-32763	23-32763
Quotation No.: Q19-18078		Chemtest Sample ID.:			1710290	1710291	1710292
		Client Sample ID.:			ES	ES	ES
		Sample Location:			BH1	BH1	BH2
		Sample Type:			SOIL	SOIL	SOIL
		Top Depth (m):			0.3	0.7	0.3
		Date Sampled:			25-Sep-2023	25-Sep-2023	25-Sep-2023
		Time Sampled:			12:00	12:00	12:00
Determinand	Accred.	SOP	Units	LOD			
Moisture	N	2030	%	0.020	13	11	9.4
Soil Colour	N	2040		N/A	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Clay	Clay	Loam
pH at 20C	M	2010		4.0	7.7		6.8
Arsenic	M	2455	mg/kg	0.5	5.8		7.8
Cadmium	M	2455	mg/kg	0.10	0.25		0.17
Copper	M	2455	mg/kg	0.50	15		12
Mercury	M	2455	mg/kg	0.05	0.06		0.07
Nickel	M	2455	mg/kg	0.50	12		9.2
Lead	M	2455	mg/kg	0.50	43		38
Selenium	M	2455	mg/kg	0.25	0.43		0.54
Zinc	M	2455	mg/kg	0.50	96		58
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50
TPH >C8-C10	N	2670	mg/kg	1.0		< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0		< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0		< 1.0	< 1.0
TPH >C16-C21	N	2670	mg/kg	1.0		< 1.0	< 1.0
TPH >C21-C35	N	2670	mg/kg	1.0		< 1.0	< 1.0
TPH >C35-C40	N	2670	mg/kg	1.0		< 1.0	< 1.0
Total TPH >C8-C40	N	2670	mg/kg	10		< 10	< 10
Naphthalene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10		< 0.10

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<b>Determinand</b>	<b>Accred.</b>	<b>SOP</b>	<b>Units</b>	<b>LOD</b>			
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10		< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0		< 2.0

## Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH at 20°C	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)

## **Report Information**

### **Key**

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U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

### **Sample Deviation Codes**

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- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

### **Sample Retention and Disposal**

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All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

