- consumption of home-grown produce
- consumption of soil attached to home-grown produce
- dermal contact with soil and indoor dust
- inhalation of indoor and outdoor dust and vapours.

Figure 1 is a conceptual model illustrating these linkages.

In line with guidance in the EA SGV report for cadmium[1], the RSK GAC for cadmium has been derived based on estimates representative of lifetime exposure. Although young children are generally more likely to have higher exposures to soil contaminants, the renal toxicity of cadmium, and the derivation of the TDI_{oral} and TDI_{inh}, are based on considerations of the kidney burden accumulated over 50 years or so. It is therefore reasonable to consider exposure not just in childhood but averaged over a longer period.

With respect to volatilisation, the CLEA model assumes a simple linear partitioning of a chemical in the soil between the sorbed, dissolved and vapour phase[9]. The upper boundaries of this partitioning are represented by the maximum aqueous solubility and pure saturated vapour concentration of the chemical. The CLEA model estimates saturated soil concentrations where these limits are reached[9]. The CLEA software uses a traffic light system to identify when individual and/or combined assessment criteria exceed the lower of either the aqueous- or vapour-based soil saturation limits. Model output cells are flagged red where the saturated soil concentration has been exceeded and the contribution of the indoor and outdoor vapour pathway to total exposure is greater than 10%. In this case, further consideration of the following is required[9]:

- Free phase contamination may be present.
- Exposure from the vapour pathways will be over-predicted by the model, as in reality the vapour phase concentration will not increase at concentrations above saturation limits
- Where the vapour pathway contribution is greater than 90%, it is unlikely the relevant health criteria value (HCV) will be exceeded at soil concentrations at least a factor of ten higher than the relevant HCV.

Where the vapour pathway is the predominant pathway (contributes greater than 90% of exposure) or the only exposure route considered and the cell is highlighted red (SAC exceeds saturation limit), the risk based on the assumed conceptual model is likely to be negligible as the vapour risk is assumed to be tolerable at maximum possible soil concentrations. In such circumstances, the vapour pathway exposure should be considered based on the presence of free phase or non-aqueous phase liquid sources and the measured concentrations of volatile organic compounds (VOC) in the vapour phase. Screening could be considered based on setting the SAC as the modelled soil saturation limits. However, as stated within the CLEA handbook[9], this is likely to not be practical in many cases because of the very low saturation limits and, in any case, is highly conservative.

It should also be noted that for mixtures of compounds, free phase may be present where soil (or groundwater) concentrations are well below saturation limits for individual compounds.

Where the vapour pathway is only one of the exposure pathways considered, an additional approach can then be utilised as detailed within Section 4.12 of the CLEA model handbook[9], which explains how to calculate an effective assessment criterion manually.

SR3[5] states that, as a general rule of thumb, it is recognised that estimating vapour phase concentrations from dissolved and sorbed phase contamination by petroleum hydrocarbons are

at least a factor of ten higher than those likely to be measured on-site. RSK has therefore applied an empirical subsurface to indoor air correction factor of 10 into the CLEA model chemical database for all petroleum hydrocarbon fractions (including BTEX, trimethylbenzenes and the polycyclic aromatic hydrocarbons (PAH) naphthalene, acenaphthene and acenaphthylene) to reduce this conservatism.

Input selection

The most up-to-date published chemical and toxicological data was obtained from EA Report SC050021/SR7[10], the EA TOX[1] reports, the C4SL SP1010 project report and associated appendices[3,6], the 2015 LQM/CIEH report[7] or the USEPA IRIS database[14]. Where a C4SL has been published, the RSK GAC have duplicated the C4SL published values using all input parameters within the SP1010 final project report[3] and associated appendices[6], and has adopted them as GAC for these six substances. Toxicological and specific chemical parameters for 1,2,4-trimethylbenzene, barium and methyl tertiary-butyl ether (MTBE) were obtained from the CL:AIRE Soil Generic Assessment Criteria report[11].

For TPH, aromatic hydrocarbons C_5–C_8 were not modelled, as this range comprises benzene (>EC5-EC7) and toluene (>EC7-EC8), which are modelled separately.

Physical parameters

For the residential with home-grown produce scenario, the CLEA default building is a small, two-storey terrace house with a concrete ground-bearing slab. The house is assumed to have a 100m^2 private garden consisting of lawn and flowerbeds, incorporating a 20m^2 plot for growing fruit and vegetables consumed by the residents. SR3[5] notes this residential building type to be the most conservative in terms of potential for vapour intrusion. The building parameters used in the production of the RSK GACs are the default CLEA v1.06 inputs presented in Table 3.3 of SR3[3], with a dust loading factor detailed in Section 9.3 of SR3[5]. The parameters for a sandy loam soil type were used in line with Table 4.4 of SR3[5]. This includes a value of 6% for the percentage of soil organic matter (SOM) within the soil. In RSK's experience, this is rather high for many sites. To avoid undertaking site-specific risk assessments for SOM, RSK has produced an additional set of GAC for SOM of 1% and 2.5% for all substances using the CLEA tool.

Summary of modifications to the default CLEA SR3[5] input parameters for residential with home-grown produce land-use scenario

In summary, the RSK GAC were produced using the default input parameters for soil properties, the air dispersion model, building properties and the vapour model detailed in SR3[5]. Modifications to the default SR3[5] exposure scenarios based on the C4SL exposure scenarios[3] are presented in Tables 2 and 3 below.

The final selected GAC are presented by pathway in Table 4 and the combined GAC in Table 5.

Figure 1: Conceptual model for residential scenario with home-grown produce

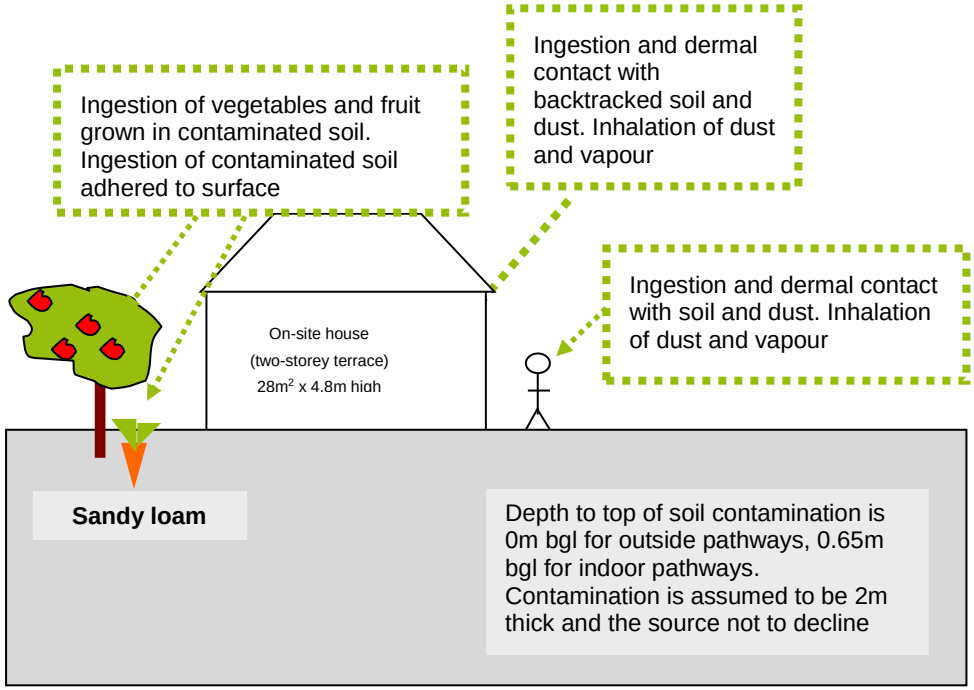

Table 1: Exposure assessment parameters for residential scenario with home-grown produce – inputs for CLEA model

Parameter	Value	Justification
Land use	Residential with homegrown produce	Chosen land use
Receptor	Female child age 1 to 6	Key generic assumption given in Box 3.1, SR3[5]
Building	Small terraced house	Key generic assumption given in Box 3.1, SR3. Small, two-storey terraced house chosen, as it is the most conservative residential building type in terms of protection from vapor intrusion (Section 3.4.6, SR3)[5]
Soil type	Sandy Loam	Most common UK soil type (Section 4.3.1, from Table 3.1, SR3)[5]
Start AC (age class)	1	Range of age classes corresponding to key generic assumption that the critical receptor is a young female child aged 0–6. From Box 3.1, SR3[5]
End AC (age class)	6	
SOM (%)	6	Representative of sandy loamy soil according to EA guidance note dated January 2009 entitled 'Changes We Have Made to the CLEA Framework Documents'[13]
	1	To provide SAC for sites where SOM <6% as often observed by RSK
	2.5	
pH	7	Model default

Table 2: Residential with home-grown produce – modified home-grown produce data

Name	Consumption rate 90th percentile (g FW kg^{-1} BW day^{-1}) by age class						Dry weight conversion factor (g DW g^{-1} FW)	Home-grown fraction (average)	Home-grown fraction (high end)	Soil loading factor (g g^{-1} DW)	Preparation correction factor
	1	2	3	4	5	6					
Green vegetables	7.12	5.87	5.87	5.87	4.53	4.53	0.096	0.05	0.33	1.00E-03	2.00E-01
Root vegetables	10.7	2.83	2.83	2.83	2.14	2.14	0.103	0.06	0.4	1.00E-03	1.00E+00
Tuber vegetables	16	6.6	6.6	6.6	4.95	4.95	0.21	0.02	0.13	1.00E-03	1.00E+00
Herbaceous fruit	1.83	3.39	3.39	3.39	2.24	2.24	0.058	0.06	0.4	1.00E-03	6.00E-01
Shrub fruit	2.23	0.46	0.46	0.46	0.19	0.19	0.166	0.09	0.6	1.00E-03	6.00E-01
Tree fruit	3.82	10.3	10.3	10.3	5.16	5.16	0.157	0.04	0.27	1.00E-03	6.00E-01
Justification	Table 3.4, SP1010 (3)						Table 6.3, SR3(5)	Table 4.19, SR3(5)		Table 6.3, SR3(5)	

Table 3: Residential with home-grown produce – modified and use and receptor data

Parameter	Unit	Age class					
		1	2	3	4	5	6
EF (soil and dust ingestion)	day yr^{-1}	180	365	365	365	365	365
EF (consumption of home-grown produce)	day yr^{-1}	180	365	365	365	365	365
EF (skin contact, indoor)	day yr^{-1}	180	365	365	365	365	365
EF (skin contact, outdoor)	day yr^{-1}	170	170	170	170	170	170
EF (inhalation of dust and vapour, indoor)	day yr^{-1}	365	365	365	365	365	365
EF (inhalation of dust and vapour, outdoor)	day yr^{-1}	365	365	365	365	365	365
Justification		Table 3.5, SP1010(3); Table 3.1, SR3(5)					
Soil to skin adherence factor (outdoor)	mg cm^{-2} day^{-1}	0.1	0.1	0.1	0.1	0.1	0.1
Justification		Table 3.5, SP1010(3)					
Inhalation rate	m^3 day^{-1}	5.4	8.0	8.9/f	10.1	10.1	10.1
Justification		Mean value USEPA, 2011(12); Table 3.2, SP1010(3)					
Notes: For **cadmium**, the exposure assessment for a residential land use is based on estimates representative of lifetime exposure AC1-18. This is because the TDI_{oral} and TDI_{inh} are based on considerations of the kidney burden accumulated over 50 years. It is therefore reasonable to consider exposure not just in childhood but averaged over a longer period. See the Environment Agency Science Report SC05002/ TOX 3(1), Science Report SC050021/Cadmium SGV(1) and the project report SP1010(3) for more information.							

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GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE

Table 4

Human Health Generic Assessment Criteria by Pathway for Residential With Home-Grown Produce Scenario

Compound	Notes	SAC Appropriate to Pathway SOM 1% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 2.5% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 6% (mg/kg)			Soil Saturation Limit (mg/kg)
		Oral	Inhalation	Combined		Oral	Inhalation	Combined		Oral	Inhalation	Combined	
Metals													
Arsenic	(a,b)	3.71E+01	5.26E+02	NR	NR	3.71E+01	5.26E+02	NR	NR	3.71E+01	5.26E+02	NR	NR
Barium	(b)	1.34E+03	NR	NR	NR	1.34E+03	NR	NR	NR	1.34E+03	NR	NR	NR
Beryllium		1.13E+02	1.72E+00	NR	NR	1.13E+02	1.72E+00	NR	NR	1.13E+02	1.72E+00	NR	NR
Boron		3.00E+02	5.20E+06	NR	NR	3.00E+02	5.20E+06	NR	NR	3.00E+02	5.20E+06	NR	NR
Cadmium	(a)	2.30E+01	4.88E+02	2.21E+01	NR	2.30E+01	4.88E+02	2.21E+01	NR	2.30E+01	4.88E+02	2.21E+01	NR
Chromium (III) - trivalent	(c)	1.84E+04	9.07E+02	NR	NR	1.84E+04	9.07E+02	NR	NR	1.84E+04	9.07E+02	NR	NR
Chromium (VI) - hexavalent	(a,d)	5.85E+01	2.06E+01	NR	NR	5.85E+01	2.06E+01	NR	NR	5.85E+01	2.06E+01	NR	NR
Copper		2.72E+03	1.41E+04	2.47E+03	NR	2.72E+03	1.41E+04	2.47E+03	NR	2.72E+03	1.41E+04	2.47E+03	NR
Lead	(a)	2.01E+02	NR	NR	NR	2.01E+02	NR	NR	NR	2.01E+02	NR	NR	NR
Elemental Mercury (Hg^0)	(d)	NR	2.35E-01	NR	4.31E+00	NR	5.60E-01	NR	1.07E+01	NR	1.22E+00	NR	2.58E+01
Inorganic Mercury (Hg^{2+})		3.95E+01	3.63E+03	3.91E+01	NR	3.95E+01	3.63E+03	3.91E+01	NR	3.95E+01	3.63E+03	3.91E+01	NR
Methyl Mercury (Hg^{4+})		1.26E+01	1.87E+01	7.52E+00	7.33E+01	1.26E+01	3.62E+01	9.34E+00	1.42E+02	1.26E+01	7.68E+01	1.08E+01	3.04E+02
Nickel	(d)	1.27E+02	1.81E+02	NR	NR	1.27E+02	1.81E+02	NR	NR	1.27E+02	1.81E+02	NR	NR
Selenium	(b)	2.58E+02	NR	NR	NR	2.58E+02	NR	NR	NR	2.58E+02	NR	NR	NR
Vanadium		4.13E+02	1.46E+03	NR	NR	4.13E+02	1.46E+03	NR	NR	4.13E+02	1.46E+03	NR	NR
Zinc	(b)	3.86E+03	3.63E+07	NR	NR	3.86E+03	3.63E+07	NR	NR	3.86E+03	3.63E+07	NR	NR
Cyanide (free)		1.37E+00	1.37E+04	1.37E+00	NR	1.37E+00	1.37E+04	1.37E+00	NR	1.37E+00	1.37E+04	1.37E+00	NR
Volatile Organic Compounds													
Benzene	(a)	2.62E-01	9.01E-01	2.03E-01	1.22E+03	5.39E-01	1.68E+00	4.08E-01	2.26E+03	1.16E+00	3.48E+00	8.72E-01	4.71E+03
Toluene		1.53E+02	9.08E+02	1.31E+02	8.69E+02	3.49E+02	2.00E+03	2.97E+02	1.92E+03	7.95E+02	4.55E+03	6.77E+02	4.36E+03
Ethylbenzene		1.10E+02	8.34E+01	4.74E+01	5.18E+02	2.61E+02	1.96E+02	1.12E+02	1.22E+03	6.00E+02	4.58E+02	2.60E+02	2.84E+03
Xylene - m		2.10E+02	8.25E+01	5.92E+01	6.25E+02	5.01E+02	1.95E+02	1.40E+02	1.47E+03	1.15E+03	4.56E+02	3.27E+02	3.46E+03
Xylene - o		1.92E+02	8.87E+01	6.07E+01	4.78E+02	4.56E+02	2.08E+02	1.43E+02	1.12E+03	1.05E+03	4.86E+02	3.32E+02	2.62E+03
Xylene - p		1.98E+02	7.93E+01	5.66E+01	5.76E+02	4.70E+02	1.86E+02	1.33E+02	1.35E+03	1.08E+03	4.36E+02	3.10E+02	3.17E+03
Total xylene		1.92E+02	7.93E+01	5.66E+01	6.25E+02	4.56E+02	1.86E+02	1.33E+02	1.47E+03	1.05E+03	4.36E+02	3.10E+02	3.46E+03
Methyl tertiary-Butyl ether (MTBE)		1.54E+02	1.04E+02	6.22E+01	2.04E+04	2.97E+02	1.69E+02	1.08E+02	3.31E+04	6.03E+02	3.21E+02	2.10E+02	6.27E+04
1,1,1,2 Tetrachloroethane		5.39E+00	1.54E+00	1.20E+00	2.60E+03	1.27E+01	3.56E+00	2.78E+00	6.02E+03	2.92E+01	8.29E+00	6.46E+00	1.40E+04
1,1,2,2-Tetrachloroethane		2.81E+00	3.92E+00	1.64E+00	2.67E+03	6.10E+00	8.04E+00	3.47E+00	5.46E+03	1.36E+01	1.76E+01	7.67E+00	1.20E+04
1,1,1-Trichloroethane		3.33E+02	9.01E+00	8.77E+00	1.43E+03	7.26E+02	1.84E+01	1.80E+01	2.92E+03	1.62E+03	4.04E+01	3.94E+01	6.39E+03
1,1,2 Trichloroethane		1.95E+00	1.25E+00	7.62E-01	4.03E+03	4.21E+00	2.55E+00	1.59E+00	8.21E+03	9.35E+00	5.59E+00	3.50E+00	1.80E+04
1,1-Dichloroethene		1.93E+01	3.29E-01	3.23E-01	2.23E+03	3.85E+01	5.82E-01	5.74E-01	3.94E+03	8.15E+01	1.17E+00	1.16E+00	7.94E+03
1,2-Dichloroethane		3.17E-02	9.20E-03	7.13E-03	3.41E+03	5.73E-02	1.33E-02	1.08E-02	4.91E+03	1.09E-01	2.28E-02	1.88E-02	8.43E+03
1,2,4-Trimethylbenzene		NR	1.76E+00	NR	4.74E+02	NR	4.26E+00	NR	1.16E+03	NR	9.72E+00	NR	2.76E+03
1,3,5-Trimethylbenzene	(e)	NR	NR	NR	2.30E+02	NR	NR	NR	5.52E+02	NR	NR	NR	1.30E+03
1,2-Dichloropropane		4.28E+00	3.40E-02	3.37E-02	1.19E+03	8.44E+00	6.00E-02	5.96E-02	2.11E+03	1.77E+01	1.21E-01	1.20E-01	4.24E+03
Carbon Tetrachloride (tetrachloromethane)		3.10E+00	2.58E-02	2.57E-02	1.52E+03	7.11E+00	5.65E-02	5.62E-02	3.32E+03	1.62E+01	1.28E-01	1.27E-01	7.54E+03
Chloroethane		NR	1.17E+01	NR	2.61E+03	NR	1.59E+01	NR	3.54E+03	NR	2.57E+01	NR	5.71E+03
Chloromethane		NR	1.17E-02	NR	1.91E+03	NR	1.38E-02	NR	2.24E+03	NR	1.85E-02	NR	2.99E+03
Cis 1,2 Dichloroethene		1.56E-01	NR	NR	3.94E+03	2.66E-01	NR	NR	6.61E+03	5.18E-01	NR	NR	1.29E+04
Dichloromethane		7.04E-01	3.05E+00	6.24E-01	7.27E+03	1.27E+00	4.06E+00	1.08E+00	9.68E+03	2.33E+00	6.42E+00	1.92E+00	1.53E+04
Tetrachloroethene		4.49E+00	1.79E-01	1.76E-01	4.24E+02	1.04E+01	4.02E-01	3.94E-01	9.51E+02	2.38E+01	9.21E-01	9.04E-01	2.18E+03
Trans 1,2 Dichloroethene		6.45E+00	2.76E-01	NR	3.42E+03	1.29E+01	4.99E-01	NR	6.17E+03	2.74E+01	1.02E+00	NR	1.26E+04
Trichloroethene		2.83E-01	1.72E-02	1.62E-02	1.54E+03	6.26E-01	3.59E-02	3.40E-02	3.22E+03	1.41E+00	7.98E-02	7.55E-02	7.14E+03
Vinyl Chloride (chloroethene)		3.82E-03	7.73E-04	6.43E-04	1.36E+03	6.87E-03	1.00E-03	8.73E-04	1.76E+03	1.25E-02	1.53E-03	1.36E-03	2.69E+03
Semi-Volatile Organic Compounds													
2-Chloronaphthalene		2.76E+02	5.39E+00	5.29E+00	1.14E+02	6.59E+02	1.33E+01	1.30E+01	2.80E+02	1.45E+03	3.17E+01	3.10E+01	6.69E+02
Acenaphthene		2.27E+02	4.86E+04	2.26E+02	5.70E+01	5.41E+02	1.18E+05	5.38E+02	1.41E+02	1.18E+03	2.68E+05	1.17E+03	3.36E+02
Acenaphthylene		1.85E+02	4.59E+04	1.84E+02	8.61E+01	4.42E+02	1.11E+05	4.40E+02	2.12E+02	9.78E+02	2.53E+05	9.74E+02	5.06E+02
Anthracene		2.43E+03	1.53E+05	2.39E+03	1.17E+00	5.53E+03	3.77E+05	5.45E+03	2.91E+00	1.10E+04	8.76E+05	1.09E+04	6.96E+00

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - RESIDENTIAL WITH HOME-GROWN PRODUCE

Table 4

Human Health Generic Assessment Criteria by Pathway for Residential With Home-Grown Produce Scenario

Compound	Notes	SAC Appropriate to Pathway SOM 1% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 2.5% (mg/kg)			Soil Saturation Limit (mg/kg)	SAC Appropriate to Pathway SOM 6% (mg/kg)			Soil Saturation Limit (mg/kg)
		Oral	Inhalation	Combined		Oral	Inhalation	Combined		Oral	Inhalation	Combined	
Benzo(a)anthracene		1.01E+01	2.47E+01	7.18E+00	1.71E+00	1.42E+01	4.37E+01	1.07E+01	4.28E+00	1.69E+01	6.26E+01	1.33E+01	1.03E+01
Benzo(a)pyrene	(a)	4.96E+00	3.51E+01	NR	9.11E-01	4.96E+00	3.77E+01	NR	2.28E+00	4.96E+00	3.89E+01	NR	5.46E+00
Benzo(b)fluoranthene		2.96E+00	1.93E+01	2.56E+00	1.22E+00	3.89E+00	2.13E+01	3.29E+00	3.04E+00	4.43E+00	2.22E+01	3.69E+00	7.29E+00
Benzo(g,h,i)perylene		3.77E+02	1.87E+03	3.14E+02	1.54E-02	4.09E+02	1.94E+03	3.38E+02	3.85E-02	4.23E+02	1.97E+03	3.48E+02	9.23E-02
Benzo(k)fluoranthene		8.92E+01	5.41E+02	7.66E+01	6.87E-01	1.10E+02	5.76E+02	9.22E+01	1.72E+00	1.21E+02	5.91E+02	1.00E+02	4.12E+00
Chrysene		1.66E+01	1.19E+02	1.46E+01	4.40E-01	2.54E+01	1.49E+02	2.17E+01	1.10E+00	3.19E+01	1.66E+02	2.67E+01	2.64E+00
Dibenzo(a,h)anthracene		2.90E-01	1.45E+00	2.41E-01	3.93E-03	3.43E-01	1.64E+00	2.84E-01	9.82E-03	3.69E-01	1.74E+00	3.04E-01	2.36E-02
Fluoranthene		2.87E+02	3.83E+04	2.85E+02	1.89E+01	5.63E+02	8.87E+04	5.60E+02	4.73E+01	9.00E+02	1.83E+05	8.96E+02	1.13E+02
Fluorene		1.77E+02	6.20E+03	1.72E+02	3.09E+01	4.19E+02	1.53E+04	4.07E+02	7.65E+01	8.98E+02	3.62E+04	8.77E+02	1.83E+02
Hexachloroethane		2.68E-01	NR	NR	8.17E+00	6.57E-01	NR	NR	2.01E+01	1.55E+00	NR	NR	4.81E+01
Indeno(1,2,3-cd)pyrene		3.09E+01	2.12E+02	2.70E+01	6.13E-02	4.22E+01	2.38E+02	3.59E+01	1.53E-01	4.92E+01	2.50E+02	4.11E+01	3.68E-01
Naphthalene		2.78E+01	2.33E+01	1.27E+01	7.64E+01	6.66E+01	5.58E+01	3.04E+01	1.83E+02	1.53E+02	1.31E+02	7.06E+01	4.32E+02
Phenanthrene		9.85E+01	7.17E+03	9.72E+01	3.60E+01	2.24E+02	1.76E+04	2.22E+02	8.96E+01	4.48E+02	4.07E+04	4.43E+02	2.14E+02
Pyrene		6.25E+02	8.79E+04	6.20E+02	2.20E+00	1.25E+03	2.04E+05	1.24E+03	5.49E+00	2.05E+03	4.23E+05	2.04E+03	1.32E+01
Phenol		1.60E+02	4.58E+02	1.20E+02	2.42E+04	2.96E+02	6.95E+02	2.09E+02	3.81E+04	5.86E+02	1.19E+03	3.93E+02	7.03E+04
Total Petroleum Hydrocarbons													
Aliphatic hydrocarbons EC_5-EC_6		4.99E+03	4.24E+01	4.23E+01	3.04E+02	1.13E+04	7.79E+01	7.78E+01	5.58E+02	2.50E+04	1.61E+02	1.60E+02	1.15E+03
Aliphatic hydrocarbons >EC_6-EC_8		1.49E+04	1.04E+02	1.03E+02	1.44E+02	3.43E+04	2.31E+02	2.31E+02	3.22E+02	7.11E+04	5.29E+02	5.28E+02	7.36E+02
Aliphatic hydrocarbons >EC_8-EC_{10}		1.61E+03	2.68E+01	2.67E+01	7.77E+01	2.91E+03	6.55E+01	6.51E+01	1.90E+02	4.26E+03	1.56E+02	1.54E+02	4.51E+02
Aliphatic hydrocarbons >EC_{10}-EC_{12}		4.57E+03	1.33E+02	1.32E+02	4.75E+01	5.51E+03	3.31E+02	3.26E+02	1.18E+02	5.98E+03	7.93E+02	7.65E+02	2.83E+02
Aliphatic hydrocarbons >EC_{12}-EC_{16}		6.27E+03	1.11E+03	1.06E+03	2.37E+01	6.34E+03	2.78E+03	2.41E+03	5.91E+01	6.36E+03	6.67E+03	4.34E+03	1.42E+02
Aliphatic hydrocarbons >EC_{16}-EC_{35}	(b)	6.46E+04	NR	NR	8.48E+00	9.17E+04	NR	NR	2.12E+01	1.10E+05	NR	NR	5.09E+01
Aliphatic hydrocarbons >EC_{35}-EC_{44}	(b)	6.46E+04	NR	NR	8.48E+00	9.17E+04	NR	NR	2.12E+01	1.10E+05	NR	NR	5.09E+01
Aromatic hydrocarbons >EC8-EC_{10}		5.76E+01	4.74E+01	3.45E+01	6.13E+02	1.38E+02	1.16E+02	8.38E+01	1.50E+03	3.07E+02	2.77E+02	1.94E+02	3.58E+02
Aromatic hydrocarbons >EC_{10}-EC_{12}		8.29E+01	2.58E+02	7.52E+01	3.64E+02	1.96E+02	6.39E+02	1.79E+02	8.99E+02	4.25E+02	1.52E+03	3.91E+02	2.15E+03
Aromatic hydrocarbons >EC_{12}-EC_{16}		1.47E+02	2.85E+03	1.45E+02	1.69E+02	3.36E+02	7.07E+03	3.32E+02	4.19E+02	6.81E+02	1.68E+04	6.74E+02	1.00E+03
Aromatic hydrocarbons >EC_{16}-EC_{21}	(b)	2.63E+02	NR	NR	5.37E+01	5.45E+02	NR	NR	1.34E+02	9.34E+02	NR	NR	3.21E+02
Aromatic hydrocarbons >EC_{21}-EC_{35}	(b)	1.09E+03	NR	NR	4.83E+00	1.47E+03	NR	NR	1.21E+01	1.70E+03	NR	NR	2.90E+01
Aromatic hydrocarbons >EC_{35}-EC_{44}	(b)	1.09E+03	NR	NR	4.83E+00	1.47E+03	NR	NR	1.21E+01	1.70E+03	NR	NR	2.90E+01

Notes:

EC - equivalent carbon. SAC - soil assessment criteria.

The CLEA model output is colour coded depending upon whether the soil saturation limit has been exceeded.

Calculated SAC exceeds soil saturation limit and may significantly affect the interpretation of any exceedances as the contribution of the indoor and outdoor vapour pathway to total exposure is >10%.

Calculated SAC exceeds soil saturation limit but the exceedance will not affect the SAC significantly as the contribution of the indoor and outdoor vapour pathway to total exposure is <10%.

Calculated SAC does not exceed the soil saturation limit.

The SAC for organic compounds are dependant upon soil organic matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58. 1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.

SAC for TPH fractions, PAHs napthalene, acenaphthene and acenaphthylene, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway (Section 10.1.1, SR3)

(a) SAC for arsenic, benzene, benzo(a)pyrene, cadmium, chromium VI and lead are derived using the C4SL toxicology data.

(b) SAC for boron and selenium should not include the inhalation pathway as no expert group HCV has been derived; aliphatic and aromatic hydrocarbons >EC16 should not include inhalation pathway due to their non-volatile nature and inhalation exposure being minimal (oral, dermal and inhalation exposure is compared to the oral HCV); arsenic should only be based on oral contribution (rather than combined) owing to the relative small contribution from inhalation in accordance with the SGV report. The Oral SAC should be adopted for zinc and benzo(a)pyrene.

(c) SAC for CrIII should be based on the lower of the oral and inhalation SAC (see LQM/CIEH 2015 Section 6.8)

(d) SAC for elemental mercury, chromium VI and nickel should be based on the inhalation pathway only.

(e) SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4 trimethylbenzene may be used.

Table 5
Human Health Generic Assessment Criteria for Residential with home-grown produce

Compound	SAC for Soil SOM 1% (mg/kg)	SAC for Soil SOM 2.5% (mg/kg)	SAC for Soil SOM 6% (mg/kg)
Metals			
Arsenic	37	37	37
Barium	1,300	1,300	1,300
Beryllium	1.7	1.7	1.7
Boron	300	300	300
Cadmium	22	22	22
Chromium (III) - trivalent	910	910	910
Chromium (VI) - hexavalent	21	21	21
Copper	2,500	2,500	2,500
Lead	200	200	200
Elemental Mercury (Hg^0)	0.2	0.6	1.2
Inorganic Mercury (Hg^{2+})	39	39	39
Methyl Mercury (Hg^{4+})	10	10	10
Nickel	130	130	130
Selenium	258	258	258
Vanadium	410	410	410
Zinc	3,900	3,900	3,900
Cyanide (free)	1.4	1.4	1.4
Volatile Organic Compounds			
Benzene	0.20	0.41	0.87
Toluene	130	300	680
Ethylbenzene	50	110	260
Xylene - m	59	140	327
Xylene - o	61	143	332
Xylene - p	57	133	310
Total xylene	57	133	310
Methyl tertiary-Butyl ether (MTBE)	60	110	210
1,1,1,2 Tetrachloroethane	1.20	2.78	6.46
1,1,2,2-Tetrachloroethane	1.6	3.5	7.7
1,1,1-Trichloroethane	9	18	39
1,1,2 Trichloroethane	0.8	1.6	3.5
1,1-Dichloroethene	0.32	0.57	1.16
1,2-Dichloroethane	0.007	0.011	0.019
1,2,4-Trimethylbenzene	1.8	4.3	9.7
1,3,5-Trimethylbenzene	NR	NR	NR
1,2-Dichloropropane	0.034	0.060	0.120
Carbon Tetrachloride (tetrachloromethane)	0.026	0.056	0.127
Chloroethane	11.7	15.9	25.7
Chloromethane	0.012	0.014	0.019
Cis 1,2 Dichloroethene	0.16	0.27	0.52
Dichloromethane	0.62	1.08	1.92
Tetrachloroethene	0.2	0.4	0.9
Trans 1,2 Dichloroethene	0.28	0.50	1.02
Trichloroethene	0.02	0.03	0.08
Vinyl Chloride (chloroethene)	0.0006	0.0009	0.0014
Semi-Volatile Organic Compounds			
2-Chloronaphthalene	5	13	31
Acenaphthene	230	540	1,170
Acenaphthylene	180	440	970
Anthracene	2,400	5,500	10,900
Benzo(a)anthracene	7	11	13
Benzo(a)pyrene	5	5	5
Benzo(b)fluoranthene	2.6	3.3	3.7
Benzo(g,h,i)perylene	310	340	350
Benzo(k)fluoranthene	77	92	100
Chrysene	15	22	27
Dibenzo(a,h)anthracene	0.24	0.28	0.30
Fluoranthene	290	560	900
Fluorene	170	410	880
Hexachloroethane	0.27	0.66	1.55
Indeno(1,2,3-cd)pyrene	27	36	41
Naphthalene	13	30	71
Phenanthrene	100	220	440
Pyrene	620	1,240	2,040
Phenol	120	210	390
Total Petroleum Hydrocarbons			
Aliphatic hydrocarbons EC_5-EC_6	42	78	160
Aliphatic hydrocarbons >EC_6-EC_8	100	230	530
Aliphatic hydrocarbons >EC_8-EC_{10}	27	65	154
Aliphatic hydrocarbons >EC_{10}-EC_{12}	130 (48)	330 (118)	760 (283)
Aliphatic hydrocarbons >EC_{12}-EC_{16}	1,100 (24)	2,400 (59)	4,300 (142)
Aliphatic hydrocarbons >EC_{16}-EC_{35}	65,000 (8)	92,000 (21)	110,000
Aliphatic hydrocarbons >EC_{35}-EC_{44}	65,000 (8)	92,000 (21)	110,000
Aromatic hydrocarbons >EC_8-EC_{10}	30	80	190
Aromatic hydrocarbons >EC_{10}-EC_{12}	80	180	390
Aromatic hydrocarbons >EC_{12}-EC_{16}	140	330	670
Aromatic hydrocarbons >EC_{16}-EC_{21}	260	540	930
Aromatic hydrocarbons >EC_{21}-EC_{35}	1,100	1,500	1,700
Aromatic hydrocarbons >EC_{35}-EC_{44}	1,100	1,500	1,700
Minerals			
Asbestos	Stage 1 test – No asbestos detected with ID; Stage 2 test - <0.001% dry weight (exceedance of either equates to an exceedance of the GAC)[1]		

Notes:
'-' Generic assessment criteria not calculated owing to low volatility of substance and therefore no pathway, or an absence of toxicological data.
NR - SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4 trimethylbenzene may be used
EC - equivalent carbon. SAC - soil assessment criteria.
[1] LOD for weight of asbestos per unit weight of soil calculated on a dry weight basis using PLM, handpicking and gravimetry.

The SAC for organic compounds are dependent on Soil Organic Matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58.
1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.

SAC for TPH fractions, PAHs napthalene, acenaphthene and acenaphthylene, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway, section 10.1.1, SR3.

(VALUE IN BRACKETS)
RSK has adopted an approach for petroleum hydrocarbons in accordance with LQM/CIEH whereby the concentration modelled for each petroleum hydrocarbon fraction has been tabulated as the SAC with the corresponding solubility or vapour saturation limits given in brackets.

APPENDIX N
GENERIC ASSESSMENT CRITERIA FOR PHYTOTOXIC EFFECTS

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Phytotoxic (pH >7.0)
SOM	1%
GAC version	2012_01

Notes

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects	Lab sample ID	20/07394/55	20/08313/1	20/07494/1	20/07394/21	20/07494/2	20/07494/3	20/07394/1	20/07394/2	20/07394/3	20/07394/4
									Client sample ID	BH1	BH3	BH4	BH5	BH6	BH7	TP1	TP2	TP2	TP3
									Depth to top	1.75	0.4	0.75	0.2	0.5	1.5	0.5	0.1	0.7	0.5
									Depth to bottom										
									Date sampled	19/08/20	13/08/20	02/09/20	25/08/20	21/08/20	02/09/20	24/08/20	24/08/20	24/08/20	24/08/20
Metals and Inorganics																			
Arsenic	mg/kg			18	<1	26	24	2		5	13	5	8	<1	3	2	18	2	4
Cadmium	mg/kg	3		4.1	<0.5	26	24	2		0.5	1.1	0.7	0.7	<0.5	0.6	0.7	0.8	0.5	0.7
Chromium	mg/kg			54	21	26	26	0		36	37	37	26	34	45	54	28	43	36
Copper	mg/kg	200		3550	18	26	26	0		55	51	159	24	93	170	75	87	23	302
Lead	mg/kg	300		563	17	26	26	0		48	61	139	112	77	180	18	219	19	115
Mercury	mg/kg	1		2	<0.17	26	24	2		0.34	0.68	0.8	1.33	0.6	0.82	0.84	2	0.3	0.6
Nickel	mg/kg	110		142	18	26	26	0		28	34	34	25	18	45	47	27	26	45
Selenium	mg/kg			5	<1	26	15	11		<1	<1	2	2	2	2	2	<1	<1	1
Zinc	mg/kg	300		701	61	26	26	0		98	100	164	87	85	165	104	162	61	239
Asbestos																			
Asbestos in soil						26	0	26		NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C6-C8	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C8-C10	mg/kg				<1	26	0	26		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C10-C12	mg/kg				<1	26	0	26		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C12-C16	mg/kg			3	<1	26	2	24		<1	<1	<1	<1	<1	3	<1	<1	<1	<1
Ali >C16-C21	mg/kg			10	<1	26	10	16		1	<1	2	<1	<1	7	<1	<1	<1	2
Ali >C21-C35	mg/kg			599	1	26	26	0		50	5	15	13	2	15	1	4	2	8
Ali >C16-C35 calculated	mg/kg			609	1	26	26	0		51	5	17	13	2	22	1	4	2	10
Total Aliphatics	mg/kg			609	1	26	26	0		51	5	18	13	2	25	1	4	2	10
Aro >C5-C7	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C7-C8	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	mg/kg			3	<1	26	1	25		<1	<1	<1	<1	<1	3	<1	<1	<1	<1
Aro >C10-C12	mg/kg				<1	26	0	26		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aro >C12-C16	mg/kg			4	<1	26	8	18		3	<1	4	<1	<1	3	<1	<1	<1	2
Aro >C16-C21	mg/kg			234	<1	26	23	3		9	<1	41	3	<1	7	<1	5	2	22
Aro >C21-C35	mg/kg			428	1	26	26	0		73	11	141	38	7	23	1	25	12	79
Total Aromatics	mg/kg			666	1	26	26	0		86	12	186	41	7	35	1	30	14	103
TPH (Ali & Aro)	mg/kg			1270	2	26	26	0		136	16	203	54	9	60	2	34	15	113
BTEX - Benzene	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Toluene	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - o Xylene	mg/kg			0.02	<0.01	26	1	25		<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
BTEX - m & p Xylene	mg/kg			0.07	<0.01	26	1	25		<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01	<0.01
MTBE	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg			0.34	<0.01	26	13	13		0.34	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	0.02	<0.01	<0.01
Acenaphthylene	mg/kg			0.2	<0.01	26	16	10		0.03	<0.01	0.02	<0.01	<0.01	0.02	<0.01	0.02	<0.01	0.06
Anthracene	mg/kg			1.29	<0.02	26	16	10		0.38	<0.02	0.08	<0.02	<0.02	0.09	<0.02	0.05	<0.02	0.06
Benzo(a)anthracene	mg/kg			2.85	<0.04	26	22	4		0.78	0.18	0.51	0.1	<0.04	0.26	<0.04	0.3	<0.04	0.29

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Phytotoxic (pH >7.0)
SOM	1%
GAC version	2012_01

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete	Lab sample ID	20/07394/25	20/07394/61	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9	20/07394/30	20/07394/62	20/07394/10
									Client sample ID	TP3	TP3 + TP4	TP4	TP5	TP6	TP6	TP7	TP7	TP7 + TP8	TP8
									Depth to top	0.75	0.75	0.8	0.6	0.1	0.4	0.1	0.5	0.5	0.5
									Depth to bottom		0.8								
									Date sampled	24/08/20	24/08/20	24/08/20	24/08/20	26/08/20	26/08/20	26/08/20	24/08/20	26/08/20	26/08/20
Metals and Inorganics																			
Arsenic	mg/kg			18	<1	26	24	2				3	2	16	6	8			4
Cadmium	mg/kg	3		4.1	<0.5	26	24	2				1.9	0.6	4.1	1	0.7			<0.5
Chromium	mg/kg			54	21	26	26	0				48	42	48	40	33			21
Copper	mg/kg	200		3550	18	26	26	0				3550	97	173	419	35			36
Lead	mg/kg	300		563	17	26	26	0				459	49	563	172	40			160
Mercury	mg/kg	1		2	<0.17	26	24	2				0.49	0.56	1.56	0.71	0.82			0.91
Nickel	mg/kg	110		142	18	26	26	0				142	34	54	54	33			19
Selenium	mg/kg			5	<1	26	15	11				<2	2	2	2	5			<1
Zinc	mg/kg	300		701	61	26	26	0				701	114	509	290	98			104
Asbestos																			
Asbestos in soil						26	0	26				NAD	NAD	NAD	NAD	NAD			NAD
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
Ali >C6-C8	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
Ali >C8-C10	mg/kg				<1	26	0	26				<1	<1	<1	<1	<1			<1
Ali >C10-C12	mg/kg				<1	26	0	26				<1	<1	<1	<1	<1			<1
Ali >C12-C16	mg/kg			3	<1	26	2	24				<1	<1	<1	<1	<1			2
Ali >C16-C21	mg/kg			10	<1	26	10	16				2	2	<1	<1	<1			5
Ali >C21-C35	mg/kg			599	1	26	26	0				34	6	10	5	8			47
Ali >C16-C35 calculated	mg/kg			609	1	26	26	0				36	8	10	5	8			52
Total Aliphatics	mg/kg			609	1	26	26	0				36	8	10	5	8			54
Aro >C5-C7	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
Aro >C7-C8	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
Aro >C8-C10	mg/kg			3	<1	26	1	25				<1	<1	<1	<1	<1			<1
Aro >C10-C12	mg/kg				<1	26	0	26				<1	<1	<1	<1	<1			<1
Aro >C12-C16	mg/kg			4	<1	26	8	18				4	<1	<1	<1	<1			2
Aro >C16-C21	mg/kg			234	<1	26	23	3				33	2	5	3	2			6
Aro >C21-C35	mg/kg			428	1	26	26	0				144	10	30	28	25			79
Total Aromatics	mg/kg			666	1	26	26	0				180	12	34	31	27			88
TPH (Ali & Aro)	mg/kg			1270	2	26	26	0				217	20	44	37	36			142
BTEX - Benzene	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
BTEX - Toluene	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
BTEX - Ethyl Benzene	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
BTEX - o Xylene	mg/kg			0.02	<0.01	26	1	25				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
BTEX - m & p Xylene	mg/kg			0.07	<0.01	26	1	25				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
MTBE	mg/kg				<0.01	26	0	26				<0.01	<0.01	<0.01	<0.01	<0.01			<0.01
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg			0.34	<0.01	26	13	13				0.11	<0.01	0.1	0.01	<0.01			0.01
Acenaphthylene	mg/kg			0.2	<0.01	26	16	10				0.09	0.02	0.2	0.02	<0.01			0.02
Anthracene	mg/kg			1.29	<0.02	26	16	10				0.44	0.03	1.29	0.05	<0.02			0.04
Benzo(a)anthracene	mg/kg			2.85	<0.04	26	22	4				2.85	0.17	2.58	0.47	0.08			0.18

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Phytotoxic (pH >7.0)
SOM	1%
GAC version	2012_01

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete	Lab sample ID	20/07394/11	20/07394/12	20/07394/13	20/07394/63	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/40	20/07394/64
									Client sample ID	TP9	TP10	TP11	TP11 + TP13	TP12	TP13	TP14	TP15	TP15	TP15 +TP16
									Depth to top	0.3	1.5	0.5	0.4	1	0.4	0.5	0.15	0.8	0.5
									Depth to bottom				0.5						0.8
									Date sampled	26/08/20	25/08/20	24/08/20	24/08/20	25/08/20	24/08/20	24/08/20	25/08/20	25/08/20	25/08/20
Metals and Inorganics																			
Arsenic	mg/kg			18	<1	26	24	2		11	3	4		2	4	3	4		
Cadmium	mg/kg	3		4.1	<0.5	26	24	2		0.7	1.8	0.6		1.2	0.6	0.7	1		
Chromium	mg/kg			54	21	26	26	0		21	53	31		48	36	43	29		
Copper	mg/kg	200		3550	18	26	26	0		33	528	69		129	18	67	86		
Lead	mg/kg	300		563	17	26	26	0		52	181	47		55	25	102	81		
Mercury	mg/kg	1		2	<0.17	26	24	2		0.34	0.76	0.36		0.32	0.24	0.4	0.38		
Nickel	mg/kg	110		142	18	26	26	0		25	79	30		53	23	28	31		
Selenium	mg/kg			5	<1	26	15	11		<1	3	<1		2	<1	<1	3		
Zinc	mg/kg	300		701	61	26	26	0		111	362	88		131	67	114	147		
Asbestos																			
Asbestos in soil						26	0	26		NAD	NAD	NAD		NAD	NAD	NAD	NAD		
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
Ali >C6-C8	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
Ali >C8-C10	mg/kg				<1	26	0	26		<1	<1	<1		<1	<1	<1	<1		
Ali >C10-C12	mg/kg				<1	26	0	26		<1	<1	<1		<1	<1	<1	<1		
Ali >C12-C16	mg/kg			3	<1	26	2	24		<1	<1	<1		<1	<1	<1	<1		
Ali >C16-C21	mg/kg			10	<1	26	10	16		<1	<1	2		1	10	<1	<1		
Ali >C21-C35	mg/kg			599	1	26	26	0		1	5	5		3	599	14	4		
Ali >C16-C35 calculated	mg/kg			609	1	26	26	0		1	5	7		4	609	14	4		
Total Aliphatics	mg/kg			609	1	26	26	0		1	5	7		4	609	14	4		
Aro >C5-C7	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
Aro >C7-C8	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
Aro >C8-C10	mg/kg			3	<1	26	1	25		<1	<1	<1		<1	<1	<1	<1		
Aro >C10-C12	mg/kg				<1	26	0	26		<1	<1	<1		<1	<1	<1	<1		
Aro >C12-C16	mg/kg			4	<1	26	8	18		<1	<1	<1		<1	4	<1	<1		
Aro >C16-C21	mg/kg			234	<1	26	23	3		1	5	4		2	234	1	2		
Aro >C21-C35	mg/kg			428	1	26	26	0		8	24	30		10	428	21	17		
Total Aromatics	mg/kg			666	1	26	26	0		9	30	34		12	666	22	19		
TPH (Ali & Aro)	mg/kg			1270	2	26	26	0		11	35	40		17	1270	36	23		
BTEX - Benzene	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
BTEX - Toluene	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
BTEX - Ethyl Benzene	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
BTEX - o Xylene	mg/kg			0.02	<0.01	26	1	25		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
BTEX - m & p Xylene	mg/kg			0.07	<0.01	26	1	25		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
MTBE	mg/kg				<0.01	26	0	26		<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg			0.34	<0.01	26	13	13		<0.01	0.01	0.02		0.01	<0.01	<0.01	<0.01		
Acenaphthylene	mg/kg			0.2	<0.01	26	16	10		0.01	0.01	0.03		0.01	<0.01	<0.01	<0.01		
Anthracene	mg/kg			1.29	<0.02	26	16	10		<0.02	0.06	0.07		0.03	<0.02	<0.02	<0.02		
Benzo(a)anthracene	mg/kg			2.85	<0.04	26	22	4		0.08	0.32	0.43		0.14	<0.04	0.07	0.15		

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Phytotoxic (pH >7.0)
SOM	1%
GAC version	2012_01

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete	Lab sample ID: 20/07394/18	20/07394/48	20/07394/19	20/07394/20
									Client sample ID: TP16	TP16	TP17	TP18
									Depth to top: 1	0.5	0.5	1.5
									Depth to bottom:			
									Date sampled: 25/08/20	25/08/20	25/08/20	25/08/20
Metals and Inorganics												
Arsenic	mg/kg			18	<1	26	24	2	2		3	<1
Cadmium	mg/kg	3		4.1	<0.5	26	24	2	1.4		0.6	0.8
Chromium	mg/kg			54	21	26	26	0	46		39	50
Copper	mg/kg	200		3550	18	26	26	0	344		32	116
Lead	mg/kg	300		563	17	26	26	0	73		17	26
Mercury	mg/kg	1		2	<0.17	26	24	2	0.38		<0.17	<0.17
Nickel	mg/kg	110		142	18	26	26	0	60		39	48
Selenium	mg/kg			5	<1	26	15	11	4		<1	2
Zinc	mg/kg	300		701	61	26	26	0	191		80	99
Asbestos												
Asbestos in soil						26	0	26	NAD		NAD	NAD
Petroleum Hydrocarbons												
Ali >C5-C6	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
Ali >C6-C8	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
Ali >C8-C10	mg/kg				<1	26	0	26	<1		<1	<1
Ali >C10-C12	mg/kg				<1	26	0	26	<1		<1	<1
Ali >C12-C16	mg/kg			3	<1	26	2	24	<1		<1	<1
Ali >C16-C21	mg/kg			10	<1	26	10	16	<1		<1	<1
Ali >C21-C35	mg/kg			599	1	26	26	0	3		7	18
Ali >C16-C35 calculated	mg/kg			609	1	26	26	0	3		7	18
Total Aliphatics	mg/kg			609	1	26	26	0	3		7	18
Aro >C5-C7	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
Aro >C7-C8	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
Aro >C8-C10	mg/kg			3	<1	26	1	25	<1		<1	<1
Aro >C10-C12	mg/kg				<1	26	0	26	<1		<1	<1
Aro >C12-C16	mg/kg			4	<1	26	8	18	1		<1	<1
Aro >C16-C21	mg/kg			234	<1	26	23	3	21		5	8
Aro >C21-C35	mg/kg			428	1	26	26	0	45		22	63
Total Aromatics	mg/kg			666	1	26	26	0	68		27	71
TPH (Ali & Aro)	mg/kg			1270	2	26	26	0	71		34	89
BTEX - Benzene	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
BTEX - Toluene	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
BTEX - o Xylene	mg/kg			0.02	<0.01	26	1	25	<0.01		<0.01	<0.01
BTEX - m & p Xylene	mg/kg			0.07	<0.01	26	1	25	<0.01		<0.01	<0.01
MTBE	mg/kg				<0.01	26	0	26	<0.01		<0.01	<0.01
Polycyclic aromatic hydrocarbons												
Acenaphthene	mg/kg			0.34	<0.01	26	13	13	0.13		0.04	0.04
Acenaphthylene	mg/kg			0.2	<0.01	26	16	10	<0.01		0.11	0.01
Anthracene	mg/kg			1.29	<0.02	26	16	10	0.08		0.22	0.1
Benzo(a)anthracene	mg/kg			2.85	<0.04	26	22	4	0.15		1.64	0.68

								Lab sample ID	20/07394/55	20/08313/1	20/07494/1	20/07394/21	20/07494/2	20/07494/3	20/07394/1	20/07394/2	20/07394/3	20/07394/4
								Client sample ID	BH1	BH3	BH4	BH5	BH6	BH7	TP1	TP2	TP2	TP3
								Depth to top	1.75	0.4	0.75	0.2	0.5	1.5	0.5	0.1	0.7	0.5
								Depth to bottom										
								Date sampled	19/08/20	13/08/20	02/09/20	25/08/20	21/08/20	02/09/20	24/08/20	24/08/20	24/08/20	24/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects										
Benzo(a)pyrene	mg/kg			2.31	<0.04	26	22	4	0.74	0.24	0.48	0.13	<0.04	0.28	<0.04	0.31	<0.04	0.42
Benzo(b)fluoranthene	mg/kg			2.65	<0.05	26	22	4	0.75	0.27	0.59	0.13	<0.05	0.32	<0.05	0.44	<0.05	0.5
Benzo(ghi)perylene	mg/kg			1.28	<0.05	26	21	5	0.53	0.14	0.31	0.11	<0.05	0.18	<0.05	0.23	<0.05	0.36
Benzo(k)fluoranthene	mg/kg			0.92	<0.07	26	15	11	0.29	0.09	0.22	<0.07	<0.07	0.12	<0.07	0.16	<0.07	0.15
Chrysene	mg/kg			2.5	<0.06	26	22	4	0.86	0.24	0.53	0.13	<0.06	0.28	<0.06	0.4	<0.06	0.36
Dibenzo(ah)anthracene	mg/kg			0.27	<0.04	26	12	14	0.15	<0.04	0.08	<0.04	<0.04	0.05	<0.04	0.04	<0.04	0.06
Fluoranthene	mg/kg			8.67	<0.08	26	22	4	1.55	0.25	0.93	0.16	<0.08	0.49	<0.08	0.56	<0.08	0.4
Fluorene	mg/kg			0.31	<0.01	26	12	14	0.23	<0.01	0.02	<0.01	<0.01	0.04	<0.01	0.01	<0.01	<0.01
Indeno(123-cd)pyrene	mg/kg			1.67	<0.03	26	22	4	0.65	0.16	0.4	0.13	<0.03	0.25	<0.03	0.27	<0.03	0.41
Naphthalene	mg/kg				<0.03	26	0	26	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Phenanthrene	mg/kg			4.4	<0.03	26	21	5	1.43	0.07	0.27	0.05	<0.03	0.29	0.04	0.27	<0.03	0.07
Pyrene	mg/kg			7.48	<0.07	26	22	4	1.42	0.25	0.8	0.15	<0.07	0.45	<0.07	0.5	<0.07	0.42
Total PAH-16MS	mg/kg			34	<0.08	26	22	4	10.1	1.89	5.24	1.09	<0.08	3.17	<0.08	3.58	<0.08	3.56
Volatile Organic Compounds (VOC)																		
1,1,1,2-Tetrachloroethane	mg/kg				<0.001	2	0	2										
1,1,1-Trichloroethane	mg/kg				<0.001	2	0	2										
1,1,2,2-Tetrachloroethane	mg/kg				<0.001	2	0	2										
1,1,2-Trichloroethane	mg/kg				<0.001	2	0	2										
1,1-Dichloroethane	mg/kg				<0.001	2	0	2										
1,1-Dichloroethene	mg/kg				<0.001	2	0	2										
1,1-Dichloropropene	mg/kg				<0.001	2	0	2										
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2										
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2										
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2										
1,2,4-Trimethylbenzene	mg/kg				<0.001	2	0	2										
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2										
1,2-Dibromoethane	mg/kg				<0.001	2	0	2										
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2										
1,2-Dichloroethane	mg/kg				<0.002	2	0	2										
1,2-Dichloropropane	mg/kg				<0.001	2	0	2										
1,3,5-Trimethylbenzene	mg/kg				<0.001	2	0	2										
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2										
1,3-Dichloropropane	mg/kg				<0.001	2	0	2										
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2										
2,2-Dichloropropane	mg/kg				<0.001	2	0	2										
2-Chlorotoluene	mg/kg				<0.001	2	0	2										
4-Chlorotoluene	mg/kg				<0.001	2	0	2										
4-Isopropyltoluene	mg/kg				<0.001	2	0	2										
Benzene	mg/kg				<0.001	2	0	2										
Bromobenzene	mg/kg				<0.001	2	0	2										
Bromochloromethane	mg/kg				<0.005	2	0	2										
Bromodichloromethane	mg/kg				<0.01	2	0	2										
Bromoform	mg/kg				<0.001	2	0	2										
Bromomethane	mg/kg				<0.001	2	0	2										
Carbon Disulphide	mg/kg				<0.001	2	0	2										
Carbon Tetrachloride	mg/kg				<0.001	2	0	2										
Chlorobenzene	mg/kg				<0.001	2	0	2										
Chloroethane	mg/kg				<0.001	2	0	2										
Chloroform	mg/kg				<0.001	2	0	2										
Chloromethane	mg/kg				<0.01	2	0	2										
cis 1,2-Dichloroethene	mg/kg				<0.001	2	0	2										
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2										
Dibromochloromethane	mg/kg				<0.003	2	0	2										
Dibromomethane	mg/kg				<0.001	2	0	2										

								Lab sample ID	20/07394/25	20/07394/61	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9	20/07394/30	20/07394/62	20/07394/10
								Client sample ID	TP3	TP3 + TP4	TP4	TP5	TP6	TP6	TP7	TP7	TP7 + TP8	TP8
								Depth to top	0.75	0.75	0.8	0.6	0.1	0.4	0.1	0.5	0.5	0.5
								Depth to bottom		0.8								
								Date sampled	24/08/20	24/08/20	24/08/20	24/08/20	26/08/20	26/08/20	26/08/20	24/08/20	26/08/20	26/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete										
Benzo(a)pyrene	mg/kg			2.31	<0.04	26	22	4			2.31	0.25	1.75	0.44	0.08			0.19
Benzo(b)fluoranthene	mg/kg			2.65	<0.05	26	22	4			2.65	0.29	2.02	0.61	0.12			0.26
Benzo(ghi)perylene	mg/kg			1.28	<0.05	26	21	5			1.28	0.3	0.89	0.31	0.06			0.2
Benzo(k)fluoranthene	mg/kg			0.92	<0.07	26	15	11			0.92	0.1	0.69	0.2	<0.07			0.08
Chrysene	mg/kg			2.5	<0.06	26	22	4			2.5	0.23	2.37	0.56	0.1			0.23
Dibenzo(ah)anthracene	mg/kg			0.27	<0.04	26	12	14			0.27	0.05	0.15	0.06	<0.04			<0.04
Fluoranthene	mg/kg			8.67	<0.08	26	22	4			5.27	0.25	8.67	0.84	0.14			0.3
Fluorene	mg/kg			0.31	<0.01	26	12	14			0.08	<0.01	0.31	0.01	<0.01			<0.01
Indeno(123-cd)pyrene	mg/kg			1.67	<0.03	26	22	4			1.67	0.33	1.11	0.38	0.07			0.21
Naphthalene	mg/kg				<0.03	26	0	26			<0.03	<0.03	<0.03	<0.03	<0.03			<0.03
Phenanthrene	mg/kg			4.4	<0.03	26	21	5			1.4	0.07	4.4	0.27	0.04			0.12
Pyrene	mg/kg			7.48	<0.07	26	22	4			4.69	0.27	7.48	0.76	0.13			0.27
Total PAH-16MS	mg/kg			34	<0.08	26	22	4			26.5	2.36	34	4.99	0.82			2.11
Volatile Organic Compounds (VOC)																		
1,1,1,2-Tetrachloroethane	mg/kg				<0.001	2	0	2			<0.001							
1,1,1-Trichloroethane	mg/kg				<0.001	2	0	2			<0.001							
1,1,2,2-Tetrachloroethane	mg/kg				<0.001	2	0	2			<0.001							
1,1,2-Trichloroethane	mg/kg				<0.001	2	0	2			<0.001							
1,1-Dichloroethane	mg/kg				<0.001	2	0	2			<0.001							
1,1-Dichloroethene	mg/kg				<0.001	2	0	2			<0.001							
1,1-Dichloropropene	mg/kg				<0.001	2	0	2			<0.001							
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2			<0.003							
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2			<0.001							
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2			<0.003							
1,2,4-Trimethylbenzene	mg/kg				<0.001	2	0	2			<0.001							
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2			<0.002							
1,2-Dibromoethane	mg/kg				<0.001	2	0	2			<0.001							
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2			<0.001							
1,2-Dichloroethane	mg/kg				<0.002	2	0	2			<0.002							
1,2-Dichloropropane	mg/kg				<0.001	2	0	2			<0.001							
1,3,5-Trimethylbenzene	mg/kg				<0.001	2	0	2			<0.001							
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2			<0.001							
1,3-Dichloropropane	mg/kg				<0.001	2	0	2			<0.001							
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2			<0.001							
2,2-Dichloropropane	mg/kg				<0.001	2	0	2			<0.001							
2-Chlorotoluene	mg/kg				<0.001	2	0	2			<0.001							
4-Chlorotoluene	mg/kg				<0.001	2	0	2			<0.001							
4-Isopropyltoluene	mg/kg				<0.001	2	0	2			<0.001							
Benzene	mg/kg				<0.001	2	0	2			<0.001							
Bromobenzene	mg/kg				<0.001	2	0	2			<0.001							
Bromochloromethane	mg/kg				<0.005	2	0	2			<0.005							
Bromodichloromethane	mg/kg				<0.01	2	0	2			<0.01							
Bromoform	mg/kg				<0.001	2	0	2			<0.001							
Bromomethane	mg/kg				<0.001	2	0	2			<0.001							
Carbon Disulphide	mg/kg				<0.001	2	0	2			<0.001							
Carbon Tetrachloride	mg/kg				<0.001	2	0	2			<0.001							
Chlorobenzene	mg/kg				<0.001	2	0	2			<0.001							
Chloroethane	mg/kg				<0.001	2	0	2			<0.001							
Chloroform	mg/kg				<0.001	2	0	2			<0.001							
Chloromethane	mg/kg				<0.01	2	0	2			<0.01							
cis 1,2-Dichloroethene	mg/kg				<0.001	2	0	2			<0.001							
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2			<0.001							
Dibromochloromethane	mg/kg				<0.003	2	0	2			<0.003							
Dibromomethane	mg/kg				<0.001	2	0	2			<0.001							

								Lab sample ID	20/07394/11	20/07394/12	20/07394/13	20/07394/63	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/40	20/07394/64
								Client sample ID	TP9	TP10	TP11	TP11 + TP13	TP12	TP13	TP14	TP15	TP15	TP15 +TP16
								Depth to top	0.3	1.5	0.5	0.4	1	0.4	0.5	0.15	0.8	0.5
								Depth to bottom				0.5						0.8
								Date sampled	26/08/20	25/08/20	24/08/20	24/08/20	25/08/20	24/08/20	24/08/20	25/08/20	25/08/20	25/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete										
Benzo(a)pyrene	mg/kg			2.31	<0.04	26	22	4	0.08	0.27	0.67		0.14	<0.04	0.08	0.16		
Benzo(b)fluoranthene	mg/kg			2.65	<0.05	26	22	4	0.1	0.48	0.81		0.19	<0.05	0.11	0.22		
Benzo(ghi)perylene	mg/kg			1.28	<0.05	26	21	5	0.06	0.18	0.55		0.09	<0.05	0.07	0.12		
Benzo(k)fluoranthene	mg/kg			0.92	<0.07	26	15	11	<0.07	0.15	0.25		<0.07	<0.07	<0.07	<0.07		
Chrysene	mg/kg			2.5	<0.06	26	22	4	0.1	0.41	0.53		0.19	<0.06	0.1	0.19		
Dibenzo(ah)anthracene	mg/kg			0.27	<0.04	26	12	14	<0.04	<0.04	0.1		<0.04	<0.04	<0.04	<0.04		
Fluoranthene	mg/kg			8.67	<0.08	26	22	4	0.1	0.66	0.74		0.29	<0.08	0.1	0.21		
Fluorene	mg/kg			0.31	<0.01	26	12	14	<0.01	0.01	0.02		<0.01	<0.01	<0.01	<0.01		
Indeno(123-cd)pyrene	mg/kg			1.67	<0.03	26	22	4	0.07	0.23	0.64		0.11	<0.03	0.07	0.12		
Naphthalene	mg/kg				<0.03	26	0	26	<0.03	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03		
Phenanthrene	mg/kg			4.4	<0.03	26	21	5	<0.03	0.17	0.26		0.15	<0.03	<0.03	0.06		
Pyrene	mg/kg			7.48	<0.07	26	22	4	0.1	0.58	0.74		0.28	<0.07	0.09	0.2		
Total PAH-16MS	mg/kg			34	<0.08	26	22	4	0.7	3.54	5.86		1.63	<0.08	0.69	1.43		
Volatile Organic Compounds (VOC)																		
1,1,1,2-Tetrachloroethane	mg/kg				<0.001	2	0	2										
1,1,1-Trichloroethane	mg/kg				<0.001	2	0	2										
1,1,2,2-Tetrachloroethane	mg/kg				<0.001	2	0	2										
1,1,2-Trichloroethane	mg/kg				<0.001	2	0	2										
1,1-Dichloroethane	mg/kg				<0.001	2	0	2										
1,1-Dichloroethene	mg/kg				<0.001	2	0	2										
1,1-Dichloropropene	mg/kg				<0.001	2	0	2										
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2										
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2										
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2										
1,2,4-Trimethylbenzene	mg/kg				<0.001	2	0	2										
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2										
1,2-Dibromoethane	mg/kg				<0.001	2	0	2										
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2										
1,2-Dichloroethane	mg/kg				<0.002	2	0	2										
1,2-Dichloropropane	mg/kg				<0.001	2	0	2										
1,3,5-Trimethylbenzene	mg/kg				<0.001	2	0	2										
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2										
1,3-Dichloropropane	mg/kg				<0.001	2	0	2										
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2										
2,2-Dichloropropane	mg/kg				<0.001	2	0	2										
2-Chlorotoluene	mg/kg				<0.001	2	0	2										
4-Chlorotoluene	mg/kg				<0.001	2	0	2										
4-Isopropyltoluene	mg/kg				<0.001	2	0	2										
Benzene	mg/kg				<0.001	2	0	2										
Bromobenzene	mg/kg				<0.001	2	0	2										
Bromochloromethane	mg/kg				<0.005	2	0	2										
Bromodichloromethane	mg/kg				<0.01	2	0	2										
Bromoform	mg/kg				<0.001	2	0	2										
Bromomethane	mg/kg				<0.001	2	0	2										
Carbon Disulphide	mg/kg				<0.001	2	0	2										
Carbon Tetrachloride	mg/kg				<0.001	2	0	2										
Chlorobenzene	mg/kg				<0.001	2	0	2										
Chloroethane	mg/kg				<0.001	2	0	2										
Chloroform	mg/kg				<0.001	2	0	2										
Chloromethane	mg/kg				<0.01	2	0	2										
cis 1,2-Dichloroethene	mg/kg				<0.001	2	0	2										
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2										
Dibromochloromethane	mg/kg				<0.003	2	0	2										
Dibromomethane	mg/kg				<0.001	2	0	2										

								Lab sample ID	20/07394/18	20/07394/48	20/07394/19	20/07394/20
								Client sample ID	TP16	TP16	TP17	TP18
								Depth to top	1	0.5	0.5	1.5
								Depth to bottom				
								Date sampled	25/08/20	25/08/20	25/08/20	25/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete				
Benzo(a)pyrene	mg/kg			2.31	<0.04	26	22	4	0.09		1.34	0.73
Benzo(b)fluoranthene	mg/kg			2.65	<0.05	26	22	4	0.14		1.73	0.82
Benzo(ghi)perylene	mg/kg			1.28	<0.05	26	21	5	<0.05		0.68	0.47
Benzo(k)fluoranthene	mg/kg			0.92	<0.07	26	15	11	<0.07		0.58	0.31
Chrysene	mg/kg			2.5	<0.06	26	22	4	0.19		1.64	0.77
Dibenzo(ah)anthracene	mg/kg			0.27	<0.04	26	12	14	<0.04		0.15	0.16
Fluoranthene	mg/kg			8.67	<0.08	26	22	4	0.47		2.57	0.86
Fluorene	mg/kg			0.31	<0.01	26	12	14	0.04		0.02	0.02
Indeno(123-cd)pyrene	mg/kg			1.67	<0.03	26	22	4	0.06		0.88	0.69
Naphthalene	mg/kg				<0.03	26	0	26	<0.03		<0.03	<0.03
Phenanthrene	mg/kg			4.4	<0.03	26	21	5	0.26		0.53	0.17
Pyrene	mg/kg			7.48	<0.07	26	22	4	0.35		2.32	0.8
Total PAH-16MS	mg/kg			34	<0.08	26	22	4	1.96		14.4	6.63
Volatile Organic Compounds (VOC)												
1,1,1,2-Tetrachloroethane	mg/kg				<0.001	2	0	2	<0.001			
1,1,1-Trichloroethane	mg/kg				<0.001	2	0	2	<0.001			
1,1,2,2-Tetrachloroethane	mg/kg				<0.001	2	0	2	<0.001			
1,1,2-Trichloroethane	mg/kg				<0.001	2	0	2	<0.001			
1,1-Dichloroethane	mg/kg				<0.001	2	0	2	<0.001			
1,1-Dichloroethene	mg/kg				<0.001	2	0	2	<0.001			
1,1-Dichloropropene	mg/kg				<0.001	2	0	2	<0.001			
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2	<0.003			
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2	<0.001			
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2	<0.003			
1,2,4-Trimethylbenzene	mg/kg				<0.001	2	0	2	<0.001			
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2	<0.002			
1,2-Dibromoethane	mg/kg				<0.001	2	0	2	<0.001			
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2	<0.001			
1,2-Dichloroethane	mg/kg				<0.002	2	0	2	<0.002			
1,2-Dichloropropane	mg/kg				<0.001	2	0	2	<0.001			
1,3,5-Trimethylbenzene	mg/kg				<0.001	2	0	2	<0.001			
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2	<0.001			
1,3-Dichloropropane	mg/kg				<0.001	2	0	2	<0.001			
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2	<0.001			
2,2-Dichloropropane	mg/kg				<0.001	2	0	2	<0.001			
2-Chlorotoluene	mg/kg				<0.001	2	0	2	<0.001			
4-Chlorotoluene	mg/kg				<0.001	2	0	2	<0.001			
4-Isopropyltoluene	mg/kg				<0.001	2	0	2	<0.001			
Benzene	mg/kg				<0.001	2	0	2	<0.001			
Bromobenzene	mg/kg				<0.001	2	0	2	<0.001			
Bromochloromethane	mg/kg				<0.005	2	0	2	<0.005			
Bromodichloromethane	mg/kg				<0.01	2	0	2	<0.01			
Bromoform	mg/kg				<0.001	2	0	2	<0.001			
Bromomethane	mg/kg				<0.001	2	0	2	<0.001			
Carbon Disulphide	mg/kg				<0.001	2	0	2	<0.001			
Carbon Tetrachloride	mg/kg				<0.001	2	0	2	<0.001			
Chlorobenzene	mg/kg				<0.001	2	0	2	<0.001			
Chloroethane	mg/kg				<0.001	2	0	2	<0.001			
Chloroform	mg/kg				<0.001	2	0	2	<0.001			
Chloromethane	mg/kg				<0.01	2	0	2	<0.01			
cis 1,2-Dichloroethene	mg/kg				<0.001	2	0	2	<0.001			
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2	<0.001			
Dibromochloromethane	mg/kg				<0.003	2	0	2	<0.003			
Dibromomethane	mg/kg				<0.001	2	0	2	<0.001			

									Lab sample ID	20/07394/55	20/08313/1	20/07494/1	20/07394/21	20/07494/2	20/07494/3	20/07394/1	20/07394/2	20/07394/3	20/07394/4
									Client sample ID	BH1	BH3	BH4	BH5	BH6	BH7	TP1	TP2	TP2	TP3
									Depth to top	1.75	0.4	0.75	0.2	0.5	1.5	0.5	0.1	0.7	0.5
									Depth to bottom										
									Date sampled	19/08/20	13/08/20	02/09/20	25/08/20	21/08/20	02/09/20	24/08/20	24/08/20	24/08/20	24/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2											
Dichloromethane	mg/kg				<0.005	2	0	2											
Ethylbenzene	mg/kg				<0.001	2	0	2											
Hexachlorobutadiene	mg/kg				<0.001	2	0	2											
Isopropylbenzene	mg/kg				<0.001	2	0	2											
m & p Xylene	mg/kg				<0.001	2	0	2											
n-Butylbenzene	mg/kg				<0.001	2	0	2											
n-Propylbenzene	mg/kg				<0.001	2	0	2											
o-Xylene	mg/kg				<0.001	2	0	2											
sec-Butylbenzene	mg/kg				<0.001	2	0	2											
Styrene	mg/kg				<0.001	2	0	2											
tert-Butylbenzene	mg/kg				<0.002	2	0	2											
Tetrachloroethene	mg/kg				<0.001	2	0	2											
Toluene	mg/kg				<0.001	2	0	2											
trans 1,2-Dichloroethene	mg/kg				<0.001	2	0	2											
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2											
Trichloroethene	mg/kg				<0.001	2	0	2											
Trichlorofluoromethane	mg/kg				<0.001	2	0	2											
Vinyl Chloride	mg/kg				<0.001	2	0	2											
Other analytes																			
% Stones >10mm	% w/w			46	<0.1	30	23	7		9.3	18.1	8.6	17.9	7.9	19	4	11.2	22.3	25.7
pH	pH			10.84	6.73	30	30	0		7.96	7.92	8.38	7.95	6.73	10.12	8.12	6.91	8.01	8.14
Sulphate (acid soluble)	mg/kg			3500	<200	26	25	1		650	360	610	1400	430	3500	300	450	<200	300
Sulphate (water sol 2:1)	g/l			0.45	<0.01	26	19	7		0.13	0.02	0.05	0.02	0.02	0.45	0.12	<0.01	0.05	<0.01
Total Organic Carbon	% w/w			1.81	0.17	10	10	0		1.61	0.75								
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0		2.77586207	1.29310345								

									Lab sample ID	20/07394/25	20/07394/61	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9	20/07394/30	20/07394/62	20/07394/10
									Client sample ID	TP3	TP3 + TP4	TP4	TP5	TP6	TP6	TP7	TP7	TP7 + TP8	TP8
									Depth to top	0.75	0.75	0.8	0.6	0.1	0.4	0.1	0.5	0.5	0.5
									Depth to bottom		0.8								
									Date sampled	24/08/20	24/08/20	24/08/20	24/08/20	26/08/20	26/08/20	26/08/20	24/08/20	26/08/20	26/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete											
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2				<0.001							
Dichloromethane	mg/kg				<0.005	2	0	2				<0.005							
Ethylbenzene	mg/kg				<0.001	2	0	2				<0.001							
Hexachlorobutadiene	mg/kg				<0.001	2	0	2				<0.001							
Isopropylbenzene	mg/kg				<0.001	2	0	2				<0.001							
m & p Xylene	mg/kg				<0.001	2	0	2				<0.001							
n-Butylbenzene	mg/kg				<0.001	2	0	2				<0.001							
n-Propylbenzene	mg/kg				<0.001	2	0	2				<0.001							
o-Xylene	mg/kg				<0.001	2	0	2				<0.001							
sec-Butylbenzene	mg/kg				<0.001	2	0	2				<0.001							
Styrene	mg/kg				<0.001	2	0	2				<0.001							
tert-Butylbenzene	mg/kg				<0.002	2	0	2				<0.002							
Tetrachloroethene	mg/kg				<0.001	2	0	2				<0.001							
Toluene	mg/kg				<0.001	2	0	2				<0.001							
trans 1,2-Dichloroethene	mg/kg				<0.001	2	0	2				<0.001							
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2				<0.001							
Trichloroethene	mg/kg				<0.001	2	0	2				<0.001							
Trichlorofluoromethane	mg/kg				<0.001	2	0	2				<0.001							
Vinyl Chloride	mg/kg				<0.001	2	0	2				<0.001							
Other analytes																			
% Stones >10mm	% w/w			46	<0.1	30	23	7		25.7	36.3	14.6	19.2	13.2	20.6		45.8	46	
pH	pH			10.84	6.73	30	30	0		8.16	8.07	7.76	7.77	7.86	7.8		10.84	8.39	
Sulphate (acid soluble)	mg/kg			3500	<200	26	25	1			370	490	670	360	1200			490	
Sulphate (water sol 2:1)	g/l			0.45	<0.01	26	19	7			0.04	0.12	<0.01	<0.01	<0.01			0.04	
Total Organic Carbon	% w/w			1.81	0.17	10	10	0		1.78							0.66	1.08	
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0		3.06896552							1.13793103	1.86206897	

									Lab sample ID	20/07394/11	20/07394/12	20/07394/13	20/07394/63	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/40	20/07394/64
									Client sample ID	TP9	TP10	TP11	TP11 + TP13	TP12	TP13	TP14	TP15	TP15	TP15 +TP16
									Depth to top	0.3	1.5	0.5	0.4	1	0.4	0.5	0.15	0.8	0.5
									Depth to bottom				0.5						0.8
									Date sampled	26/08/20	25/08/20	24/08/20	24/08/20	25/08/20	24/08/20	24/08/20	25/08/20	25/08/20	25/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete											
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2											
Dichloromethane	mg/kg				<0.005	2	0	2											
Ethylbenzene	mg/kg				<0.001	2	0	2											
Hexachlorobutadiene	mg/kg				<0.001	2	0	2											
Isopropylbenzene	mg/kg				<0.001	2	0	2											
m & p Xylene	mg/kg				<0.001	2	0	2											
n-Butylbenzene	mg/kg				<0.001	2	0	2											
n-Propylbenzene	mg/kg				<0.001	2	0	2											
o-Xylene	mg/kg				<0.001	2	0	2											
sec-Butylbenzene	mg/kg				<0.001	2	0	2											
Styrene	mg/kg				<0.001	2	0	2											
tert-Butylbenzene	mg/kg				<0.002	2	0	2											
Tetrachloroethene	mg/kg				<0.001	2	0	2											
Toluene	mg/kg				<0.001	2	0	2											
trans 1,2-Dichloroethene	mg/kg				<0.001	2	0	2											
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2											
Trichloroethene	mg/kg				<0.001	2	0	2											
Trichlorofluoromethane	mg/kg				<0.001	2	0	2											
Vinyl Chloride	mg/kg				<0.001	2	0	2											
Other analytes																			
% Stones >10mm	% w/w			46	<0.1	30	23	7		33.7	<0.1	27.3	<0.1	6.6	6.1	<0.1	10.7		<0.1
pH	pH			10.84	6.73	30	30	0		7.92	8.11	8.16	7.95	8.12	7.2	7.79	7.65		8.72
Sulphate (acid soluble)	mg/kg			3500	<200	26	25	1		270	790	210		520	290	420	820		
Sulphate (water sol 2:1)	g/l			0.45	<0.01	26	19	7		<0.01	0.25	0.01		0.18	0.02	0.06	<0.01		
Total Organic Carbon	% w/w			1.81	0.17	10	10	0		0.74			0.61			1.29			1.81
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0		1.27586207			1.05172414			2.22413793			3.12068966

								Lab sample ID	20/07394/18	20/07394/48	20/07394/19	20/07394/20
								Client sample ID	TP16	TP16	TP17	TP18
								Depth to top	1	0.5	0.5	1.5
								Depth to bottom				
								Date sampled	25/08/20	25/08/20	25/08/20	25/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete				
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2	<0.001			
Dichloromethane	mg/kg				<0.005	2	0	2	<0.005			
Ethylbenzene	mg/kg				<0.001	2	0	2	<0.001			
Hexachlorobutadiene	mg/kg				<0.001	2	0	2	<0.001			
Isopropylbenzene	mg/kg				<0.001	2	0	2	<0.001			
m & p Xylene	mg/kg				<0.001	2	0	2	<0.001			
n-Butylbenzene	mg/kg				<0.001	2	0	2	<0.001			
n-Propylbenzene	mg/kg				<0.001	2	0	2	<0.001			
o-Xylene	mg/kg				<0.001	2	0	2	<0.001			
sec-Butylbenzene	mg/kg				<0.001	2	0	2	<0.001			
Styrene	mg/kg				<0.001	2	0	2	<0.001			
tert-Butylbenzene	mg/kg				<0.002	2	0	2	<0.002			
Tetrachloroethene	mg/kg				<0.001	2	0	2	<0.001			
Toluene	mg/kg				<0.001	2	0	2	<0.001			
trans 1,2-Dichloroethene	mg/kg				<0.001	2	0	2	<0.001			
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2	<0.001			
Trichloroethene	mg/kg				<0.001	2	0	2	<0.001			
Trichlorofluoromethane	mg/kg				<0.001	2	0	2	<0.001			
Vinyl Chloride	mg/kg				<0.001	2	0	2	<0.001			
Other analytes												
% Stones >10mm	% w/w			46	<0.1	30	23	7	<0.1		<0.1	<0.1
pH	pH			10.84	6.73	30	30	0	8.13		8.34	8.24
Sulphate (acid soluble)	mg/kg			3500	<200	26	25	1	1300		200	210
Sulphate (water sol 2:1)	g/l			0.45	<0.01	26	19	7	0.41		0.05	0.03
Total Organic Carbon	% w/w			1.81	0.17	10	10	0			0.17	
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0			0.29310345	

APPENDIX O
GENERIC ASSESSMENT CRITERIA FOR POTABLE WATER SUPPLY PIPES

A range of pipe materials is available and careful selection, design and installation is required to ensure that water supply pipes are satisfactorily installed and meet the requirements of the Water Supply (Water Fittings) Regulations 1999 in England and Wales, the Byelaws 2000 in Scotland and the Northern Ireland Water Regulations. The regulations include a requirement to use only suitable materials when laying water pipes and laying water pipes without protection is not permitted at contaminated sites. The water supply company has a statutory duty to enforce the regulations.

Contaminants in the ground can pose a risk to human health by permeating potable water supply pipes. To fulfil their statutory obligation, UK water supply companies require robust evidence from developers to demonstrate either that the ground in which new plastic supply pipes will be laid is free from specific contaminants, or that the proposed remedial strategy will mitigate any existing risk. If these requirements cannot be demonstrated to the satisfaction of the relevant water company, it becomes necessary to specify an alternative pipe material on the whole development or in specific zones.

In 2010, UK Water Industry Research (UKWIR) published *Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites* (Report Ref. No. 10/WM/03/21). This report reviewed previously published industry guidelines and threshold concentrations adopted by individual water supply companies.

The focus of the UKWIR research project was to develop clear and concise procedures, which provide consistency in the pipe selection decision process. It was intended to provide guidance that can be used to ensure compliance with current regulations and to prevent water supply pipe failing prematurely due to the presence of contamination.

The report concluded that in most circumstances only organic contaminants pose a potential risk to plastic pipe materials and Table 3.1 of the report provides threshold concentrations for polyethylene (PE) and polyvinyl chloride (PVC) pipes for the organic contaminants of concern. The report also makes recommendations for the procedures to be adopted in the design of site investigations and sampling strategies, and the assessment of data, to ensure that the ground through which water supply pipes will be laid is adequately characterised.

Risks to water supply pipes have therefore been assessed against the threshold concentrations for PE and PVC pipe specified in Table 3.1 of Report 10/WM/03/21, which have been adopted as the GAC for this linkage and are reproduced in Table A3 below.

Since water supply pipes are typically laid at a minimum depth of 0.75 m below finished ground levels, sample results from depths between 0.5 m and 1.5 m below finished level are generally considered suitable for assessing risks to water supply. Samples outside these depths can be used, providing the stratum is the same as that in which water supply pipes are likely to be located. The report specifies that sampling should characterise the ground conditions to a minimum of 0.5 m below the proposed depth of the pipe.

It should be noted that the assessment provided in this report is a guide and the method of assessment and recommendations should be checked with the relevant water supply company.

Table Q1: Generic assessment criteria for water supply pipes

		Pipe material	
		GAC (mg/kg)	
	Parameter group	**PE**	**PVC**
1	Extended VOC suite by purge and trap or head space and GC-MS with TIC (Not including compounds within group 1a)	0.5	0.125
1a	• BTEX + MTBE	0.1	0.03
2	SVOCs TIC by purge and trap or head space and GC-MS with TIC (aliphatic and aromatic C_5–C_{10}) (Not including compounds within group 2e and 2f)	2	1.4
2e	• Phenols	2	0.4
2f	• Cresols and chlorinated phenols	2	0.04
3	Mineral oil C_{11}–C_{20}	10	Suitable
4	Mineral oil C_{21}–C_{40}	500	Suitable
5	Corrosive (conductivity, redox and pH)	Suitable	Suitable
Specific suite identified as relevant following site investigation			
2a	Ethers	0.5	1
2b	Nitrobenzene	0.5	0.4
2c	Ketones	0.5	0.02
2d	Aldehydes	0.5	0.02
6	Amines	Not suitable	Suitable
Notes: where indicated as 'suitable', the material is considered resistant to permeation or degradation and no threshold concentration has been specified by UKWIR.			

APPENDIX P
GQRA DATA SCREENING TABLES – SOILS

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Residential with home-grown produce
SOM	1%
GAC version	2019_00

Notes

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects	Lab sample ID	20/07394/55	20/08313/1	20/07494/1	20/07494/2	20/07494/3	20/07394/1	20/07394/3	20/07394/4	20/07394/25	20/07394/61
									Client sample ID	BH1	BH3	BH4	BH6	BH7	TP1	TP2	TP3	TP3	TP3 + TP4
									Depth to top	1.75	0.4	0.75	0.5	1.5	0.5	0.7	0.5	0.75	0.75
									Depth to bottom										0.8
									Date sampled	19/08/20	13/08/20	02/09/20	21/08/20	02/09/20	24/08/20	24/08/20	24/08/20	24/08/20	24/08/20
Metals and Inorganics																			
Arsenic	mg/kg	37		13	<1	21	19	2		5	13	5	<1	3	2	2	4		
Cadmium	mg/kg	22		1.9	<0.5	21	19	2		0.5	1.1	0.7	<0.5	0.6	0.7	0.5	0.7		
Chromium	mg/kg	910	21	54	21	21	21	0		36	37	37	34	45	54	43	36		
Copper	mg/kg	2500		3550	23	21	21	0		55	51	159	93	170	75	23	302		
Lead	mg/kg	200		459	17	21	21	0		48	61	139	77	180	18	19	115		
Mercury	mg/kg	39	0.2	0.91	<0.17	21	19	2		0.34	0.68	0.8	0.6	0.82	0.84	0.3	0.6		
Nickel	mg/kg	130		142	18	21	21	0		28	34	34	18	45	47	26	45		
Selenium	mg/kg	258		5	<1	21	12	9		<1	<1	2	2	2	2	<1	1		
Zinc	mg/kg	3900		701	61	21	21	0		98	100	164	85	165	104	61	239		
Asbestos																			
Asbestos in soil						21	0	21		NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD		
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg	42			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Ali >C6-C8	mg/kg	100			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Ali >C8-C10	mg/kg	27			<1	21	0	21		<1	<1	<1	<1	<1	<1	<1	<1		
Ali >C10-C12	mg/kg	130	48		<1	21	0	21		<1	<1	<1	<1	<1	<1	<1	<1		
Ali >C12-C16	mg/kg	1100	24	3	<1	21	2	19		<1	<1	<1	<1	3	<1	<1	<1		
Ali >C16-C21	mg/kg			7	<1	21	9	12		1	<1	2	<1	7	<1	<1	2		
Ali >C21-C35	mg/kg			50	1	21	21	0		50	5	15	2	15	1	2	8		
Ali >C16-C35 calculated	mg/kg	65000	8	52	1	21	21	0		51	5	17	2	22	1	2	10		
Total Aliphatics	mg/kg			54	1	21	21	0		51	5	18	2	25	1	2	10		
Aro >C5-C7	mg/kg				<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aro >C7-C8	mg/kg				<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aro >C8-C10	mg/kg	30		3	<1	21	1	20		<1	<1	<1	<1	3	<1	<1	<1		
Aro >C10-C12	mg/kg	80			<1	21	0	21		<1	<1	<1	<1	<1	<1	<1	<1		
Aro >C12-C16	mg/kg	140		4	<1	21	7	14		3	<1	4	<1	3	<1	<1	2		
Aro >C16-C21	mg/kg	260		41	<1	21	18	3		9	<1	41	<1	7	<1	2	22		
Aro >C21-C35	mg/kg	1100		144	1	21	21	0		73	11	141	7	23	1	12	79		
Total Aromatics	mg/kg			186	1	21	21	0		86	12	186	7	35	1	14	103		
TPH (Ali & Aro)	mg/kg			217	2	21	21	0		136	16	203	9	60	2	15	113		
BTEX - Benzene	mg/kg	0.2			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
BTEX - Toluene	mg/kg	130			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
BTEX - Ethyl Benzene	mg/kg	50			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
BTEX - o Xylene	mg/kg	61		0.02	<0.01	21	1	20		<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01		
BTEX - m & p Xylene	mg/kg	57		0.07	<0.01	21	1	20		<0.01	<0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01		
MTBE	mg/kg	60			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg	230		0.34	<0.01	21	11	10		0.34	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01		
Acenaphthylene	mg/kg	180		0.11	<0.01	21	14	7		0.03	<0.01	0.02	<0.01	0.02	<0.01	<0.01	0.06		
Anthracene	mg/kg	2400		0.44	<0.02	21	14	7		0.38	<0.02	0.08	<0.02	0.09	<0.02	<0.02	0.06		
Benzo(a)anthracene	mg/kg	7		2.85	<0.04	21	18	3		0.78	0.18	0.51	<0.04	0.26	<0.04	<0.04	0.29		

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Residential with home-grown produce
SOM	1%
GAC version	2019_00

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete	Lab sample ID	20/07394/5	20/07394/6	20/07394/8	20/07394/9	20/07394/30	20/07394/62	20/07394/10	20/07394/11	20/07394/12	20/07394/13
									Client sample ID	TP4	TP5	TP6	TP7	TP7	TP7 + TP8	TP8	TP9	TP10	TP11
									Depth to top	0.8	0.6	0.4	0.1	0.5	0.5	0.5	0.3	1.5	0.5
									Depth to bottom										
									Date sampled	24/08/20	24/08/20	26/08/20	26/08/20	24/08/20	26/08/20	26/08/20	26/08/20	25/08/20	24/08/20
Metals and Inorganics																			
Arsenic	mg/kg	37		13	<1	21	19	2		3	2	6	8			4	11	3	4
Cadmium	mg/kg	22		1.9	<0.5	21	19	2		1.9	0.6	1	0.7			<0.5	0.7	1.8	0.6
Chromium	mg/kg	910	21	54	21	21	21	0		48	42	40	33			21	21	53	31
Copper	mg/kg	2500		3550	23	21	21	0		3550	97	419	35			36	33	528	69
Lead	mg/kg	200		459	17	21	21	0		459	49	172	40			160	52	181	47
Mercury	mg/kg	39	0.2	0.91	<0.17	21	19	2		0.49	0.56	0.71	0.82			0.91	0.34	0.76	0.36
Nickel	mg/kg	130		142	18	21	21	0		142	34	54	33			19	25	79	30
Selenium	mg/kg	258		5	<1	21	12	9		<2	2	2	5			<1	<1	3	<1
Zinc	mg/kg	3900		701	61	21	21	0		701	114	290	98			104	111	362	88
Asbestos																			
Asbestos in soil						21	0	21		NAD	NAD	NAD	NAD			NAD	NAD	NAD	NAD
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg	42			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
Ali >C6-C8	mg/kg	100			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
Ali >C8-C10	mg/kg	27			<1	21	0	21		<1	<1	<1	<1			<1	<1	<1	<1
Ali >C10-C12	mg/kg	130	48		<1	21	0	21		<1	<1	<1	<1			<1	<1	<1	<1
Ali >C12-C16	mg/kg	1100	24	3	<1	21	2	19		<1	<1	<1	<1			2	<1	<1	<1
Ali >C16-C21	mg/kg			7	<1	21	9	12		2	2	<1	<1			5	<1	<1	2
Ali >C21-C35	mg/kg			50	1	21	21	0		34	6	5	8			47	1	5	5
Ali >C16-C35 calculated	mg/kg	65000	8	52	1	21	21	0		36	8	5	8			52	1	5	7
Total Aliphatics	mg/kg			54	1	21	21	0		36	8	5	8			54	1	5	7
Aro >C5-C7	mg/kg				<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
Aro >C7-C8	mg/kg				<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	mg/kg	30		3	<1	21	1	20		<1	<1	<1	<1			<1	<1	<1	<1
Aro >C10-C12	mg/kg	80			<1	21	0	21		<1	<1	<1	<1			<1	<1	<1	<1
Aro >C12-C16	mg/kg	140		4	<1	21	7	14		4	<1	<1	<1			2	<1	<1	<1
Aro >C16-C21	mg/kg	260		41	<1	21	18	3		33	2	3	2			6	1	5	4
Aro >C21-C35	mg/kg	1100		144	1	21	21	0		144	10	28	25			79	8	24	30
Total Aromatics	mg/kg			186	1	21	21	0		180	12	31	27			88	9	30	34
TPH (Ali & Aro)	mg/kg			217	2	21	21	0		217	20	37	36			142	11	35	40
BTEX - Benzene	mg/kg	0.2			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
BTEX - Toluene	mg/kg	130			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg	50			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
BTEX - o Xylene	mg/kg	61		0.02	<0.01	21	1	20		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
BTEX - m & p Xylene	mg/kg	57		0.07	<0.01	21	1	20		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
MTBE	mg/kg	60			<0.01	21	0	21		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg	230		0.34	<0.01	21	11	10		0.11	<0.01	0.01	<0.01			0.01	<0.01	0.01	0.02
Acenaphthylene	mg/kg	180		0.11	<0.01	21	14	7		0.09	0.02	0.02	<0.01			0.02	0.01	0.01	0.03
Anthracene	mg/kg	2400		0.44	<0.02	21	14	7		0.44	0.03	0.05	<0.02			0.04	<0.02	0.06	0.07
Benzo(a)anthracene	mg/kg	7		2.85	<0.04	21	18	3		2.85	0.17	0.47	0.08			0.18	0.08	0.32	0.43

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Residential with home-grown produce
SOM	1%
GAC version	2019_00

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete									
Lab sample ID									20/07394/63	20/07394/14	20/07394/16	20/07394/40	20/07394/64	20/07394/18	20/07394/48	20/07394/19	20/07394/20
Client sample ID									TP11 + TP13	TP12	TP14	TP15	TP15 +TP16	TP16	TP16	TP17	TP18
Depth to top									0.4	1	0.5	0.8	0.5	1	0.5	0.5	1.5
Depth to bottom									0.5				0.8				
Date sampled									24/08/20	25/08/20	24/08/20	25/08/20	25/08/20	25/08/20	25/08/20	25/08/20	25/08/20
Metals and Inorganics																	
Arsenic	mg/kg	37		13	<1	21	19	2		2	3			2		3	<1
Cadmium	mg/kg	22		1.9	<0.5	21	19	2		1.2	0.7			1.4		0.6	0.8
Chromium	mg/kg	910	21	54	21	21	21	0		48	43			46		39	50
Copper	mg/kg	2500		3550	23	21	21	0		129	67			344		32	116
Lead	mg/kg	200		459	17	21	21	0		55	102			73		17	26
Mercury	mg/kg	39	0.2	0.91	<0.17	21	19	2		0.32	0.4			0.38		<0.17	<0.17
Nickel	mg/kg	130		142	18	21	21	0		53	28			60		39	48
Selenium	mg/kg	258		5	<1	21	12	9		2	<1			4		<1	2
Zinc	mg/kg	3900		701	61	21	21	0		131	114			191		80	99
Asbestos																	
Asbestos in soil						21	0	21		NAD	NAD			NAD		NAD	NAD
Petroleum Hydrocarbons																	
Ali >C5-C6	mg/kg	42			<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
Ali >C6-C8	mg/kg	100			<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
Ali >C8-C10	mg/kg	27			<1	21	0	21		<1	<1			<1		<1	<1
Ali >C10-C12	mg/kg	130	48		<1	21	0	21		<1	<1			<1		<1	<1
Ali >C12-C16	mg/kg	1100	24	3	<1	21	2	19		<1	<1			<1		<1	<1
Ali >C16-C21	mg/kg			7	<1	21	9	12		1	<1			<1		<1	<1
Ali >C21-C35	mg/kg			50	1	21	21	0		3	14			3		7	18
Ali >C16-C35 calculated	mg/kg	65000	8	52	1	21	21	0		4	14			3		7	18
Total Aliphatics	mg/kg			54	1	21	21	0		4	14			3		7	18
Aro >C5-C7	mg/kg				<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
Aro >C7-C8	mg/kg				<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
Aro >C8-C10	mg/kg	30		3	<1	21	1	20		<1	<1			<1		<1	<1
Aro >C10-C12	mg/kg	80			<1	21	0	21		<1	<1			<1		<1	<1
Aro >C12-C16	mg/kg	140		4	<1	21	7	14		<1	<1			1		<1	<1
Aro >C16-C21	mg/kg	260		41	<1	21	18	3		2	1			21		5	8
Aro >C21-C35	mg/kg	1100		144	1	21	21	0		10	21			45		22	63
Total Aromatics	mg/kg			186	1	21	21	0		12	22			68		27	71
TPH (Ali & Aro)	mg/kg			217	2	21	21	0		17	36			71		34	89
BTEX - Benzene	mg/kg	0.2			<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
BTEX - Toluene	mg/kg	130			<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg	50			<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
BTEX - o Xylene	mg/kg	61		0.02	<0.01	21	1	20		<0.01	<0.01			<0.01		<0.01	<0.01
BTEX - m & p Xylene	mg/kg	57		0.07	<0.01	21	1	20		<0.01	<0.01			<0.01		<0.01	<0.01
MTBE	mg/kg	60			<0.01	21	0	21		<0.01	<0.01			<0.01		<0.01	<0.01
Polycyclic aromatic hydrocarbons																	
Acenaphthene	mg/kg	230		0.34	<0.01	21	11	10		0.01	<0.01			0.13		0.04	0.04
Acenaphthylene	mg/kg	180		0.11	<0.01	21	14	7		0.01	<0.01			<0.01		0.11	0.01
Anthracene	mg/kg	2400		0.44	<0.02	21	14	7		0.03	<0.02			0.08		0.22	0.1
Benzo(a)anthracene	mg/kg	7		2.85	<0.04	21	18	3		0.14	0.07			0.15		1.64	0.68

Lab sample ID								20/07394/55	20/08313/1	20/07494/1	20/07494/2	20/07494/3	20/07394/1	20/07394/3	20/07394/4	20/07394/25	20/07394/61
Client sample ID								BH1	BH3	BH4	BH6	BH7	TP1	TP2	TP3	TP3	TP3 + TP4
Depth to top								1.75	0.4	0.75	0.5	1.5	0.5	0.7	0.5	0.75	0.75
Depth to bottom																	0.8
Date sampled								19/08/20	13/08/20	02/09/20	21/08/20	02/09/20	24/08/20	24/08/20	24/08/20	24/08/20	24/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects									
Benzo(a)pyrene	mg/kg	5		2.31	<0.04	21	18	3	0.74	0.24	0.48	<0.04	0.28	<0.04	<0.04	0.42	
Benzo(b)fluoranthene	mg/kg	2.6		2.65	<0.05	21	18	3	0.75	0.27	0.59	<0.05	0.32	<0.05	<0.05	0.5	
Benzo(ghi)perylene	mg/kg	310		1.28	<0.05	21	17	4	0.53	0.14	0.31	<0.05	0.18	<0.05	<0.05	0.36	
Benzo(k)fluoranthene	mg/kg	77		0.92	<0.07	21	13	8	0.29	0.09	0.22	<0.07	0.12	<0.07	<0.07	0.15	
Chrysene	mg/kg	15		2.5	<0.06	21	18	3	0.86	0.24	0.53	<0.06	0.28	<0.06	<0.06	0.36	
Dibenzo(ah)anthracene	mg/kg	0.24		0.27	<0.04	21	10	11	0.15	<0.04	0.08	<0.04	0.05	<0.04	<0.04	0.06	
Fluoranthene	mg/kg	290		5.27	<0.08	21	18	3	1.55	0.25	0.93	<0.08	0.49	<0.08	<0.08	0.4	
Fluorene	mg/kg	170		0.23	<0.01	21	10	11	0.23	<0.01	0.02	<0.01	0.04	<0.01	<0.01	<0.01	
Indeno(123-cd)pyrene	mg/kg	27		1.67	<0.03	21	18	3	0.65	0.16	0.4	<0.03	0.25	<0.03	<0.03	0.41	
Naphthalene	mg/kg	13			<0.03	21	0	21	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Phenanthrene	mg/kg	100		1.43	<0.03	21	17	4	1.43	0.07	0.27	<0.03	0.29	0.04	<0.03	0.07	
Pyrene	mg/kg	620		4.69	<0.07	21	18	3	1.42	0.25	0.8	<0.07	0.45	<0.07	<0.07	0.42	
Total PAH-16MS	mg/kg			26.5	<0.08	21	18	3	10.1	1.89	5.24	<0.08	3.17	<0.08	<0.08	3.56	
Volatile Organic Compounds (VOC)																	
1,1,1,2-Tetrachloroethane	mg/kg	1.2			<0.001	2	0	2									
1,1,1-Trichloroethane	mg/kg	9			<0.001	2	0	2									
1,1,2,2-Tetrachloroethane	mg/kg	1.6			<0.001	2	0	2									
1,1,2-Trichloroethane	mg/kg	0.8			<0.001	2	0	2									
1,1-Dichloroethane	mg/kg				<0.001	2	0	2									
1,1-Dichloroethene	mg/kg	0.32			<0.001	2	0	2									
1,1-Dichloropropene	mg/kg				<0.001	2	0	2									
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2									
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2									
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2									
1,2,4-Trimethylbenzene	mg/kg	1.8			<0.001	2	0	2									
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2									
1,2-Dibromoethane	mg/kg				<0.001	2	0	2									
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2									
1,2-Dichloroethane	mg/kg	0.007			<0.002	2	0	2									
1,2-Dichloropropane	mg/kg	0.034			<0.001	2	0	2									
1,3,5-Trimethylbenzene	mg/kg	1.8			<0.001	2	0	2									
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2									
1,3-Dichloropropane	mg/kg				<0.001	2	0	2									
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2									
2,2-Dichloropropane	mg/kg				<0.001	2	0	2									
2-Chlorotoluene	mg/kg				<0.001	2	0	2									
4-Chlorotoluene	mg/kg				<0.001	2	0	2									
4-Isopropyltoluene	mg/kg				<0.001	2	0	2									
Benzene	mg/kg	0.2			<0.001	2	0	2									
Bromobenzene	mg/kg				<0.001	2	0	2									
Bromochloromethane	mg/kg				<0.005	2	0	2									
Bromodichloromethane	mg/kg				<0.01	2	0	2									
Bromoform	mg/kg				<0.001	2	0	2									
Bromomethane	mg/kg				<0.001	2	0	2									
Carbon Disulphide	mg/kg				<0.001	2	0	2									
Carbon Tetrachloride	mg/kg	0.026			<0.001	2	0	2									
Chlorobenzene	mg/kg				<0.001	2	0	2									
Chloroethane	mg/kg	11.7			<0.001	2	0	2									
Chloroform	mg/kg				<0.001	2	0	2									
Chloromethane	mg/kg	0.012			<0.01	2	0	2									
cis 1,2-Dichloroethene	mg/kg	0.16			<0.001	2	0	2									
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2									
Dibromochloromethane	mg/kg				<0.003	2	0	2									
Dibromomethane	mg/kg				<0.001	2	0	2									

								Lab sample ID	20/07394/5	20/07394/6	20/07394/8	20/07394/9	20/07394/30	20/07394/62	20/07394/10	20/07394/11	20/07394/12	20/07394/13
								Client sample ID	TP4	TP5	TP6	TP7	TP7	TP7 + TP8	TP8	TP9	TP10	TP11
								Depth to top	0.8	0.6	0.4	0.1	0.5	0.5	0.5	0.3	1.5	0.5
								Depth to bottom										
								Date sampled	24/08/20	24/08/20	26/08/20	26/08/20	24/08/20	26/08/20	26/08/20	26/08/20	25/08/20	24/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete										
Benzo(a)pyrene	mg/kg	5		2.31	<0.04	21	18	3	2.31	0.25	0.44	0.08			0.19	0.08	0.27	0.67
Benzo(b)fluoranthene	mg/kg	2.6		2.65	<0.05	21	18	3	2.65	0.29	0.61	0.12			0.26	0.1	0.48	0.81
Benzo(ghi)perylene	mg/kg	310		1.28	<0.05	21	17	4	1.28	0.3	0.31	0.06			0.2	0.06	0.18	0.55
Benzo(k)fluoranthene	mg/kg	77		0.92	<0.07	21	13	8	0.92	0.1	0.2	<0.07			0.08	<0.07	0.15	0.25
Chrysene	mg/kg	15		2.5	<0.06	21	18	3	2.5	0.23	0.56	0.1			0.23	0.1	0.41	0.53
Dibenzo(ah)anthracene	mg/kg	0.24		0.27	<0.04	21	10	11	0.27	0.05	0.06	<0.04			<0.04	<0.04	<0.04	0.1
Fluoranthene	mg/kg	290		5.27	<0.08	21	18	3	5.27	0.25	0.84	0.14			0.3	0.1	0.66	0.74
Fluorene	mg/kg	170		0.23	<0.01	21	10	11	0.08	<0.01	0.01	<0.01			<0.01	<0.01	0.01	0.02
Indeno(123-cd)pyrene	mg/kg	27		1.67	<0.03	21	18	3	1.67	0.33	0.38	0.07			0.21	0.07	0.23	0.64
Naphthalene	mg/kg	13			<0.03	21	0	21	<0.03	<0.03	<0.03	<0.03			<0.03	<0.03	<0.03	<0.03
Phenanthrene	mg/kg	100		1.43	<0.03	21	17	4	1.4	0.07	0.27	0.04			0.12	<0.03	0.17	0.26
Pyrene	mg/kg	620		4.69	<0.07	21	18	3	4.69	0.27	0.76	0.13			0.27	0.1	0.58	0.74
Total PAH-16MS	mg/kg			26.5	<0.08	21	18	3	26.5	2.36	4.99	0.82			2.11	0.7	3.54	5.86
Volatile Organic Compounds (VOC)																		
1,1,1,2-Tetrachloroethane	mg/kg	1.2			<0.001	2	0	2	<0.001									
1,1,1-Trichloroethane	mg/kg	9			<0.001	2	0	2	<0.001									
1,1,2,2-Tetrachloroethane	mg/kg	1.6			<0.001	2	0	2	<0.001									
1,1,2-Trichloroethane	mg/kg	0.8			<0.001	2	0	2	<0.001									
1,1-Dichloroethane	mg/kg				<0.001	2	0	2	<0.001									
1,1-Dichloroethene	mg/kg	0.32			<0.001	2	0	2	<0.001									
1,1-Dichloropropene	mg/kg				<0.001	2	0	2	<0.001									
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2	<0.003									
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2	<0.001									
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2	<0.003									
1,2,4-Trimethylbenzene	mg/kg	1.8			<0.001	2	0	2	<0.001									
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2	<0.002									
1,2-Dibromoethane	mg/kg				<0.001	2	0	2	<0.001									
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2	<0.001									
1,2-Dichloroethane	mg/kg	0.007			<0.002	2	0	2	<0.002									
1,2-Dichloropropane	mg/kg	0.034			<0.001	2	0	2	<0.001									
1,3,5-Trimethylbenzene	mg/kg	1.8			<0.001	2	0	2	<0.001									
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2	<0.001									
1,3-Dichloropropane	mg/kg				<0.001	2	0	2	<0.001									
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2	<0.001									
2,2-Dichloropropane	mg/kg				<0.001	2	0	2	<0.001									
2-Chlorotoluene	mg/kg				<0.001	2	0	2	<0.001									
4-Chlorotoluene	mg/kg				<0.001	2	0	2	<0.001									
4-Isopropyltoluene	mg/kg				<0.001	2	0	2	<0.001									
Benzene	mg/kg	0.2			<0.001	2	0	2	<0.001									
Bromobenzene	mg/kg				<0.001	2	0	2	<0.001									
Bromochloromethane	mg/kg				<0.005	2	0	2	<0.005									
Bromodichloromethane	mg/kg				<0.01	2	0	2	<0.01									
Bromoform	mg/kg				<0.001	2	0	2	<0.001									
Bromomethane	mg/kg				<0.001	2	0	2	<0.001									
Carbon Disulphide	mg/kg				<0.001	2	0	2	<0.001									
Carbon Tetrachloride	mg/kg	0.026			<0.001	2	0	2	<0.001									
Chlorobenzene	mg/kg				<0.001	2	0	2	<0.001									
Chloroethane	mg/kg	11.7			<0.001	2	0	2	<0.001									
Chloroform	mg/kg				<0.001	2	0	2	<0.001									
Chloromethane	mg/kg	0.012			<0.01	2	0	2	<0.01									
cis 1,2-Dichloroethene	mg/kg	0.16			<0.001	2	0	2	<0.001									
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2	<0.001									
Dibromochloromethane	mg/kg				<0.003	2	0	2	<0.003									
Dibromomethane	mg/kg				<0.001	2	0	2	<0.001									

								Lab sample ID	20/07394/63	20/07394/14	20/07394/16	20/07394/40	20/07394/64	20/07394/18	20/07394/48	20/07394/19	20/07394/20
								Client sample ID	TP11 + TP13	TP12	TP14	TP15	TP15 +TP16	TP16	TP16	TP17	TP18
								Depth to top	0.4	1	0.5	0.8	0.5	1	0.5	0.5	1.5
								Depth to bottom	0.5				0.8				
								Date sampled	24/08/20	25/08/20	24/08/20	25/08/20	25/08/20	25/08/20	25/08/20	25/08/20	25/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete									
Benzo(a)pyrene	mg/kg	5		2.31	<0.04	21	18	3		0.14	0.08			0.09		1.34	0.73
Benzo(b)fluoranthene	mg/kg	2.6		2.65	<0.05	21	18	3		0.19	0.11			0.14		1.73	0.82
Benzo(ghi)perylene	mg/kg	310		1.28	<0.05	21	17	4		0.09	0.07			<0.05		0.68	0.47
Benzo(k)fluoranthene	mg/kg	77		0.92	<0.07	21	13	8		<0.07	<0.07			<0.07		0.58	0.31
Chrysene	mg/kg	15		2.5	<0.06	21	18	3		0.19	0.1			0.19		1.64	0.77
Dibenzo(ah)anthracene	mg/kg	0.24		0.27	<0.04	21	10	11		<0.04	<0.04			<0.04		0.15	0.16
Fluoranthene	mg/kg	290		5.27	<0.08	21	18	3		0.29	0.1			0.47		2.57	0.86
Fluorene	mg/kg	170		0.23	<0.01	21	10	11		<0.01	<0.01			0.04		0.02	0.02
Indeno(123-cd)pyrene	mg/kg	27		1.67	<0.03	21	18	3		0.11	0.07			0.06		0.88	0.69
Naphthalene	mg/kg	13			<0.03	21	0	21		<0.03	<0.03			<0.03		<0.03	<0.03
Phenanthrene	mg/kg	100		1.43	<0.03	21	17	4		0.15	<0.03			0.26		0.53	0.17
Pyrene	mg/kg	620		4.69	<0.07	21	18	3		0.28	0.09			0.35		2.32	0.8
Total PAH-16MS	mg/kg			26.5	<0.08	21	18	3		1.63	0.69			1.96		14.4	6.63
Volatile Organic Compounds (VOC)																	
1,1,1,2-Tetrachloroethane	mg/kg	1.2			<0.001	2	0	2						<0.001			
1,1,1-Trichloroethane	mg/kg	9			<0.001	2	0	2						<0.001			
1,1,2,2-Tetrachloroethane	mg/kg	1.6			<0.001	2	0	2						<0.001			
1,1,2-Trichloroethane	mg/kg	0.8			<0.001	2	0	2						<0.001			
1,1-Dichloroethane	mg/kg				<0.001	2	0	2						<0.001			
1,1-Dichloroethene	mg/kg	0.32			<0.001	2	0	2						<0.001			
1,1-Dichloropropene	mg/kg				<0.001	2	0	2						<0.001			
1,2,3-Trichlorobenzene	mg/kg				<0.003	2	0	2						<0.003			
1,2,3-Trichloropropane	mg/kg				<0.001	2	0	2						<0.001			
1,2,4-Trichlorobenzene	mg/kg				<0.003	2	0	2						<0.003			
1,2,4-Trimethylbenzene	mg/kg	1.8			<0.001	2	0	2						<0.001			
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	2	0	2						<0.002			
1,2-Dibromoethane	mg/kg				<0.001	2	0	2						<0.001			
1,2-Dichlorobenzene	mg/kg				<0.001	2	0	2						<0.001			
1,2-Dichloroethane	mg/kg	0.007			<0.002	2	0	2						<0.002			
1,2-Dichloropropane	mg/kg	0.034			<0.001	2	0	2						<0.001			
1,3,5-Trimethylbenzene	mg/kg	1.8			<0.001	2	0	2						<0.001			
1,3-Dichlorobenzene	mg/kg				<0.001	2	0	2						<0.001			
1,3-Dichloropropane	mg/kg				<0.001	2	0	2						<0.001			
1,4-Dichlorobenzene	mg/kg				<0.001	2	0	2						<0.001			
2,2-Dichloropropane	mg/kg				<0.001	2	0	2						<0.001			
2-Chlorotoluene	mg/kg				<0.001	2	0	2						<0.001			
4-Chlorotoluene	mg/kg				<0.001	2	0	2						<0.001			
4-Isopropyltoluene	mg/kg				<0.001	2	0	2						<0.001			
Benzene	mg/kg	0.2			<0.001	2	0	2						<0.001			
Bromobenzene	mg/kg				<0.001	2	0	2						<0.001			
Bromochloromethane	mg/kg				<0.005	2	0	2						<0.005			
Bromodichloromethane	mg/kg				<0.01	2	0	2						<0.01			
Bromoform	mg/kg				<0.001	2	0	2						<0.001			
Bromomethane	mg/kg				<0.001	2	0	2						<0.001			
Carbon Disulphide	mg/kg				<0.001	2	0	2						<0.001			
Carbon Tetrachloride	mg/kg	0.026			<0.001	2	0	2						<0.001			
Chlorobenzene	mg/kg				<0.001	2	0	2						<0.001			
Chloroethane	mg/kg	11.7			<0.001	2	0	2						<0.001			
Chloroform	mg/kg				<0.001	2	0	2						<0.001			
Chloromethane	mg/kg	0.012			<0.01	2	0	2						<0.01			
cis 1,2-Dichloroethene	mg/kg	0.16			<0.001	2	0	2						<0.001			
cis 1,3-Dichloropropene	mg/kg				<0.001	2	0	2						<0.001			
Dibromochloromethane	mg/kg				<0.003	2	0	2						<0.003			
Dibromomethane	mg/kg				<0.001	2	0	2						<0.001			

									Lab sample ID	20/07394/55	20/08313/1	20/07494/1	20/07494/2	20/07494/3	20/07394/1	20/07394/3	20/07394/4	20/07394/25	20/07394/61
									Client sample ID	BH1	BH3	BH4	BH6	BH7	TP1	TP2	TP3	TP3	TP3 + TP4
									Depth to top	1.75	0.4	0.75	0.5	1.5	0.5	0.7	0.5	0.75	0.75
									Depth to bottom										0.8
									Date sampled	19/08/20	13/08/20	02/09/20	21/08/20	02/09/20	24/08/20	24/08/20	24/08/20	24/08/20	24/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2											
Dichloromethane	mg/kg	0.62			<0.005	2	0	2											
Ethylbenzene	mg/kg	50			<0.001	2	0	2											
Hexachlorobutadiene	mg/kg				<0.001	2	0	2											
Isopropylbenzene	mg/kg				<0.001	2	0	2											
m & p Xylene	mg/kg	57			<0.001	2	0	2											
n-Butylbenzene	mg/kg				<0.001	2	0	2											
n-Propylbenzene	mg/kg				<0.001	2	0	2											
o-Xylene	mg/kg	61			<0.001	2	0	2											
sec-Butylbenzene	mg/kg				<0.001	2	0	2											
Styrene	mg/kg				<0.001	2	0	2											
tert-Butylbenzene	mg/kg				<0.002	2	0	2											
Tetrachloroethene	mg/kg	0.2			<0.001	2	0	2											
Toluene	mg/kg	130			<0.001	2	0	2											
trans 1,2-Dichloroethene	mg/kg	0.28			<0.001	2	0	2											
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2											
Trichloroethene	mg/kg	0.02			<0.001	2	0	2											
Trichlorofluoromethane	mg/kg				<0.001	2	0	2											
Vinyl Chloride	mg/kg	0.0006			<0.001	2	0	2											
Other analytes																			
% Stones >10mm	% w/w			46	<0.1	25	18	7		9.3	18.1	8.6	7.9	19	4	22.3	25.7		25.7
pH	pH			10.84	6.73	25	25	0		7.96	7.92	8.38	6.73	10.12	8.12	8.01	8.14		8.16
Sulphate (acid soluble)	mg/kg			3500	<200	21	20	1		650	360	610	430	3500	300	<200	300		
Sulphate (water sol 2:1)	g/l			0.45	<0.01	21	17	4		0.13	0.02	0.05	0.02	0.45	0.12	0.05	<0.01		
Total Organic Carbon	% w/w			1.81	0.17	10	10	0		1.61	0.75								1.78
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0		2.77586207	1.29310345								3.06896552

									Lab sample ID	20/07394/5	20/07394/6	20/07394/8	20/07394/9	20/07394/30	20/07394/62	20/07394/10	20/07394/11	20/07394/12	20/07394/13
									Client sample ID	TP4	TP5	TP6	TP7	TP7	TP7 + TP8	TP8	TP9	TP10	TP11
									Depth to top	0.8	0.6	0.4	0.1	0.5	0.5	0.5	0.3	1.5	0.5
									Depth to bottom										
									Date sampled	24/08/20	24/08/20	26/08/20	26/08/20	24/08/20	26/08/20	26/08/20	26/08/20	25/08/20	24/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete											
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2	<0.001										
Dichloromethane	mg/kg	0.62			<0.005	2	0	2	<0.005										
Ethylbenzene	mg/kg	50			<0.001	2	0	2	<0.001										
Hexachlorobutadiene	mg/kg				<0.001	2	0	2	<0.001										
Isopropylbenzene	mg/kg				<0.001	2	0	2	<0.001										
m & p Xylene	mg/kg	57			<0.001	2	0	2	<0.001										
n-Butylbenzene	mg/kg				<0.001	2	0	2	<0.001										
n-Propylbenzene	mg/kg				<0.001	2	0	2	<0.001										
o-Xylene	mg/kg	61			<0.001	2	0	2	<0.001										
sec-Butylbenzene	mg/kg				<0.001	2	0	2	<0.001										
Styrene	mg/kg				<0.001	2	0	2	<0.001										
tert-Butylbenzene	mg/kg				<0.002	2	0	2	<0.002										
Tetrachloroethene	mg/kg	0.2			<0.001	2	0	2	<0.001										
Toluene	mg/kg	130			<0.001	2	0	2	<0.001										
trans 1,2-Dichloroethene	mg/kg	0.28			<0.001	2	0	2	<0.001										
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2	<0.001										
Trichloroethene	mg/kg	0.02			<0.001	2	0	2	<0.001										
Trichlorofluoromethane	mg/kg				<0.001	2	0	2	<0.001										
Vinyl Chloride	mg/kg	0.0006			<0.001	2	0	2	<0.001										
Other analytes																			
% Stones >10mm	% w/w			46	<0.1	25	18	7	36.3	14.6	13.2	20.6		45.8	46	33.7	<0.1	27.3	
pH	pH			10.84	6.73	25	25	0	8.07	7.76	7.86	7.8		10.84	8.39	7.92	8.11	8.16	
Sulphate (acid soluble)	mg/kg			3500	<200	21	20	1	370	490	360	1200			490	270	790	210	
Sulphate (water sol 2:1)	g/l			0.45	<0.01	21	17	4	0.04	0.12	<0.01	<0.01			0.04	<0.01	0.25	0.01	
Total Organic Carbon	% w/w			1.81	0.17	10	10	0						0.66	1.08	0.74			
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0						1.13793103	1.86206897	1.27586207			

									Lab sample ID	20/07394/63	20/07394/14	20/07394/16	20/07394/40	20/07394/64	20/07394/18	20/07394/48	20/07394/19	20/07394/20
									Client sample ID	TP11 + TP13	TP12	TP14	TP15	TP15 +TP16	TP16	TP16	TP17	TP18
									Depth to top	0.4	1	0.5	0.8	0.5	1	0.5	0.5	1.5
									Depth to bottom	0.5				0.8				
									Date sampled	24/08/20	25/08/20	24/08/20	25/08/20	25/08/20	25/08/20	25/08/20	25/08/20	25/08/20
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-dete										
Dichlorodifluoromethane	mg/kg				<0.001	2	0	2						<0.001				
Dichloromethane	mg/kg	0.62			<0.005	2	0	2						<0.005				
Ethylbenzene	mg/kg	50			<0.001	2	0	2						<0.001				
Hexachlorobutadiene	mg/kg				<0.001	2	0	2						<0.001				
Isopropylbenzene	mg/kg				<0.001	2	0	2						<0.001				
m & p Xylene	mg/kg	57			<0.001	2	0	2						<0.001				
n-Butylbenzene	mg/kg				<0.001	2	0	2						<0.001				
n-Propylbenzene	mg/kg				<0.001	2	0	2						<0.001				
o-Xylene	mg/kg	61			<0.001	2	0	2						<0.001				
sec-Butylbenzene	mg/kg				<0.001	2	0	2						<0.001				
Styrene	mg/kg				<0.001	2	0	2						<0.001				
tert-Butylbenzene	mg/kg				<0.002	2	0	2						<0.002				
Tetrachloroethene	mg/kg	0.2			<0.001	2	0	2						<0.001				
Toluene	mg/kg	130			<0.001	2	0	2						<0.001				
trans 1,2-Dichloroethene	mg/kg	0.28			<0.001	2	0	2						<0.001				
trans 1,3-Dichloropropene	mg/kg				<0.001	2	0	2						<0.001				
Trichloroethene	mg/kg	0.02			<0.001	2	0	2						<0.001				
Trichlorofluoromethane	mg/kg				<0.001	2	0	2						<0.001				
Vinyl Chloride	mg/kg	0.0006			<0.001	2	0	2						<0.001				
Other analytes																		
% Stones >10mm	% w/w			46	<0.1	25	18	7	<0.1	6.6	<0.1		<0.1	<0.1		<0.1	<0.1	
pH	pH			10.84	6.73	25	25	0	7.95	8.12	7.79		8.72	8.13		8.34	8.24	
Sulphate (acid soluble)	mg/kg			3500	<200	21	20	1		520	420			1300		200	210	
Sulphate (water sol 2:1)	g/l			0.45	<0.01	21	17	4		0.18	0.06			0.41		0.05	0.03	
Total Organic Carbon	% w/w			1.81	0.17	10	10	0	0.61		1.29		1.81			0.17		
Converted to SOM (x / 0.58)	% w/w			3.12069	0.293103	10	10	0	1.05172414		2.22413793		3.12068966			0.29310345		

Project name	North London Business Park
Project code	1921321
Client name	Comer Homes Group
Address	Oakleigh Road South Barnet N11 1NP
NGR	528088, 193479
Land use	Residential with home-grown produce
SOM	1%
GAC version	2019_00

Notes

Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects	Lab sample ID	20/07394/21	20/07394/2	20/07394/7	20/07394/15	20/07394/17
									Client sample ID	BH5	TP2	TP6	TP13	TP15
									Depth to top	0.2	0.1	0.1	0.4	0.15
									Depth to bottom					
									Date sampled	25/08/20	24/08/20	26/08/20	24/08/20	25/08/20
Metals and Inorganics														
Arsenic	mg/kg	37		18	4	5	5	0		8	18	16	4	4
Cadmium	mg/kg	22		4.1	0.6	5	5	0		0.7	0.8	4.1	0.6	1
Chromium	mg/kg	910	21	48	26	5	5	0		26	28	48	36	29
Copper	mg/kg	2500		173	18	5	5	0		24	87	173	18	86
Lead	mg/kg	200		563	25	5	5	0		112	219	563	25	81
Mercury	mg/kg	39	0.2	2	0.24	5	5	0		1.33	2	1.56	0.24	0.38
Nickel	mg/kg	130		54	23	5	5	0		25	27	54	23	31
Selenium	mg/kg	258		3	<1	5	3	2		2	<1	2	<1	3
Zinc	mg/kg	3900		509	67	5	5	0		87	162	509	67	147
Asbestos														
Asbestos in soil						5	0	5		NAD	NAD	NAD	NAD	NAD
Petroleum Hydrocarbons														
Ali >C5-C6	mg/kg	42			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C6-C8	mg/kg	100			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C8-C10	mg/kg	27			<1	5	0	5		<1	<1	<1	<1	<1
Ali >C10-C12	mg/kg	130	48		<1	5	0	5		<1	<1	<1	<1	<1
Ali >C12-C16	mg/kg	1100	24		<1	5	0	5		<1	<1	<1	<1	<1
Ali >C16-C21	mg/kg			10	<1	5	1	4		<1	<1	<1	10	<1
Ali >C21-C35	mg/kg			599	4	5	5	0		13	4	10	599	4
Ali >C16-C35 calculated	mg/kg	65000	8	609	4	5	5	0		13	4	10	609	4
Total Aliphatics	mg/kg			609	4	5	5	0		13	4	10	609	4
Aro >C5-C7	mg/kg				<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C7-C8	mg/kg				<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	mg/kg	30			<1	5	0	5		<1	<1	<1	<1	<1
Aro >C10-C12	mg/kg	80			<1	5	0	5		<1	<1	<1	<1	<1
Aro >C12-C16	mg/kg	140		4	<1	5	1	4		<1	<1	<1	4	<1
Aro >C16-C21	mg/kg	260		234	2	5	5	0		3	5	5	234	2
Aro >C21-C35	mg/kg	1100		428	17	5	5	0		38	25	30	428	17
Total Aromatics	mg/kg			666	19	5	5	0		41	30	34	666	19
TPH (Ali & Aro)	mg/kg			1270	23	5	5	0		54	34	44	1270	23
BTEX - Benzene	mg/kg	0.2			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Toluene	mg/kg	130			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg	50			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - o Xylene	mg/kg	61			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - m & p Xylene	mg/kg	57			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
MTBE	mg/kg	60			<0.01	5	0	5		<0.01	<0.01	<0.01	<0.01	<0.01
Polycyclic aromatic hydrocarbons														
Acenaphthene	mg/kg	230		0.1	<0.01	5	2	3		<0.01	0.02	0.1	<0.01	<0.01
Acenaphthylene	mg/kg	180		0.2	<0.01	5	2	3		<0.01	0.02	0.2	<0.01	<0.01
Anthracene	mg/kg	2400		1.29	<0.02	5	2	3		<0.02	0.05	1.29	<0.02	<0.02
Benzo(a)anthracene	mg/kg	7		2.58	<0.04	5	4	1		0.1	0.3	2.58	<0.04	0.15

								Lab sample ID	20/07394/21	20/07394/2	20/07394/7	20/07394/15	20/07394/17					
								Client sample ID	BH5	TP2	TP6	TP13	TP15					
								Depth to top	0.2	0.1	0.1	0.4	0.15					
								Depth to bottom										
								Date sampled	25/08/20	24/08/20	26/08/20	24/08/20	25/08/20					
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects										
Benzo(a)pyrene	mg/kg	5		1.75	<0.04	5	4	1	0.13	0.31	1.75	<0.04	0.16					
Benzo(b)fluoranthene	mg/kg	2.6		2.02	<0.05	5	4	1	0.13	0.44	2.02	<0.05	0.22					
Benzo(ghi)perylene	mg/kg	310		0.89	<0.05	5	4	1	0.11	0.23	0.89	<0.05	0.12					
Benzo(k)fluoranthene	mg/kg	77		0.69	<0.07	5	2	3	<0.07	0.16	0.69	<0.07	<0.07					
Chrysene	mg/kg	15		2.37	<0.06	5	4	1	0.13	0.4	2.37	<0.06	0.19					
Dibenzo(ah)anthracene	mg/kg	0.24		0.15	<0.04	5	2	3	<0.04	0.04	0.15	<0.04	<0.04					
Fluoranthene	mg/kg	290		8.67	<0.08	5	4	1	0.16	0.56	8.67	<0.08	0.21					
Fluorene	mg/kg	170		0.31	<0.01	5	2	3	<0.01	0.01	0.31	<0.01	<0.01					
Indeno(123-cd)pyrene	mg/kg	27		1.11	<0.03	5	4	1	0.13	0.27	1.11	<0.03	0.12					
Naphthalene	mg/kg	13			<0.03	5	0	5	<0.03	<0.03	<0.03	<0.03	<0.03					
Phenanthrene	mg/kg	100		4.4	<0.03	5	4	1	0.05	0.27	4.4	<0.03	0.06					
Pyrene	mg/kg	620		7.48	<0.07	5	4	1	0.15	0.5	7.48	<0.07	0.2					
Total PAH-16MS	mg/kg			34	<0.08	5	4	1	1.09	3.58	34	<0.08	1.43					
Volatile Organic Compounds (VOC)																		
1,1,1,2-Tetrachloroethane	mg/kg	1.2				0	0	0										
1,1,1-Trichloroethane	mg/kg	9				0	0	0										
1,1,2,2-Tetrachloroethane	mg/kg	1.6				0	0	0										
1,1,2-Trichloroethane	mg/kg	0.8				0	0	0										
1,1-Dichloroethane	mg/kg					0	0	0										
1,1-Dichloroethene	mg/kg	0.32				0	0	0										
1,1-Dichloropropene	mg/kg					0	0	0										
1,2,3-Trichlorobenzene	mg/kg					0	0	0										
1,2,3-Trichloropropane	mg/kg					0	0	0										
1,2,4-Trichlorobenzene	mg/kg					0	0	0										
1,2,4-Trimethylbenzene	mg/kg	1.8				0	0	0										
1,2-Dibromo-3-chloropropane	mg/kg					0	0	0										
1,2-Dibromoethane	mg/kg					0	0	0										
1,2-Dichlorobenzene	mg/kg					0	0	0										
1,2-Dichloroethane	mg/kg	0.007				0	0	0										
1,2-Dichloropropane	mg/kg	0.034				0	0	0										
1,3,5-Trimethylbenzene	mg/kg	1.8				0	0	0										
1,3-Dichlorobenzene	mg/kg					0	0	0										
1,3-Dichloropropane	mg/kg					0	0	0										
1,4-Dichlorobenzene	mg/kg					0	0	0										
2,2-Dichloropropane	mg/kg					0	0	0										
2-Chlorotoluene	mg/kg					0	0	0										
4-Chlorotoluene	mg/kg					0	0	0										
4-Isopropyltoluene	mg/kg					0	0	0										
Benzene	mg/kg	0.2				0	0	0										
Bromobenzene	mg/kg					0	0	0										
Bromochloromethane	mg/kg					0	0	0										
Bromodichloromethane	mg/kg					0	0	0										
Bromoform	mg/kg					0	0	0										
Bromomethane	mg/kg					0	0	0										
Carbon Disulphide	mg/kg					0	0	0										
Carbon Tetrachloride	mg/kg	0.026				0	0	0										
Chlorobenzene	mg/kg					0	0	0										
Chloroethane	mg/kg	11.7				0	0	0										
Chloroform	mg/kg					0	0	0										
Chloromethane	mg/kg	0.012				0	0	0										
cis 1,2-Dichloroethene	mg/kg	0.16				0	0	0										
cis 1,3-Dichloropropene	mg/kg					0	0	0										
Dibromochloromethane	mg/kg					0	0	0										
Dibromomethane	mg/kg					0	0	0										

Lab sample ID									20/07394/21	20/07394/2	20/07394/7	20/07394/15	20/07394/17						
Client sample ID									BH5	TP2	TP6	TP13	TP15						
Depth to top									0.2	0.1	0.1	0.4	0.15						
Depth to bottom																			
Date sampled									25/08/20	24/08/20	26/08/20	24/08/20	25/08/20						
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Dichlorodifluoromethane	mg/kg					0	0	0											
Dichloromethane	mg/kg	0.62				0	0	0											
Ethylbenzene	mg/kg	50				0	0	0											
Hexachlorobutadiene	mg/kg					0	0	0											
Isopropylbenzene	mg/kg					0	0	0											
m & p Xylene	mg/kg	57				0	0	0											
n-Butylbenzene	mg/kg					0	0	0											
n-Propylbenzene	mg/kg					0	0	0											
o-Xylene	mg/kg	61				0	0	0											
sec-Butylbenzene	mg/kg					0	0	0											
Styrene	mg/kg					0	0	0											
tert-Butylbenzene	mg/kg					0	0	0											
Tetrachloroethene	mg/kg	0.2				0	0	0											
Toluene	mg/kg	130				0	0	0											
trans 1,2-Dichloroethene	mg/kg	0.28				0	0	0											
trans 1,3-Dichloropropene	mg/kg					0	0	0											
Trichloroethene	mg/kg	0.02				0	0	0											
Trichlorofluoromethane	mg/kg					0	0	0											
Vinyl Chloride	mg/kg	0.0006				0	0	0											
Other analytes																			
% Stones >10mm	% w/w			19.2	6.1	5	5	0	17.9	11.2	19.2	6.1	10.7						
pH	pH			7.95	6.91	5	5	0	7.95	6.91	7.77	7.2	7.65						
Sulphate (acid soluble)	mg/kg			1400	290	5	5	0	1400	450	670	290	820						
Sulphate (water sol 2:1)	g/l			0.02	<0.01	5	2	3	0.02	<0.01	<0.01	0.02	<0.01						
Total Organic Carbon	% w/w					0	0	0											
Converted to SOM (x / 0.58)	% w/w					0	0	0											

APPENDIX Q
GQRA DATA SCREENING TABLES - WATERS

envirolab
Units 7 & 8 Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 20/08709
Issue Number: 1 **Date:** 27 October, 2020

Client:
RSK Environment Ltd Hemel
18 Frogmore Road
Hemel Hempstead
Hertfordshire
UK
HP3 9RT

Project Manager: Alex Marcelo
Project Name: North London Business Park (N.L.B.P)
Project Ref: 1921321
Order No: N/A
Date Samples Received: 14/10/20
Date Instructions Received: 14/10/20
Date Analysis Completed: 24/10/20

Prepared by:

Melanie Marshall
Laboratory Coordinator

Approved by:

Danielle Brierley
Client Manager

UKAS TESTING
1247

Envirolab Job Number: 20/08709

Client Project Name: North London Business Park (N.L.B.P)

Client Project Ref: 1921321

Lab Sample ID	20/08709/1	20/08709/2						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SWS1	SWS2								
Depth to Top										
Depth To Bottom										
Date Sampled	09-Oct-20	09-Oct-20								
Sample Type	Water - EW	Water - EW								
Sample Matrix Code	N/A	N/A								
pH (w)$_{A}^{\#}$	7.71	7.65						pH	0.01	A-T-031w
Sulphate (w)$_{A}^{\#}$	41	41						mg/l	1	A-T-026w
Arsenic (dissolved)$_{A}^{\#}$	<1	<1						µg/l	1	A-T-025w
Cadmium (dissolved)$_{A}^{\#}$	<0.2	<0.2						µg/l	0.2	A-T-025w
Copper (dissolved)$_{A}^{\#}$	2	3						µg/l	1	A-T-025w
Chromium (dissolved)$_{A}^{\#}$	<1	2						µg/l	1	A-T-025w
Lead (dissolved)$_{A}^{\#}$	1	<1						µg/l	1	A-T-025w
Mercury (dissolved)$_{A}^{\#}$	<0.1	<0.1						µg/l	0.1	A-T-025w
Nickel (dissolved)$_{A}^{\#}$	2	2						µg/l	1	A-T-025w
Selenium (dissolved)$_{A}^{\#}$	1	1						µg/l	1	A-T-025w
Zinc (dissolved)$_{A}^{\#}$	2	7						µg/l	1	A-T-025w

Envirolab Job Number: 20/08709

Client Project Name: North London Business Park (N.L.B.P)

Client Project Ref: 1921321

Lab Sample ID	20/08709/1	20/08709/2						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SWS1	SWS2								
Depth to Top										
Depth To Bottom										
Date Sampled	09-Oct-20	09-Oct-20								
Sample Type	Water - EW	Water - EW								
Sample Matrix Code	N/A	N/A								
PAH 16MS (w)										
Acenaphthene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Anthracene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^{\#}$	0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^{\#}$	0.02	<0.01						µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^{\#}$	0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Chrysene (w)$_A^{\#}$	0.02	<0.01						µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^{\#}$	0.02	<0.01						µg/l	0.01	A-T-019w
Fluorene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^{\#}$	0.02	<0.01						µg/l	0.01	A-T-019w
Naphthalene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Pyrene (w)$_A^{\#}$	0.02	<0.01						µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^{\#}$	0.12	<0.01						µg/l	0.01	A-T-019w

Envirolab Job Number: 20/08709

Client Project Name: North London Business Park (N.L.B.P)

Client Project Ref: 1921321

Lab Sample ID	20/08709/1	20/08709/2						Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SWS1	SWS2								
Depth to Top										
Depth To Bottom										
Date Sampled	09-Oct-20	09-Oct-20								
Sample Type	Water - EW	Water - EW								
Sample Matrix Code	N/A	N/A								
TPH CWG (w)										
Ali >C5-C6 $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
Ali >C6-C8 $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
Ali >C8-C10 $(w)_A^{\#}$	<5	<5						µg/l	5	A-T-055w
Ali >C10-C12 $(w)_A^{\#}$	<5	<5						µg/l	5	A-T-055w
Ali >C12-C16 $(w)_A^{\#}$	<5	<5						µg/l	5	A-T-055w
Ali >C16-C21 $(w)_A^{\#}$	<5	<5						µg/l	5	A-T-055w
Ali >C21-C35 $(w)_A^{\#}$	15	<5						µg/l	5	A-T-055w
Total Aliphatics $(w)_A^{\#}$	15	<5						µg/l	5	A-T-055w
Aro >C5-C7 $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
Aro >C7-C8 $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
Aro >C8-C10 $(w)_A$	<5	<5						µg/l	5	A-T-055w
Aro >C10-C12 $(w)_A^{\#}$	<5	<5						µg/l	5	A-T-055w
Aro >C12-C16 $(w)_A^{\#}$	<5	<5						µg/l	5	A-T-055w
Aro >C16-C21 $(w)_A^{\#}$	7	<5						µg/l	5	A-T-055w
Aro >C21-C35 $(w)_A^{\#}$	29	<10						µg/l	10	A-T-055w
Total Aromatics $(w)_A$	36	<10						µg/l	10	A-T-055w
TPH (Ali & Aro >C5-C35) $(w)_A$	51	<10						µg/l	10	A-T-055w
BTEX - Benzene $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
BTEX - Toluene $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
BTEX - Ethyl Benzene $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
BTEX - m & p Xylene $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
BTEX - o Xylene $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w
MTBE $(w)_A^{\#}$	<1	<1						µg/l	1	A-T-022w

REPORT NOTES

General
This report shall not be reproduced, except in full, without written approval from Envirolab.
The results reported herein relate only to the material supplied to the laboratory.
The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.
Analytical results reflect the quality of the sample at the time of analysis only.
Opinions and interpretations expressed are outside the scope of our accreditation.
If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.
A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:
Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:
Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:
Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis.
Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:
1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.
Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.
Secondary Matrix Codes:
A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

Key:
IS indicates Insufficient Sample for analysis.
US indicates Unsuitable Sample for analysis.
NDP indicates No Determination Possible.
NAD indicates No Asbestos Detected.
N/A indicates Not Applicable.
Superscript # indicates method accredited to ISO 17025.
Superscript "M" indicates method accredited to MCERTS.
Subscript "A" indicates analysis performed on the sample as received.
Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: RSK Environment Ltd Hemel, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, UK, HP3 9RT

Project: North London Business Park (N.L.B.P)

Clients Project No: 1921321

Project No: 20/08709

Date Received: 14/10/2020 (am)

Cool Box Temperatures (°C): 9.6

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

APPENDIX R
WM3 ASSESSMENT

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		BH3								
Depth (m)		0.40								
Envirolab reference		20/08313/1								
% Moisture	%									
pH (soil)		7.92								
pH (leachate)										
Arsenic	mg/kg	13								
Cadmium	mg/kg	1								
Copper	mg/kg	51								
CrVI or Chromium	mg/kg	37								
Lead	mg/kg	61								
Mercury	mg/kg	1								
Nickel	mg/kg	34								
Selenium	mg/kg	1								
Zinc	mg/kg	100								
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									

PAH (Input Total PAH **OR** individual PAH results)

Acenaphthene	mg/kg	0.01								
Acenaphthylene	mg/kg	0.01								
Anthracene	mg/kg	0.02								
Benzo(a)anthracene	mg/kg	0.18								
Benzo(a)pyrene	mg/kg	0.24								
Benzo(b)fluoranthene	mg/kg	0.27								
Benzo(ghi)perylene	mg/kg	0.14								
Benzo(k)fluoranthene	mg/kg	0.09								
Chrysene	mg/kg	0.24								
Dibenzo(ah)anthracene	mg/kg	0.04								
Fluoranthene	mg/kg	0.25								
Fluorene	mg/kg	0.01								
Indeno(123cd)pyrene	mg/kg	0.16								
Naphthalene	mg/kg	0.03								
Phenanthrene	mg/kg	0.07								
Pyrene	mg/kg	0.25								
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									

TPH

Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil										
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg	16.0								
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									

Phenols Input Total Phenols HPLC **OR** individual Phenol results.

Phenol	mg/kg	0.0								
Cresols	mg/kg	0.0								
Xylenols	mg/kg	0.0								
Resourcinol	mg/kg	0.0								
Phenols Total by HPLC	mg/kg	0.0								

BTEX Input Total BTEX **OR** individual BTEX results.

Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									

PCBs (POPs)

PCBs Total (eg EC7/WHO12)	mg/kg									

PBBs (POPs)

Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH3								
Depth (m)	0.40								
Envirolab reference	20/08313/1								

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH3								
Depth (m)	0.40								
Envirolab reference	20/08313/1								

Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y	N								

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									

If visual identifiable pieces of asbestos are present, <u>you cannot use Asbestos % results</u> and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.

All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00882	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00748	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.01267	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00710	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00610	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00160	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.25%	<0.1%	0.00178	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥5%	<0.1%	0.00725	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥25%	<1%	0.01888	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥0.25%	<0.1%	0.00007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥2.5%	<0.1%	0.00710	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥55%	<1%	0.00011	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.5%	<0.1%	0.00728	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥3.5%	<0.1%	0.00014	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥22.5%	<1%	0.01873	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00710	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00002	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		7.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		7.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.00687	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00710	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00710	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00687	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00710	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH			BH3								
Depth (m)			0.40								
Envirolab reference			20/08313/1								
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.04056	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.04216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	4.07144	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP1	TP2	TP2	TP3	TP4	TP5	TP6	TP6	TP7
Depth (m)		0.50	0.10	0.70	0.50	0.80	0.60	0.10	0.40	0.10
Envirolab reference		20/07394/1	20/07394/2	20/07394/3	20/07394/4	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9
% Moisture	%									
pH (soil)		8.12	6.91	8.01	8.14	8.07	7.76	7.77	7.86	7.80
pH (leachate)										
Arsenic	mg/kg	2	18	2	4	3	2	16	6	8
Cadmium	mg/kg	0.7	0.8	0.5	0.7	1.9	0.6	4.1	1.0	0.7
Copper	mg/kg	75.0	87.0	23.0	302.0	3,550.0	97.0	173.0	419.0	35.0
CrVI or Chromium	mg/kg	54.0	28.0	43.0	36.0	48.0	42.0	48.0	40.0	33.0
Lead	mg/kg	18.0	219.0	19.0	115.0	459.0	49.0	563.0	172.0	40.0
Mercury	mg/kg	0.8	2.0	0.3	0.6	0.5	0.6	1.6	0.7	0.8
Nickel	mg/kg	47.0	27.0	26.0	45.0	142.0	34.0	54.0	54.0	33.0
Selenium	mg/kg	2.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	5.0
Zinc	mg/kg	104	162	61	239	701	114	509	290	98
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.01	0.02	0.01	0.01	0.11	0.01	0.10	0.01	0.01
Acenaphthylene	mg/kg	0.01	0.02	0.01	0.06	0.09	0.02	0.20	0.02	0.01
Anthracene	mg/kg	0.02	0.05	0.02	0.06	0.44	0.03	1.29	0.05	0.02
Benzo(a)anthracene	mg/kg	0.04	0.30	0.04	0.29	2.85	0.17	2.58	0.47	0.08
Benzo(a)pyrene	mg/kg	0.04	0.31	0.04	0.42	2.31	0.25	1.75	0.44	0.08
Benzo(b)fluoranthene	mg/kg	0.05	0.44	0.05	0.50	2.65	0.29	2.02	0.61	0.12
Benzo(ghi)perylene	mg/kg	0.05	0.23	0.05	0.36	1.28	0.30	0.89	0.31	0.06
Benzo(k)fluoranthene	mg/kg	0.07	0.16	0.07	0.15	0.92	0.10	0.69	0.20	0.07
Chrysene	mg/kg	0.06	0.40	0.06	0.36	2.50	0.23	2.37	0.56	0.10
Dibenzo(ah)anthracene	mg/kg	0.04	0.04	0.04	0.06	0.27	0.05	0.15	0.06	0.04
Fluoranthene	mg/kg	0.08	0.56	0.08	0.40	5.27	0.25	8.67	0.84	0.14
Fluorene	mg/kg	0.01	0.01	0.01	0.01	0.08	0.01	0.31	0.01	0.01
Indeno(123cd)pyrene	mg/kg	0.03	0.27	0.03	0.41	1.67	0.33	1.11	0.38	0.07
Naphthalene	mg/kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Phenanthrene	mg/kg	0.04	0.27	0.03	0.07	1.40	0.07	4.40	0.27	0.04
Pyrene	mg/kg	0.07	0.50	0.07	0.42	4.69	0.27	7.48	0.76	0.13
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg	2.0	34.0	15.0	113.0	217.0	20.0	44.0	37.0	36.0
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Toluene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ethylbenzene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenes	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total BTEX	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	TP1	TP2	TP2	TP3	TP4	TP5	TP6	TP6	TP7
Depth (m)	0.50	0.10	0.70	0.50	0.80	0.60	0.10	0.40	0.10
Envirolab reference	20/07394/1	20/07394/2	20/07394/3	20/07394/4	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	TP1	TP2	TP2	TP3	TP4	TP5	TP6	TP6	TP7
Depth (m)	0.50	0.10	0.70	0.50	0.80	0.60	0.10	0.40	0.10
Envirolab reference	20/07394/1	20/07394/2	20/07394/3	20/07394/4	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9

Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y	N	N	N	N	N	N	N	N	N

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y								

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.01063	0.00775	0.00852	0.00744	0.00961	0.00833	0.01133	0.00847	0.00739
Irritant HP4	≥10%	<1%	0.00874	0.01221	0.00286	0.03465	0.40155	0.01123	0.02166	0.04814	0.00501
Irritant HP4	≥20%	<1%	0.01799	0.01538	0.00787	0.04328	0.43051	0.01787	0.03181	0.05837	0.01065
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00003	0.00000	0.00001	0.00014	0.00001	0.00044	0.00003	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.01037	0.00545	0.00826	0.00909	0.02868	0.00806	0.01091	0.01091	0.00667
Specifc Target Organ Toxicity HP5	≥10%		0.00180	0.02190	0.00190	0.01150	0.04590	0.00490	0.05630	0.01720	0.00400
Aspiration Toxicity HP5	≥10%		0.00021	0.00341	0.00151	0.01131	0.02171	0.00201	0.00441	0.00371	0.00361
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00035	0.00258	0.00029	0.00059	0.00045	0.00032	0.00227	0.00086	0.00114
Acute Toxicity HP6	≥5%	<0.1%	0.01065	0.00552	0.00840	0.00705	0.00950	0.00835	0.00950	0.00796	0.00704
Acute Toxicity HP6	≥25%	<1%	0.01986	0.03735	0.00982	0.05484	0.47660	0.02283	0.08850	0.07567	0.01471
Acute Toxicity HP6	≥0.25%	<0.1%	0.00008	0.00020	0.00003	0.00006	0.00005	0.00006	0.00016	0.00007	0.00008
Acute Toxicity HP6	≥2.5%	<0.1%	0.01037	0.00538	0.00826	0.00691	0.00922	0.00806	0.00922	0.00768	0.00634
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00007	0.00008	0.00005	0.00007	0.00019	0.00006	0.00041	0.00010	0.00007
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.01052	0.00566	0.00834	0.00704	0.00946	0.00818	0.00978	0.00785	0.00649
Acute Toxicity HP6	≥3.5%	<0.1%	0.00028	0.00014	0.00014	0.00014	0.00028	0.00028	0.00028	0.00028	0.00071
Acute Toxicity HP6	≥22.5%	<1%	0.01977	0.03719	0.00975	0.05472	0.47574	0.02273	0.08676	0.07546	0.01462
Carcinogenic HP7	≥0.1%		0.01037	0.02190	0.00826	0.01150	0.04590	0.00806	0.05630	0.01720	0.00667
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00000	0.00003	0.00000	0.00004	0.00017	0.00003	0.00011	0.00004	0.00001
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.12	6.91	8.01	8.14	8.07	7.76	7.77	7.86	7.80
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.12	6.91	8.01	8.14	8.07	7.76	7.77	7.86	7.80
Toxic for Reproduction HP10	≥0.3%		0.00949	0.02190	0.00525	0.01150	0.04590	0.00687	0.05630	0.01720	0.00667
Toxic for Reproduction HP10	≥3%		0.01037	0.00538	0.00826	0.01130	0.02170	0.00806	0.00922	0.00768	0.00634
Mutagenic HP11	≥0.1%		0.01037	0.00538	0.00826	0.01130	0.02170	0.00806	0.00922	0.00768	0.00634
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00949	0.00545	0.00525	0.00909	0.02868	0.00687	0.01091	0.01091	0.00667
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.01037	0.00545	0.00826	0.00909	0.02868	0.00806	0.01091	0.01091	0.00667

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP1	TP2	TP2	TP3	TP4	TP5	TP6	TP6	TP7
Depth (m)			0.50	0.10	0.70	0.50	0.80	0.60	0.10	0.40	0.10
Envirolab reference			20/07394/1	20/07394/2	20/07394/3	20/07394/4	20/07394/5	20/07394/6	20/07394/7	20/07394/8	20/07394/9
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.04390	0.06594	0.02618	0.09262	0.57597	0.04591	0.16583	0.12109	0.03521
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.04410	0.06934	0.02768	0.10392	0.59768	0.04792	0.17024	0.12480	0.03882
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	4.39180	6.62800	2.63270	9.37460	**57.81420**	4.61110	16.62710	12.14620	3.55730
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP8	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16
Depth (m)		0.50	0.30	1.50	0.50	1.00	0.40	0.50	0.15	1.00
Envirolab reference		20/07394/10	20/07394/11	20/07394/12	20/07394/13	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/18
% Moisture	%									
pH (soil)		8.39	7.92	8.11	8.16	8.12	7.20	7.79	7.65	8.13
pH (leachate)										
Arsenic	mg/kg	4	11	3	4	2	4	3	4	2
Cadmium	mg/kg	0.5	0.7	1.8	0.6	1.2	0.6	0.7	1.0	1.4
Copper	mg/kg	36.0	33.0	528.0	69.0	129.0	18.0	67.0	86.0	344.0
CrVI or Chromium	mg/kg	21.0	21.0	53.0	31.0	48.0	36.0	43.0	29.0	46.0
Lead	mg/kg	160.0	52.0	181.0	47.0	55.0	25.0	102.0	81.0	73.0
Mercury	mg/kg	0.9	0.3	0.8	0.4	0.3	0.2	0.4	0.4	0.4
Nickel	mg/kg	19.0	25.0	79.0	30.0	53.0	23.0	28.0	31.0	60.0
Selenium	mg/kg	1.0	1.0	3.0	1.0	2.0	1.0	1.0	3.0	4.0
Zinc	mg/kg	104	111	362	88	131	67	114	147	191
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.13
Acenaphthylene	mg/kg	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.01
Anthracene	mg/kg	0.04	0.02	0.06	0.07	0.03	0.02	0.02	0.02	0.08
Benzo(a)anthracene	mg/kg	0.18	0.08	0.32	0.43	0.14	0.04	0.07	0.15	0.15
Benzo(a)pyrene	mg/kg	0.19	0.08	0.27	0.67	0.14	0.04	0.08	0.16	0.09
Benzo(b)fluoranthene	mg/kg	0.26	0.10	0.48	0.81	0.19	0.05	0.11	0.22	0.14
Benzo(ghi)perylene	mg/kg	0.20	0.06	0.18	0.55	0.09	0.05	0.07	0.12	0.05
Benzo(k)fluoranthene	mg/kg	0.08	0.07	0.15	0.25	0.07	0.07	0.07	0.07	0.07
Chrysene	mg/kg	0.23	0.10	0.41	0.53	0.19	0.06	0.10	0.19	0.19
Dibenzo(ah)anthracene	mg/kg	0.04	0.04	0.04	0.10	0.04	0.04	0.04	0.04	0.04
Fluoranthene	mg/kg	0.30	0.10	0.66	0.74	0.29	0.08	0.10	0.21	0.47
Fluorene	mg/kg	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.04
Indeno(123cd)pyrene	mg/kg	0.21	0.07	0.23	0.64	0.11	0.03	0.07	0.12	0.06
Naphthalene	mg/kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Phenanthrene	mg/kg	0.12	0.03	0.17	0.26	0.15	0.03	0.03	0.06	0.26
Pyrene	mg/kg	0.27	0.10	0.58	0.74	0.28	0.07	0.09	0.20	0.35
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg	142.0	11.0	35.0	40.0	17.0	1,270.0	36.0	23.0	71.0
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Toluene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ethylbenzene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Xylenes	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total BTEX	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

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If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	TP8	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16
Depth (m)	0.50	0.30	1.50	0.50	1.00	0.40	0.50	0.15	1.00
Envirolab reference	20/07394/10	20/07394/11	20/07394/12	20/07394/13	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/18

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

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Haswaste, developed by Dr. Iain Haslock.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Site Code and Name									
TP/WS/BH	TP8	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16
Depth (m)	0.50	0.30	1.50	0.50	1.00	0.40	0.50	0.15	1.00
Envirolab reference	20/07394/10	20/07394/11	20/07394/12	20/07394/13	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/18
Asbestos in Soil	Thresholds								
Asbestos detected in Soil (enter Y or N)	Y	N	N	N	N	N	N	N	N	N

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00456	0.00548	0.01057	0.00648	0.00948	0.00744	0.00865	0.00610	0.00910
Irritant HP4	≥10%	<1%	0.00460	0.00518	0.06006	0.00833	0.01484	0.00256	0.00797	0.01025	0.03914
Irritant HP4	≥20%	<1%	0.00796	0.00880	0.07571	0.01397	0.02534	0.00670	0.01325	0.01601	0.05108
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00001	0.00000	0.00002	0.00003	0.00002	0.00000	0.00000	0.00001	0.00003
Specifc Target Organ Toxicity HP5	≥1%		0.00403	0.00505	0.01596	0.00606	0.01071	0.00691	0.00826	0.00626	0.01212
Specifc Target Organ Toxicity HP5	≥10%		0.01600	0.00520	0.01810	0.00470	0.00550	0.12700	0.01020	0.00810	0.00730
Aspiration Toxicity HP5	≥10%		0.01421	0.00111	0.00351	0.00401	0.00171	0.12701	0.00361	0.00231	0.00711
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00062	0.00149	0.00047	0.00056	0.00030	0.00055	0.00044	0.00057	0.00030
Acute Toxicity HP6	≥5%	<0.1%	0.00417	0.00417	0.01060	0.00609	0.00950	0.00705	0.00840	0.00599	0.00940
Acute Toxicity HP6	≥25%	<1%	0.02400	0.01407	0.09399	0.01872	0.03095	0.00926	0.02351	0.02421	0.05851
Acute Toxicity HP6	≥0.25%	<0.1%	0.00009	0.00003	0.00008	0.00004	0.00003	0.00002	0.00004	0.00004	0.00004
Acute Toxicity HP6	≥2.5%	<0.1%	0.00403	0.00403	0.01018	0.00595	0.00922	0.00691	0.00826	0.00557	0.00883
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00005	0.00007	0.00018	0.00006	0.00012	0.00006	0.00007	0.00010	0.00014
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00417	0.00414	0.01043	0.00605	0.00937	0.00700	0.00837	0.00571	0.00901
Acute Toxicity HP6	≥3.5%	<0.1%	0.00014	0.00014	0.00042	0.00014	0.00028	0.00014	0.00014	0.00042	0.00056
Acute Toxicity HP6	≥22.5%	<1%	0.02391	0.01398	0.09373	0.01856	0.03079	0.00918	0.02343	0.02408	0.05830
Carcinogenic HP7	≥0.1%		0.01600	0.00520	0.01810	0.00606	0.01071	**0.12700**	0.01020	0.00810	0.01212
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00002	0.00001	0.00002	0.00006	0.00001	0.00000	0.00001	0.00001	0.00001
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.39	7.92	8.11	8.16	8.12	7.20	7.79	7.65	8.13
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.39	7.92	8.11	8.16	8.12	7.20	7.79	7.65	8.13
Toxic for Reproduction HP10	≥0.3%		0.01600	0.00520	0.01810	0.00606	0.01071	0.00465	0.01020	0.00810	0.01212
Toxic for Reproduction HP10	≥3%		0.01420	0.00403	0.01018	0.00595	0.00922	0.12700	0.00826	0.00557	0.00883
Mutagenic HP11	≥0.1%		0.01420	0.00403	0.01018	0.00595	0.00922	**0.12700**	0.00826	0.00557	0.00883
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00384	0.00505	0.01596	0.00606	0.01071	0.00465	0.00566	0.00626	0.01212
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00403	0.00505	0.01596	0.00606	0.01071	0.00691	0.00826	0.00626	0.01212

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP8	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16
Depth (m)			0.50	0.30	1.50	0.50	1.00	0.40	0.50	0.15	1.00
Envirolab reference			20/07394/10	20/07394/11	20/07394/12	20/07394/13	20/07394/14	20/07394/15	20/07394/16	20/07394/17	20/07394/18
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.04194	0.03367	0.15056	0.03680	0.05724	0.02528	0.04666	0.04926	0.09221
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.05615	0.03477	0.15406	0.04080	0.05894	0.15228	0.05027	0.05157	0.09932
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	4.33640	3.37760	15.09100	3.71960	5.74080	3.79800	4.70230	4.94910	9.29240
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contac

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP17	TP18	BH5	TP3	TP7	TP15	TP16	BH1	TP3 + TP4
Depth (m)		0.50	1.50	0.20	0.75	0.50	0.80	0.50	1.75	0.75
Envirolab reference		20/07394/19	20/07394/20	20/07394/21	20/07394/25	20/07394/30	20/07394/40	20/07394/48	20/07394/55	20/07394/61
% Moisture	%									
pH (soil)		8.34	8.24	7.95					7.96	8.16
pH (leachate)										
Arsenic	mg/kg	3	1	8					5	
Cadmium	mg/kg	0.6	0.8	0.7					0.5	
Copper	mg/kg	32.0	116.0	24.0					55.0	
CrVI or Chromium	mg/kg	39.0	50.0	26.0					36.0	
Lead	mg/kg	17.0	26.0	112.0					48.0	
Mercury	mg/kg	0.2	0.2	1.3					0.3	
Nickel	mg/kg	39.0	48.0	25.0					28.0	
Selenium	mg/kg	1.0	2.0	2.0					1.0	
Zinc	mg/kg	80	99	87					98	
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.04	0.04	0.01					0.34	
Acenaphthylene	mg/kg	0.11	0.01	0.01					0.03	
Anthracene	mg/kg	0.22	0.10	0.02					0.38	
Benzo(a)anthracene	mg/kg	1.64	0.68	0.10					0.78	
Benzo(a)pyrene	mg/kg	1.34	0.73	0.13					0.74	
Benzo(b)fluoranthene	mg/kg	1.73	0.82	0.13					0.75	
Benzo(ghi)perylene	mg/kg	0.68	0.47	0.11					0.53	
Benzo(k)fluoranthene	mg/kg	0.58	0.31	0.07					0.29	
Chrysene	mg/kg	1.64	0.77	0.13					0.86	
Dibenzo(ah)anthracene	mg/kg	0.15	0.16	0.04					0.15	
Fluoranthene	mg/kg	2.57	0.86	0.16					1.55	
Fluorene	mg/kg	0.02	0.02	0.01					0.23	
Indeno(123cd)pyrene	mg/kg	0.88	0.69	0.13					0.65	
Naphthalene	mg/kg	0.03	0.03	0.03					0.03	
Phenanthrene	mg/kg	0.53	0.17	0.05					1.43	
Pyrene	mg/kg	2.32	0.80	0.15					1.42	
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg	34.0	89.0	54.0					136.0	
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg	0.01	0.01	0.01					0.01	
Toluene	mg/kg	0.01	0.01	0.01					0.01	
Ethylbenzene	mg/kg	0.01	0.01	0.01					0.01	
Xylenes	mg/kg	0.01	0.01	0.01					0.01	
Total BTEX	mg/kg	0.01	0.01	0.01					0.01	
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	TP17	TP18	BH5	TP3	TP7	TP15	TP16	BH1	TP3 + TP4
Depth (m)	0.50	1.50	0.20	0.75	0.50	0.80	0.50	1.75	0.75
Envirolab reference	20/07394/19	20/07394/20	20/07394/21	20/07394/25	20/07394/30	20/07394/40	20/07394/48	20/07394/55	20/07394/61

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

envirolab

Haswaste, developed by Dr. Iain Haslock.

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Site Code and Name									
TP/WS/BH	TP17	TP18	BH5	TP3	TP7	TP15	TP16	BH1	TP3 + TP4
Depth (m)	0.50	1.50	0.20	0.75	0.50	0.80	0.50	1.75	0.75
Envirolab reference	20/07394/19	20/07394/20	20/07394/21	20/07394/25	20/07394/30	20/07394/40	20/07394/48	20/07394/55	20/07394/61
Asbestos in Soil	Thresholds								
Asbestos detected in Soil (enter Y or N)	Y	N	N	N				N	

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%							
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y								

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00788	0.00973	0.00605	0.00000	0.00000	0.00000	0.00000	0.00757	0.00000
Irritant HP4	≥10%	<1%	0.00401	0.01324	0.00377	0.00000	0.00000	0.00000	0.00000	0.00688	0.00000
Irritant HP4	≥20%	<1%	0.01182	0.02292	0.00779	0.00000	0.00000	0.00000	0.00000	0.01224	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00005	0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00014	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00788	0.00970	0.00505	0.00000	0.00000	0.00000	0.00000	0.00691	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00340	0.00890	0.01120	0.00000	0.00000	0.00000	0.00000	0.01360	0.00000
Aspiration Toxicity HP5	≥10%		0.00341	0.00891	0.00541	0.00000	0.00000	0.00000	0.00000	0.01361	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00041	0.00015	0.00119	0.00000	0.00000	0.00000	0.00000	0.00069	0.00000
Acute Toxicity HP6	≥5%	<0.1%	0.00763	0.00988	0.00527	0.00000	0.00000	0.00000	0.00000	0.00705	0.00000
Acute Toxicity HP6	≥25%	<1%	0.01358	0.02559	0.01906	0.00000	0.00000	0.00000	0.00000	0.01703	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00002	0.00002	0.00013	0.00000	0.00000	0.00000	0.00000	0.00003	0.00000
Acute Toxicity HP6	≥2.5%	<0.1%	0.00749	0.00960	0.00499	0.00000	0.00000	0.00000	0.00000	0.00691	0.00000
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00006	0.00008	0.00007	0.00000	0.00000	0.00000	0.00000	0.00005	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00757	0.00970	0.00520	0.00000	0.00000	0.00000	0.00000	0.00700	0.00000
Acute Toxicity HP6	≥3.5%	<0.1%	0.00014	0.00028	0.00028	0.00000	0.00000	0.00000	0.00000	0.00014	0.00000
Acute Toxicity HP6	≥22.5%	<1%	0.01320	0.02541	0.01897	0.00000	0.00000	0.00000	0.00000	0.01667	0.00000
Carcinogenic HP7	≥0.1%		0.00788	0.00970	0.01120	0.00000	0.00000	0.00000	0.00000	0.01360	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00009	0.00007	0.00001	0.00000	0.00000	0.00000	0.00000	0.00007	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.34	8.24	7.95	0.00	0.00	0.00	0.00	7.96	8.16
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.34	8.24	7.95	0.00	0.00	0.00	0.00	7.96	8.16
Toxic for Reproduction HP10	≥0.3%		0.00788	0.00970	0.01120	0.00000	0.00000	0.00000	0.00000	0.00566	0.00000
Toxic for Reproduction HP10	≥3%		0.00749	0.00960	0.00540	0.00000	0.00000	0.00000	0.00000	0.01360	0.00000
Mutagenic HP11	≥0.1%		0.00749	0.00960	0.00540	0.00000	0.00000	0.00000	0.00000	0.01360	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00788	0.00970	0.00505	0.00000	0.00000	0.00000	0.00000	0.00566	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00788	0.00970	0.00505	0.00000	0.00000	0.00000	0.00000	0.00691	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP17	TP18	BH5	TP3	TP7	TP15	TP16	BH1	TP3 + TP4
Depth (m)			0.50	1.50	0.20	0.75	0.50	0.80	0.50	1.75	0.75
Envirolab reference			20/07394/19	20/07394/20	20/07394/21	20/07394/25	20/07394/30	20/07394/40	20/07394/48	20/07394/55	20/07394/61
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.03265	0.04849	0.03648	0.00000	0.00000	0.00000	0.00000	0.03767	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.03605	0.05739	0.04189	0.00000	0.00000	0.00000	0.00000	0.05127	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	3.29850	4.93760	3.70240	0.00000	0.00000	0.00000	0.00000	3.90260	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contac

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP7 + TP8	TP11 + TP13	TP15 +TP16						
Depth (m)		0.50	0.40	0.50						
Envirolab reference		20/07394/62	20/07394/63	20/07394/64						
% Moisture	%									
pH (soil)		10.84	7.95	8.72						
pH (leachate)										
Arsenic	mg/kg									
Cadmium	mg/kg									
Copper	mg/kg									
CrVI or Chromium	mg/kg									
Lead	mg/kg									
Mercury	mg/kg									
Nickel	mg/kg									
Selenium	mg/kg									
Zinc	mg/kg									
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg									
Acenaphthylene	mg/kg									
Anthracene	mg/kg									
Benzo(a)anthracene	mg/kg									
Benzo(a)pyrene	mg/kg									
Benzo(b)fluoranthene	mg/kg									
Benzo(ghi)perylene	mg/kg									
Benzo(k)fluoranthene	mg/kg									
Chrysene	mg/kg									
Dibenzo(ah)anthracene	mg/kg									
Fluoranthene	mg/kg									
Fluorene	mg/kg									
Indeno(123cd)pyrene	mg/kg									
Naphthalene	mg/kg									
Phenanthrene	mg/kg									
Pyrene	mg/kg									
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	TP7 + TP8	TP11 + TP13	TP15 +TP16						
Depth (m)	0.50	0.40	0.50						
Envirolab reference	20/07394/62	20/07394/63	20/07394/64						

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

envirolab

Haswaste, developed by Dr. Iain Haslock.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Site Code and Name									
TP/WS/BH	TP7 + TP8	TP11 + TP13	TP15 +TP16						
Depth (m)	0.50	0.40	0.50						
Envirolab reference	20/07394/62	20/07394/63	20/07394/64						

Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y									

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥25%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥2.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥3.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥22.5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		10.84	7.95	8.72	0.00	0.00	0.00	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		10.84	7.95	8.72	0.00	0.00	0.00	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP7 + TP8	TP11 + TP13	TP15 +TP16					
Depth (m)			0.50	0.40	0.50					
Envirolab reference			20/07394/62	20/07394/63	20/07394/64					
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contac

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP3 + TP4	TP7 + TP8	TP11 + TP13	TP15 +TP16					
Depth (m)		0.75	0.50	0.40	0.50					
Envirolab reference		20/07394/61	20/07394/62	20/07394/63	20/07394/64					
% Moisture	%									
pH (soil)		8.16	10.84	7.95	8.72					
pH (leachate)										
Arsenic	mg/kg	0	0	0	0					
Cadmium	mg/kg	0	0	0	0.0					
Copper	mg/kg	3	0	0	0.0					
CrVI or Chromium	mg/kg	0	0	0	0.0					
Lead	mg/kg	1	0	0	0.0					
Mercury	mg/kg	0	0	0	0.0					
Nickel	mg/kg	0	0	0	0.0					
Selenium	mg/kg	0	0	0	0.1					
Zinc	mg/kg	1	0	0	0					
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									

PAH (Input Total PAH **OR** individual PAH results)

Acenaphthene	mg/kg									
Acenaphthylene	mg/kg									
Anthracene	mg/kg									
Benzo(a)anthracene	mg/kg									
Benzo(a)pyrene	mg/kg									
Benzo(b)fluoranthene	mg/kg									
Benzo(ghi)perylene	mg/kg									
Benzo(k)fluoranthene	mg/kg									
Chrysene	mg/kg									
Dibenzo(ah)anthracene	mg/kg									
Fluoranthene	mg/kg									
Fluorene	mg/kg									
Indeno(123cd)pyrene	mg/kg									
Naphthalene	mg/kg									
Phenanthrene	mg/kg									
Pyrene	mg/kg									
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									

TPH

Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil										
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									

Phenols Input Total Phenols HPLC **OR** individual Phenol results.

Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									

BTEX Input Total BTEX **OR** individual BTEX results.

Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									

PCBs (POPs)

PCBs Total (eg EC7/WHO12)	mg/kg									

PBBs (POPs)

Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH		TP3 + TP4	TP7 + TP8	TP11 + TP13	TP15 +TP16				
Depth (m)		0.75	0.50	0.40	0.50				
Envirolab reference		20/07394/61	20/07394/62	20/07394/63	20/07394/64				
POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.									
2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								
Some Pesticides (POPs unless otherwise stated)									
Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								
Tin									
Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								
Organotin									
Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								
Tin excluding Organotin									
Tin excl Organotin	mg/kg								

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	TP3 + TP4	TP7 + TP8	TP11 + TP13	TP15 +TP16					
Depth (m)	0.75	0.50	0.40	0.50					
Envirolab reference	20/07394/61	20/07394/62	20/07394/63	20/07394/64					
Asbestos in Soil	Thresholds								
Asbestos detected in Soil (enter Y or N)	Y								

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y								

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.

All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00001	0.00002	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00036	0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00037	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00008	0.00004	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.25%	<0.1%	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥5%	<0.1%	0.00001	0.00001	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥25%	<1%	0.00046	0.00005	0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥2.5%	<0.1%	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥55%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.5%	<0.1%	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥3.5%	<0.1%	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥22.5%	<1%	0.00046	0.00005	0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00008	0.00004	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.16	10.84	7.95	8.72	0.00	0.00	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.16	10.84	7.95	8.72	0.00	0.00	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.00008	0.00004	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00002	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP3 + TP4	TP7 + TP8	TP11 + TP13	TP15 +TP16				
Depth (m)			0.75	0.50	0.40	0.50				
Envirolab reference			20/07394/61	20/07394/62	20/07394/63	20/07394/64				
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.00060	0.00009	0.00003	0.00002	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.00060	0.00009	0.00003	0.00002	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.06034	0.00926	0.00322	0.00232	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		BH4	BH6	BH7						
Depth (m)		0.75	0.50	1.50						
Envirolab reference		20/07494/1	20/07494/2	20/07494/3						
% Moisture	%									
pH (soil)		8.38	6.73	10.12						
pH (leachate)										
Arsenic	mg/kg	5	1	3						
Cadmium	mg/kg	0.7	0.5	0.6						
Copper	mg/kg	159.0	93.0	170.0						
CrVI or Chromium	mg/kg	37.0	34.0	45.0						
Lead	mg/kg	139.0	77.0	180.0						
Mercury	mg/kg	0.8	0.6	0.8						
Nickel	mg/kg	34.0	18.0	45.0						
Selenium	mg/kg	2.0	2.0	2.0						
Zinc	mg/kg	164	85	165						
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.01	0.01	0.05						
Acenaphthylene	mg/kg	0.02	0.01	0.02						
Anthracene	mg/kg	0.08	0.02	0.09						
Benzo(a)anthracene	mg/kg	0.51	0.04	0.26						
Benzo(a)pyrene	mg/kg	0.48	0.04	0.28						
Benzo(b)fluoranthene	mg/kg	0.59	0.05	0.32						
Benzo(ghi)perylene	mg/kg	0.31	0.05	0.18						
Benzo(k)fluoranthene	mg/kg	0.22	0.07	0.12						
Chrysene	mg/kg	0.53	0.06	0.28						
Dibenzo(ah)anthracene	mg/kg	0.08	0.04	0.05						
Fluoranthene	mg/kg	0.93	0.08	0.49						
Fluorene	mg/kg	0.02	0.01	0.04						
Indeno(123cd)pyrene	mg/kg	0.40	0.03	0.25						
Naphthalene	mg/kg	0.03	0.03	0.03						
Phenanthrene	mg/kg	0.27	0.03	0.29						
Pyrene	mg/kg	0.80	0.07	0.45						
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil										
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg	203.0	9.0	60.0						
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg	0.01	0.01	0.01						
Toluene	mg/kg	0.01	0.01	0.01						
Ethylbenzene	mg/kg	0.01	0.01	0.01						
Xylenes	mg/kg	0.01	0.01	0.07						
Total BTEX	mg/kg	0.01	0.01	0.01						
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH4	BH6	BH7						
Depth (m)	0.75	0.50	1.50						
Envirolab reference	20/07494/1	20/07494/2	20/07494/3						

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH4	BH6	BH7						
Depth (m)	0.75	0.50	1.50						
Envirolab reference	20/07494/1	20/07494/2	20/07494/3						

Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y	N	N	N						

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y								

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.

All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00776	0.00666	0.00904	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.01863	0.01064	0.01961	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.02496	0.01416	0.02840	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00003	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00710	0.00653	0.00909	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.02030	0.00770	0.01800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.02031	0.00091	0.00601	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.25%	<0.1%	0.00074	0.00019	0.00048	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥5%	<0.1%	0.00739	0.00681	0.00892	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥25%	<1%	0.03893	0.02191	0.04644	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥0.25%	<0.1%	0.00008	0.00006	0.00008	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥2.5%	<0.1%	0.00710	0.00653	0.00864	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥55%	<1%	0.00007	0.00005	0.00007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.5%	<0.1%	0.00725	0.00664	0.00878	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥3.5%	<0.1%	0.00028	0.00028	0.00028	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥22.5%	<1%	0.03874	0.02185	0.04631	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.02030	0.00770	0.01800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00004	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.38	6.73	10.12	0.00	0.00	0.00	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.38	6.73	10.12	0.00	0.00	0.00	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.01390	0.00770	0.01800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.02030	0.00653	0.00864	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.02030	0.00653	0.00864	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00687	0.00364	0.00909	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00710	0.00653	0.00909	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			BH4	BH6	BH7					
Depth (m)			0.75	0.50	1.50					
Envirolab reference			20/07494/1	20/07494/2	20/07494/3					
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.06792	0.03958	0.07668	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.08822	0.04049	0.08269	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	6.99470	3.96720	7.72781	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		BH1	BH2	BH3	BH3	BH4	BH4	BH4	BH5	BH5
Depth (m)		10.50	11.00	4.50	15.00	1.60	9.00	15.00	10.50	21.00
Envirolab reference		20/08234/1	20/08234/2	20/08234/3	20/08234/4	20/08234/5	20/08234/6	20/08234/7	20/08234/8	20/08234/9
% Moisture	%									
pH (soil)		8.10	8.42	7.86	8.00	8.46	8.64	7.94	7.79	8.23
pH (leachate)										
Arsenic	mg/kg									
Cadmium	mg/kg									
Copper	mg/kg									
CrVI or Chromium	mg/kg									
Lead	mg/kg									
Mercury	mg/kg									
Nickel	mg/kg									
Selenium	mg/kg									
Zinc	mg/kg									
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg									
Acenaphthylene	mg/kg									
Anthracene	mg/kg									
Benzo(a)anthracene	mg/kg									
Benzo(a)pyrene	mg/kg									
Benzo(b)fluoranthene	mg/kg									
Benzo(ghi)perylene	mg/kg									
Benzo(k)fluoranthene	mg/kg									
Chrysene	mg/kg									
Dibenzo(ah)anthracene	mg/kg									
Fluoranthene	mg/kg									
Fluorene	mg/kg									
Indeno(123cd)pyrene	mg/kg									
Naphthalene	mg/kg									
Phenanthrene	mg/kg									
Pyrene	mg/kg									
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH1	BH2	BH3	BH3	BH4	BH4	BH4	BH5	BH5
Depth (m)	10.50	11.00	4.50	15.00	1.60	9.00	15.00	10.50	21.00
Envirolab reference	20/08234/1	20/08234/2	20/08234/3	20/08234/4	20/08234/5	20/08234/6	20/08234/7	20/08234/8	20/08234/9

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

envirolab

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH1	BH2	BH3	BH3	BH4	BH4	BH4	BH5	BH5
Depth (m)	10.50	11.00	4.50	15.00	1.60	9.00	15.00	10.50	21.00
Envirolab reference	20/08234/1	20/08234/2	20/08234/3	20/08234/4	20/08234/5	20/08234/6	20/08234/7	20/08234/8	20/08234/9

Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y									

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥25%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥2.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥3.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥22.5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.10	8.42	7.86	8.00	8.46	8.64	7.94	7.79	8.23
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.10	8.42	7.86	8.00	8.46	8.64	7.94	7.79	8.23
Toxic for Reproduction HP10	≥0.3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			BH1	BH2	BH3	BH3	BH4	BH4	BH4	BH5	BH5
Depth (m)			10.50	11.00	4.50	15.00	1.60	9.00	15.00	10.50	21.00
Envirolab reference			20/08234/1	20/08234/2	20/08234/3	20/08234/4	20/08234/5	20/08234/6	20/08234/7	20/08234/8	20/08234/9
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		BH6	BH6	BH6	BH7	BH7	BH7	BH8	BH8	BH1
Depth (m)		2.50	6.00	13.50	3.50	6.00	19.50	6.00	16.50	2.50
Envirolab reference		20/08234/10	20/08234/11	20/08234/12	20/08234/13	20/08234/14	20/08234/15	20/08234/16	20/08234/17	20/08234/18
% Moisture	%									
pH (soil)		8.14	8.05	8.39	8.06	7.74	8.02	8.32	7.81	7.85
pH (leachate)										
Arsenic	mg/kg									
Cadmium	mg/kg									
Copper	mg/kg									
CrVI or Chromium	mg/kg									
Lead	mg/kg									
Mercury	mg/kg									
Nickel	mg/kg									
Selenium	mg/kg									
Zinc	mg/kg									
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									

PAH (Input Total PAH **OR** individual PAH results)

Acenaphthene	mg/kg									
Acenaphthylene	mg/kg									
Anthracene	mg/kg									
Benzo(a)anthracene	mg/kg									
Benzo(a)pyrene	mg/kg									
Benzo(b)fluoranthene	mg/kg									
Benzo(ghi)perylene	mg/kg									
Benzo(k)fluoranthene	mg/kg									
Chrysene	mg/kg									
Dibenzo(ah)anthracene	mg/kg									
Fluoranthene	mg/kg									
Fluorene	mg/kg									
Indeno(123cd)pyrene	mg/kg									
Naphthalene	mg/kg									
Phenanthrene	mg/kg									
Pyrene	mg/kg									
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									

TPH

Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									

Phenols Input Total Phenols HPLC **OR** individual Phenol results.

Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									

BTEX Input Total BTEX **OR** individual BTEX results.

Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									

PCBs (POPs)

PCBs Total (eg EC7/WHO12)	mg/kg									

PBBs (POPs)

Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH6	BH6	BH6	BH7	BH7	BH7	BH8	BH8	BH1
Depth (m)	2.50	6.00	13.50	3.50	6.00	19.50	6.00	16.50	2.50
Envirolab reference	20/08234/10	20/08234/11	20/08234/12	20/08234/13	20/08234/14	20/08234/15	20/08234/16	20/08234/17	20/08234/18
POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.									
2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								
Some Pesticides (POPs unless otherwise stated)									
Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								
Tin									
Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								
Organotin									
Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								
Tin excluding Organotin									
Tin excl Organotin	mg/kg								

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Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Site Code and Name									
TP/WS/BH	BH6	BH6	BH6	BH7	BH7	BH7	BH8	BH8	BH1
Depth (m)	2.50	6.00	13.50	3.50	6.00	19.50	6.00	16.50	2.50
Envirolab reference	20/08234/10	20/08234/11	20/08234/12	20/08234/13	20/08234/14	20/08234/15	20/08234/16	20/08234/17	20/08234/18

Asbestos in Soil	Thresholds								
Asbestos detected in Soil (enter Y or N)	Y								

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%							
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y								

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥25%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥2.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥3.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥22.5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.14	8.05	8.39	8.06	7.74	8.02	8.32	7.81	7.85
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.14	8.05	8.39	8.06	7.74	8.02	8.32	7.81	7.85
Toxic for Reproduction HP10	≥0.3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

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If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Site Code and Name										
TP/WS/BH			BH6	BH6	BH6	BH7	BH7	BH7	BH8	BH8	BH1
Depth (m)			2.50	6.00	13.50	3.50	6.00	19.50	6.00	16.50	2.50
Envirolab reference			20/08234/10	20/08234/11	20/08234/12	20/08234/13	20/08234/14	20/08234/15	20/08234/16	20/08234/17	20/08234/18
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contac

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

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If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		BH1	BH1	BH2	BH2	BH5	BH8			
Depth (m)		2.70	6.00	1.50	3.50	2.50	3.50			
Envirolab reference		20/08234/19	20/08234/20	20/08234/21	20/08234/22	20/08234/23	20/08234/24			
% Moisture	%									
pH (soil)		8.43	8.27	8.38	8.67	8.56	8.15			
pH (leachate)										
Arsenic	mg/kg									
Cadmium	mg/kg									
Copper	mg/kg									
CrVI or Chromium	mg/kg									
Lead	mg/kg									
Mercury	mg/kg									
Nickel	mg/kg									
Selenium	mg/kg									
Zinc	mg/kg									
Barium	mg/kg									
Beryllium	mg/kg									
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg									
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg									
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg									
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg									
Acenaphthylene	mg/kg									
Anthracene	mg/kg									
Benzo(a)anthracene	mg/kg									
Benzo(a)pyrene	mg/kg									
Benzo(b)fluoranthene	mg/kg									
Benzo(ghi)perylene	mg/kg									
Benzo(k)fluoranthene	mg/kg									
Chrysene	mg/kg									
Dibenzo(ah)anthracene	mg/kg									
Fluoranthene	mg/kg									
Fluorene	mg/kg									
Indeno(123cd)pyrene	mg/kg									
Naphthalene	mg/kg									
Phenanthrene	mg/kg									
Pyrene	mg/kg									
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH1	BH1	BH2	BH2	BH5	BH8			
Depth (m)	2.70	6.00	1.50	3.50	2.50	3.50			
Envirolab reference	20/08234/19	20/08234/20	20/08234/21	20/08234/22	20/08234/23	20/08234/24			

POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.

2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								

Some Pesticides (POPs unless otherwise stated)

Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								

Tin

Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								

Organotin

Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								

Tin excluding Organotin

Tin excl Organotin	mg/kg								

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH	BH1	BH1	BH2	BH2	BH5	BH8			
Depth (m)	2.70	6.00	1.50	3.50	2.50	3.50			
Envirolab reference	20/08234/19	20/08234/20	20/08234/21	20/08234/22	20/08234/23	20/08234/24			

Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y									

If Asbestos in Soil above is "**Y**", the soil is Hazardous Waste HP5 and HP7

Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

If Asbestos in Soil above is "**Y**", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.

Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "**Y**", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	**If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.**								
Corrosive HP8	≥5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥25%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥2.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥3.5%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥22.5%	<1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		8.43	8.27	8.38	8.67	8.56	8.15	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		8.43	8.27	8.38	8.67	8.56	8.15	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			BH1	BH1	BH2	BH2	BH5	BH8			
Depth (m)			2.70	6.00	1.50	3.50	2.50	3.50			
Envirolab reference			20/08234/19	20/08234/20	20/08234/21	20/08234/22	20/08234/23	20/08234/24			
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contac

APPENDIX S
GMA

Oasys

RSK ENVIRONMENT LIMITED

North London Business Park

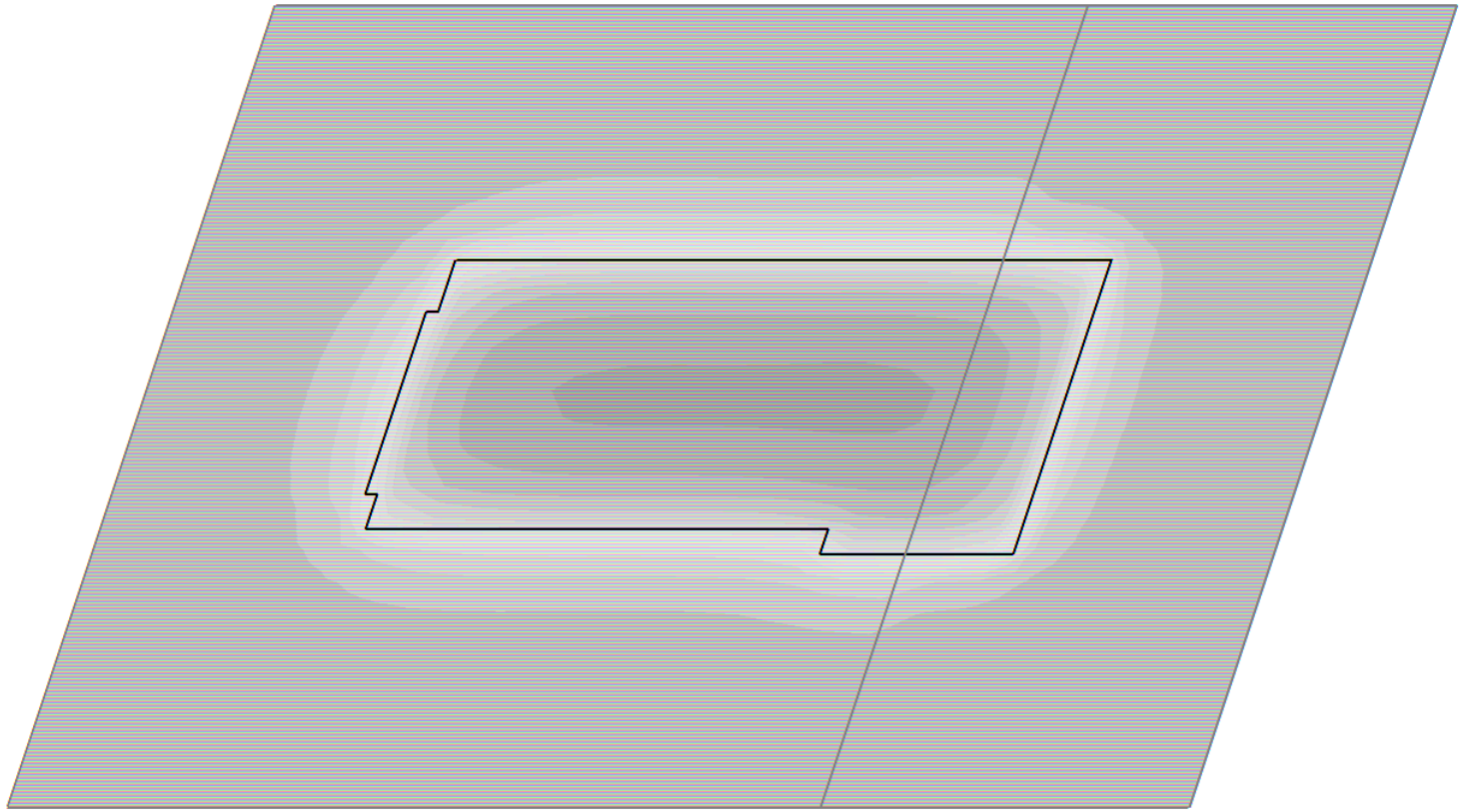
Heave Assessment Block 1A Main School Building

Basement Excavation_short term

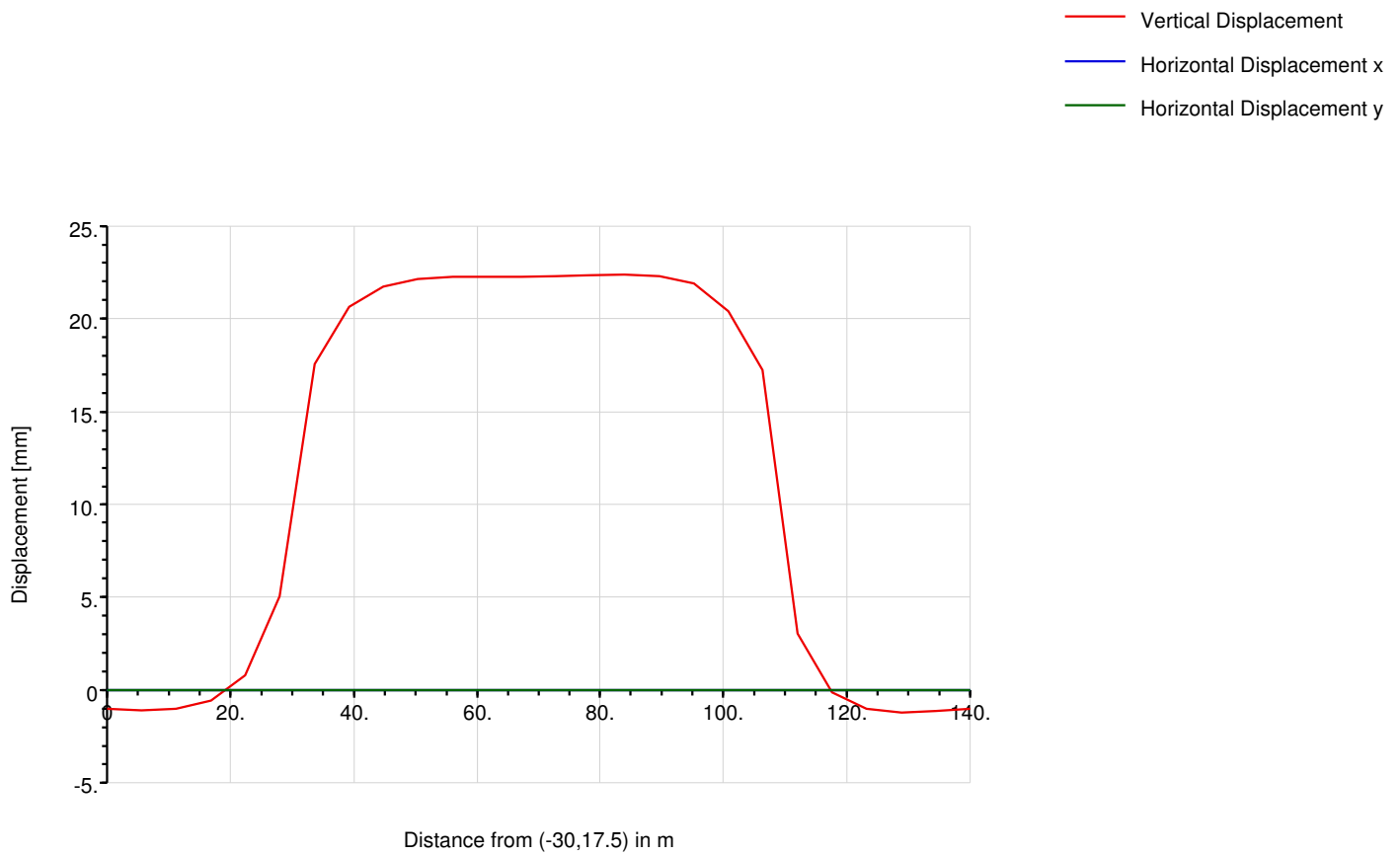
Job No.	Sheet No.	Rev.
1921321		

Drg. Ref.

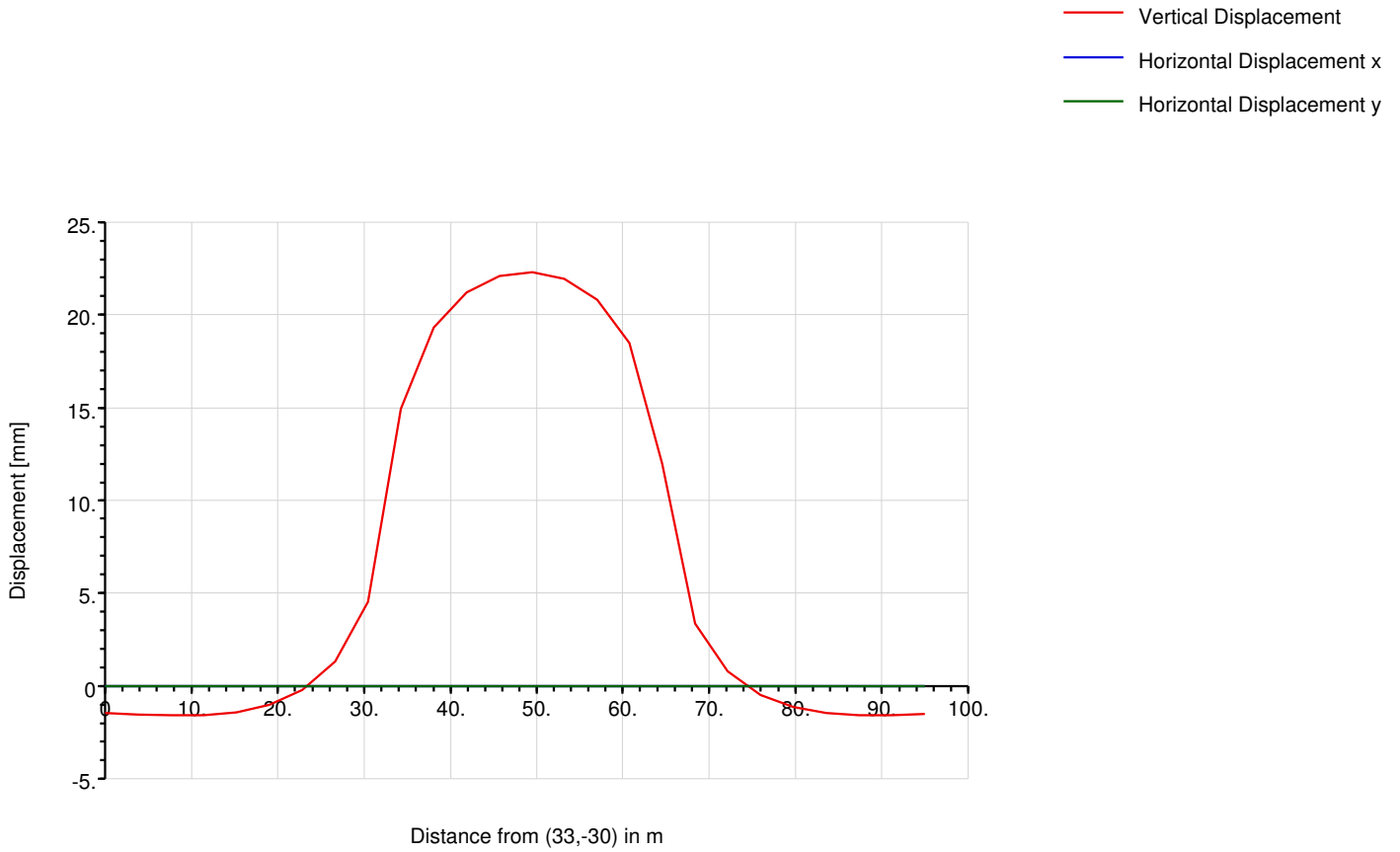
Made by	Date	Checked
ST		



Displacement for Displacement Line 1



Displacement for Displacement Line 2



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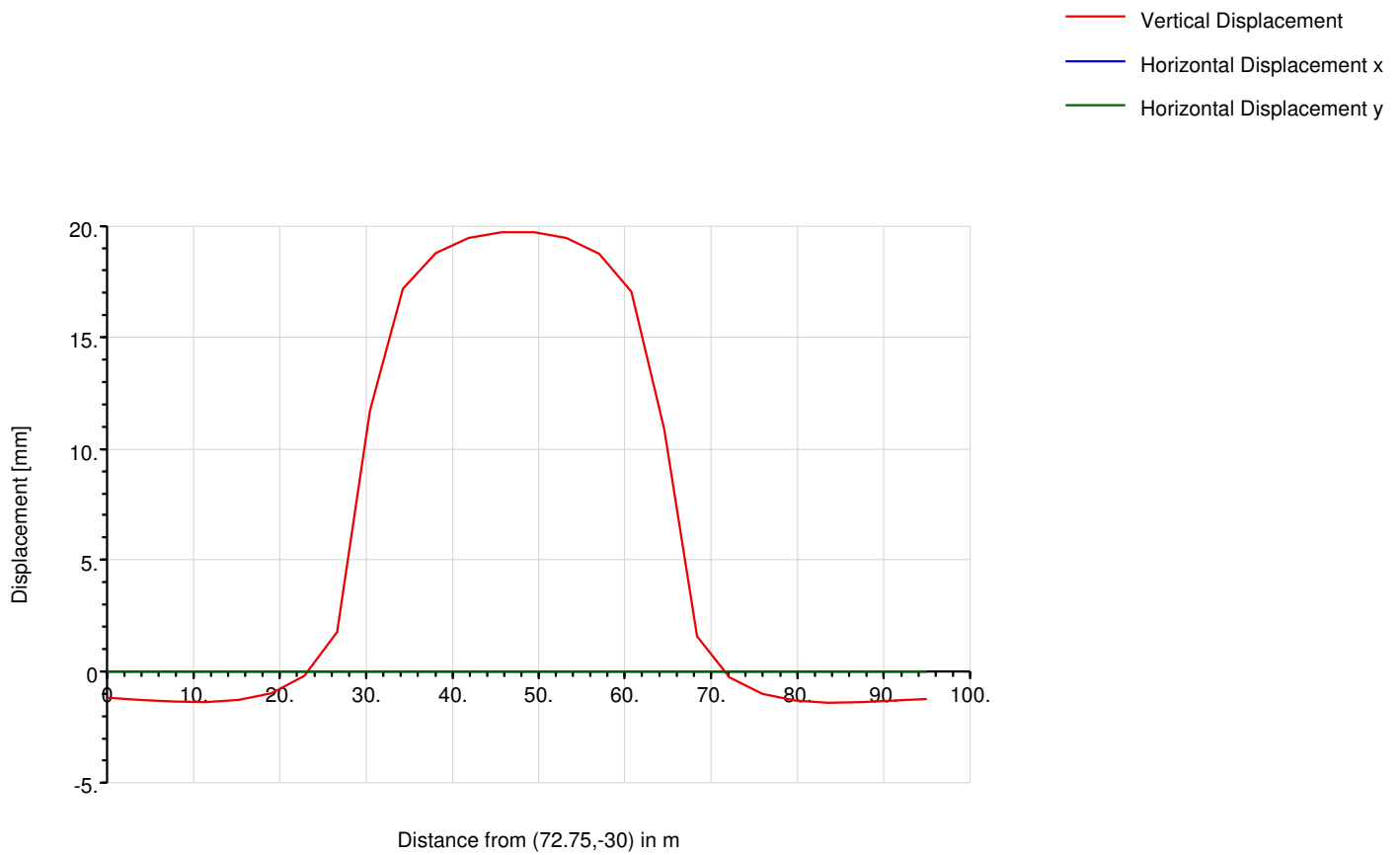


Oasys

RSK ENVIRONMENT LIMITED

Job No.	Sheet No.	Rev.
1921321		

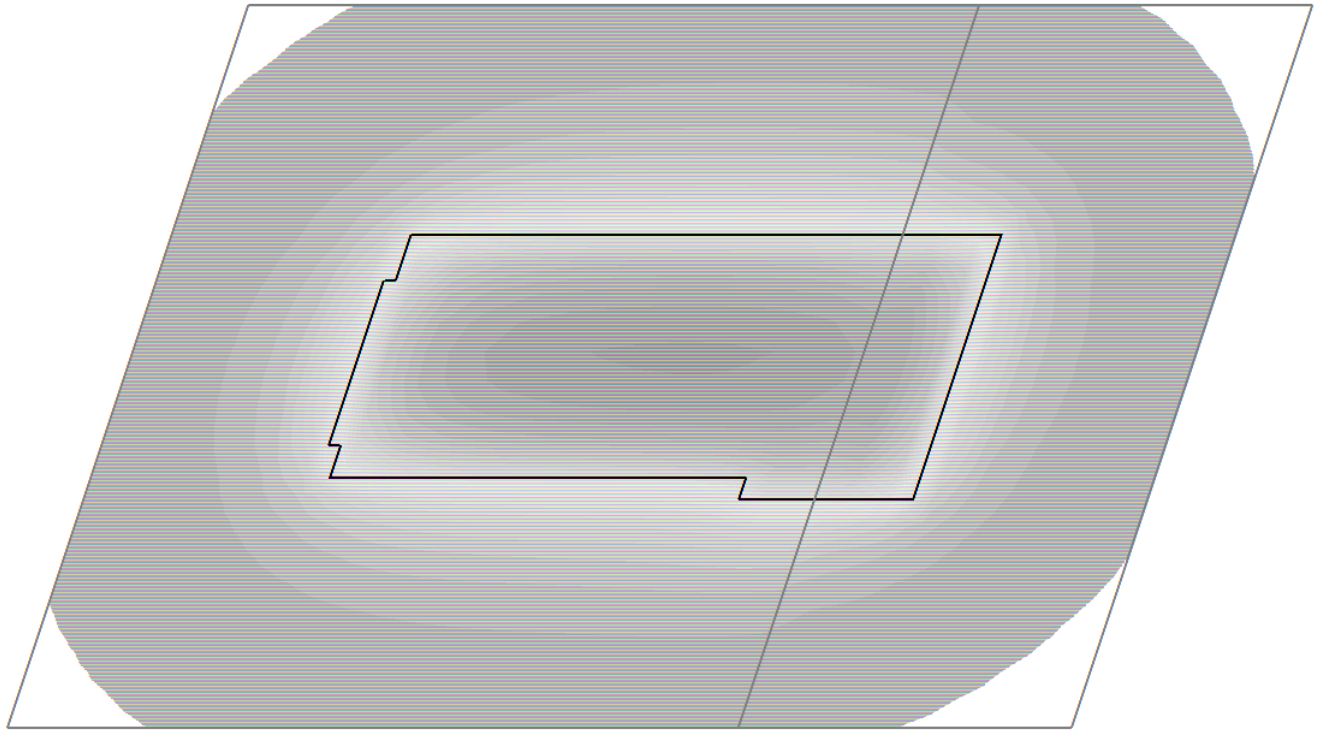
Drg. Ref.

Made by ST | Date | Checked

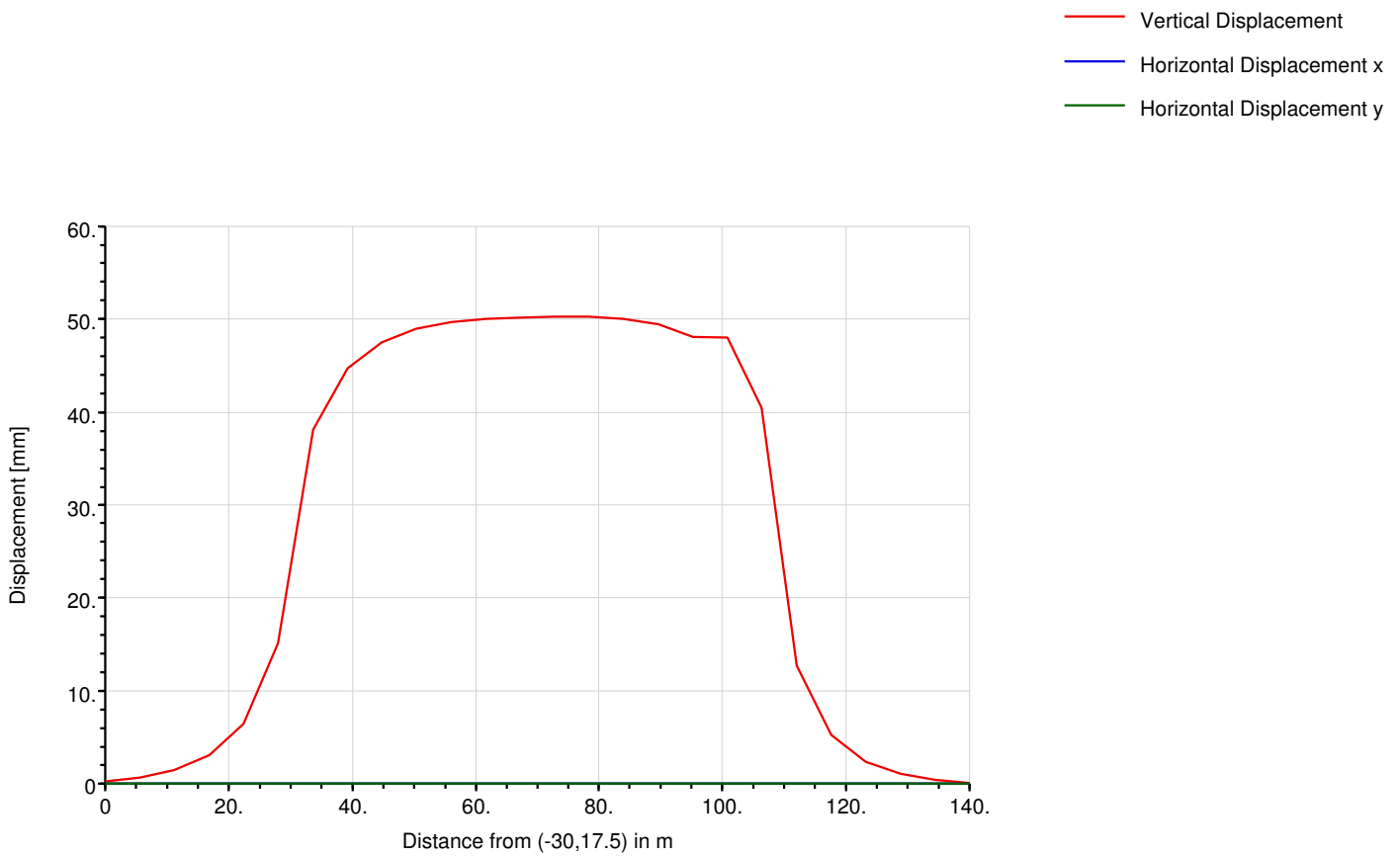
North London Business Park

Heave Assessment Block 1A Main School Building

Basement Excavation_long term



Displacement for Displacement Line 1



Titles

Job No.: 1921321
Job Title: North London Business Park
Sub-title: Heave Assessment Block 1A Main School Building
Calculation Heading: Basement Excavation_long term
Initials: ST
Checker:
Date Saved:
Date Checked:
Notes:
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History

Date	Time	By	Notes
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05-Mar-2021	14:35	trajkovski_s	
05-Mar-2021	14:38	trajkovski_s	
05-Mar-2021	15:02	trajkovski_s	
05-Mar-2021	15:02	trajkovski_s	
05-Mar-2021	15:06	trajkovski_s	

Analysis Options

General
Global Poisson's ratio: 0.20
Maximum allowable ratio between values of E: 1.5
Horizontal rigid boundary level: 8.00 [m OD]
Displacements at load centroids: Yes
GSA piled raft data : No

Elastic
Elastic : Yes
Analysis: Boussinesq
Stiffness for horizontal displacement calculations: Weighted average
Using legacy heave correction factor: Yes

Consolidation
Consolidation : No

Soil ProfilesSoil Profile 1

Layer ref.	Name	Level at top	Number of intermediate displacement levels	Youngs Modulus : Top	Youngs Modulus : Btm.	Poissons ratio	Non-linear curve
		[mOD]		[kN/m²]	[kN/m²]		
1	Made Ground	50.080	2	7780.0	7780.0	0.20000	None
2	Weathered London Clay	49.080	5	8160.0	23120.	0.20000	None
3	London Clay Formation	44.080	10	25840.	46240.	0.20000	None
4	Lambeth Group - cohesive	20.580	10	52290.	70180.	0.20000	None

Soil ProfilesSoil Profile 2

Layer ref.	Name	Level at top	Number of intermediate displacement levels	Youngs Modulus : Top	Youngs Modulus : Btm.	Poissons ratio	Non-linear curve
		[mOD]		[kN/m²]	[kN/m²]		
1	Made Ground	48.830	2	7780.0	7780.0	0.20000	None
2	London Clay Formation	46.330	20	14960.	59840.	0.20000	None
3	Lambeth Group - cohesive	18.630	10	57920.	68800.	0.20000	None
4	Lambeth Group - granular	12.230	5	200000.	200000.	0.20000	None

Soil Zones

Zone	Name	X min [m]	X max [m]	Y min [m]	Y max [m]	Profile
1	Soil Zone 1	-30.000	66.280	-30.000	65.000	Soil Profile 1
2	Soil Zone 2	66.280	110.00	-30.000	65.000	Soil Profile 2

Polygonal Load Data

Load ref.	Name	Position : Level	Position : Polygon : Coords.	Position : Polygon : Rect. tolerance	No. of Rectangles	Value : Normal (local z)
		[m]	[m]	[%]		[kN/m²]
1	Block 1A - Main School Building	46.80900	(1.48,2.96) (56.2,2.96) (56.2,0) (79.2,0) (79.2,34.8) (1.48,34.8) (1.48,28.8) (0,28.8) (0,7.1) (1.48,7.1) (1.48,2.96)	10.000	3	-70.000

Polygonal Loads' Rectangles

No.	Centre : x	Centre : y	Angle of local x from global X	Width x	Depth y
	[m]	[m]	[Degrees]	[m]	[m]
Load 1 : Block 1A - Main School Building					
(Edge 1 optimal)					
1	28.85500	18.87500	0.0	54.750	31.830
2	67.71500	17.39500	0.0	22.970	34.790
3	0.74000	17.95000	0.0	1.4800	21.700

Displacement Lines

Name	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals [No.]	Calculate	Detailed Results
Displacement Line 1	-30.00000	17.50000	46.80900	110.00000	17.50000	46.80900	25	Yes	Yes
Displacement Line 2	33.00000	-30.00000	46.80900	33.00000	65.00000	46.80900	25	Yes	Yes
Displacement Line 3	72.75000	-30.00000	46.80900	72.75000	65.00000	46.80900	25	Yes	Yes

Displacement Grids

Name	Extrusion: Direction	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals Along Line [No.]	Extrusion: Distance [m]	Extrusion: Intervals Along [No.]	Calculate	Detailed Results
Displacement Grid 1	Global X	-30.00000	-30.00000	46.80900	-	65.00000	46.80900	25	140.00000	25	Yes	Yes

Results : Immediate : Load Centres : Polygonal

Ref.	Name	x	y	z	δz	Stress: Calc. Level	Stress: Vertical	Stress: Sum Princ.	Vert. Strain

		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	Block 1A - Main School Building	40.56901	18.40396	46.80900	-50.31724	46.421	-70.000	-165.21	-0.0031674

Results : Consolidation : Load Centres : Polygonal

None

Results : Total : Load Centres : Polygonal

None

Results : Immediate : Displacement Data : Lines

Ref.	Name	x	y	z	δz	Stress: Calc. Level	Stress: Vertical	Stress: Sum Princ.	Vert. Strain
		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	Displacement Line 1	-30.00000	17.50000	46.80900	-0.29258	46.421	-15.908E-6	-0.15479	1.9231E-6
1	Displacement Line 1	-24.40000	17.50000	46.80900	-0.69365	46.421	-34.270E-6	-0.23136	2.8736E-6
1	Displacement Line 1	-18.80000	17.50000	46.80900	-1.47931	46.421	-87.938E-6	-0.37598	4.6675E-6
1	Displacement Line 1	-13.20000	17.50000	46.80900	-3.06269	46.421	-300.11E-6	-0.69709	8.6436E-6
1	Displacement Line 1	-7.60000	17.50000	46.80900	-6.45381	46.421	-0.0018241	-1.6554	20.443E-6
1	Displacement Line 1	-2.00000	17.50000	46.80900	-15.14676	46.421	-0.10354	-8.9318	103.31E-6
1	Displacement Line 1	3.60000	17.50000	46.80900	-38.18438	46.421	-69.981	-160.71	-0.0032221
1	Displacement Line 1	9.20000	17.50000	46.80900	-44.72601	46.421	-69.998	-164.01	-0.0031823
1	Displacement Line 1	14.80000	17.50000	46.80900	-47.57248	46.421	-69.999	-164.71	-0.0031736
1	Displacement Line 1	20.40000	17.50000	46.80900	-48.95774	46.421	-69.999	-164.97	-0.0031704
1	Displacement Line 1	26.00000	17.50000	46.80900	-49.66045	46.421	-70.000	-165.09	-0.0031689
1	Displacement Line 1	31.60000	17.50000	46.80900	-50.02184	46.421	-70.000	-165.16	-0.0031681
1	Displacement Line 1	37.20000	17.50000	46.80900	-50.20139	46.421	-70.000	-165.19	-0.0031677
1	Displacement Line 1	42.80000	17.50000	46.80900	-50.26921	46.421	-70.000	-165.20	-0.0031676
1	Displacement Line 1	48.40000	17.50000	46.80900	-50.23479	46.421	-70.000	-165.19	-0.0031676
1	Displacement Line 1	54.00000	17.50000	46.80900	-50.03098	46.421	-70.000	-165.16	-0.0031680
1	Displacement Line 1	59.60000	17.50000	46.80900	-49.45522	46.421	-70.000	-165.07	-0.0031692
1	Displacement Line 1	65.20000	17.50000	46.80900	-48.07729	46.421	-69.999	-164.80	-0.0031724
1	Displacement Line 1	70.80000	17.50000	46.80900	-47.98267	46.569	-70.000	-165.53	-0.0065417
1	Displacement Line 1	76.40000	17.50000	46.80900	-40.49808	46.569	-69.991	-162.61	-0.0066153
1	Displacement Line 1	82.00000	17.50000	46.80900	-12.74513	46.569	-0.0091827	-3.8593	97.795E-6
1	Displacement Line 1	87.60000	17.50000	46.80900	-5.22145	46.569	-323.65E-6	-0.93510	23.989E-6
1	Displacement Line 1	93.20000	17.50000	46.80900	-2.36818	46.569	-62.027E-6	-0.42010	10.790E-6
1	Displacement Line 1	98.80000	17.50000	46.80900	-1.07506	46.569	-19.511E-6	-0.23292	5.9846E-6
1	Displacement Line 1	104.40000	17.50000	46.80900	-0.45362	46.569	-7.8972E-6	-0.14521	3.7318E-6
1	Displacement Line 1	110.00000	17.50000	46.80900	-0.14848	46.569	-3.7459E-6	-0.097780	2.5131E-6
2	Displacement Line 2	33.00000	-30.00000	46.80900	-0.37166	46.421	-18.634E-6	-0.20928	2.6003E-6
2	Displacement Line 2	33.00000	-26.20000	46.80900	-0.64843	46.421	-28.415E-6	-0.26396	3.2793E-6
2	Displacement Line 2	33.00000	-22.40000	46.80900	-1.06244	46.421	-45.430E-6	-0.34006	4.2241E-6
2	Displacement Line 2	33.00000	-18.60000	46.80900	-1.68290	46.421	-77.344E-6	-0.45005	5.5891E-6
2	Displacement Line 2	33.00000	-14.80000	46.80900	-2.61823	46.421	-143.80E-6	-0.61732	7.6636E-6
2	Displacement Line 2	33.00000	-11.00000	46.80900	-4.04453	46.421	-305.35E-6	-0.89124	11.057E-6
2	Displacement Line 2	33.00000	-7.20000	46.80900	-6.26547	46.421	-809.64E-6	-1.3960	17.294E-6
2	Displacement Line 2	33.00000	-3.40000	46.80900	-9.88026	46.421	-0.0033384	-2.5542	31.503E-6
2	Displacement Line 2	33.00000	0.40000	46.80900	-16.45234	46.421	-0.050327	-7.2702	86.626E-6
2	Displacement Line 2	33.00000	4.20000	46.80900	-35.36599	46.421	-69.593	-150.92	-0.0033147
2	Displacement Line 2	33.00000	8.00000	46.80900	-43.91863	46.421	-69.993	-162.92	-0.0031954
2	Displacement Line 2	33.00000	11.80000	46.80900	-47.84385	46.421	-69.999	-164.55	-0.0031755
2	Displacement Line 2	33.00000	15.60000	46.80900	-49.69878	46.421	-69.999	-165.07	-0.0031691
2	Displacement Line 2	33.00000	19.40000	46.80900	-50.14282	46.421	-70.000	-165.18	-0.0031678
2	Displacement Line 2	33.00000	23.20000	46.80900	-49.31213	46.421	-69.999	-164.98	-0.0031703
2	Displacement Line 2	33.00000	27.00000	46.80900	-46.96027	46.421	-69.998	-164.27	-0.0031790
2	Displacement Line 2	33.00000	30.80000	46.80900	-42.17533	46.421	-69.986	-161.87	-0.0032080
2	Displacement Line 2	33.00000	34.60000	46.80900	-29.78328	46.421	-53.944	-107.50	-0.0026873
2	Displacement Line 2	33.00000	38.40000	46.80900	-14.05040	46.421	-0.018171	-4.9564	60.261E-6
2	Displacement Line 2	33.00000	42.20000	46.80900	-8.59665	46.421	-0.0021030	-2.0949	25.886E-6
2	Displacement Line 2	33.00000	46.00000	46.80900	-5.46616	46.421	-596.39E-6	-1.2051	14.937E-6
2	Displacement Line 2	33.00000	49.80000	46.80900	-3.51772	46.421	-241.14E-6	-0.78712	9.7671E-6
2	Displacement Line 2	33.00000	53.60000	46.80900	-2.26284	46.421	-117.84E-6	-0.55212	6.8549E-6
2	Displacement Line 2	33.00000	57.40000	46.80900	-1.44044	46.421	-64.784E-6	-0.40581	5.0400E-6
2	Displacement Line 2	33.00000	61.20000	46.80900	-0.89636	46.421	-38.599E-6	-0.30846	3.8318E-6
2	Displacement Line 2	33.00000	65.00000	46.80900	-0.53475	46.421	-24.389E-6	-0.24058	2.9889E-6
3	Displacement Line 3	72.75000	-30.00000	46.80900	-0.12691	46.569	-3.8543E-6	-0.10750	2.7629E-6
3	Displacement Line 3	72.75000	-26.20000	46.80900	-0.30390	46.569	-6.1501E-6	-0.13626	3.5020E-6
3	Displacement Line 3	72.75000	-22.40000	46.80900	-0.58557	46.569	-10.524E-6	-0.17788	4.5712E-6
3	Displacement Line 3	72.75000	-18.60000	46.80900	-1.03681	46.569	-19.829E-6	-0.24171	6.2104E-6
3	Displacement Line 3	72.75000	-14.80000	46.80900	-1.77202	46.569	-42.964E-6	-0.34799	8.9391E-6
3	Displacement Line 3	72.75000	-11.00000	46.80900	-3.00947	46.569	-116.05E-6	-0.54864	14.086E-6
3	Displacement Line 3	72.75000	-7.20000	46.80900	-5.22703	46.569	-466.96E-6	-1.0183	26.105E-6
3	Displacement Line 3	72.75000	-3.40000	46.80900	-9.78799	46.569	-0.0049718	-2.7814	70.734E-6
3	Displacement Line 3	72.75000	0.40000	46.80900	-28.83910	46.569	-67.799	-137.87	-0.0069132
3	Displacement Line 3	72.75000	4.20000	46.80900	-39.91533	46.569	-69.997	-163.38	-0.0065963
3	Displacement Line 3	72.75000	8.00000	46.80900	-43.66922	46.569	-69.999	-164.62	-0.0065650
3	Displacement Line 3	72.75000	11.80000	46.80900	-45.41996	46.569	-69.999	-164.97	-0.0065559
3	Displacement Line 3	72.75000	15.60000	46.80900	-46.15563	46.569	-69.999	-165.09	-0.0065528
3	Displacement Line 3	72.75000	19.40000	46.80900	-46.16507	46.569	-69.999	-165.09	-0.0065527
3	Displacement Line 3	72.75000	23.20000	46.80900	-45.43900	46.569	-69.999	-164.97	-0.0065559
3	Displacement Line 3	72.75000	27.00000	46.80900	-43.66125	46.569	-69.999	-164.60	-0.0065654
3	Displacement Line 3	72.75000	30.80000	46.80900	-39.76483	46.569	-69.996	-163.26	-0.0065994
3	Displacement Line 3	72.75000	34.60000	46.80900	-27.27463	46.569	-60.792	-118.63	-0.0063271
3	Displacement Line 3	72.75000	38.40000	46.80900	-9.58916	46.569	-0.0041382	-2.6017	66.243E-6
3	Displacement Line 3	72.75000	42.20000	46.80900	-5.21308	46.569	-428.21E-6	-0.99874	25.608E-6
3	Displacement Line 3	72.75000	46.00000	46.80900	-3.04372	46.569	-110.95E-6	-0.55101	14.148E-6
3	Displacement Line 3	72.75000	49.80000	46.80900	-1.81535	46.569	-42.300E-6	-0.35489	9.1165E-6
3	Displacement Line 3	72.75000	53.60000	46.80900	-1.07604	46.569	-19.972E-6	-0.24904	6.3991E-6
3	Displacement Line 3	72.75000	57.40000	46.80900	-0.61691	46.569	-10.788E-6	-0.18456	4.7427E-6
3	Displacement Line 3	72.75000	61.20000	46.80900	-0.32717	46.569	-6.3886E-6	-0.14203	3.6502E-6
3	Displacement Line 3	72.75000	65.00000	46.80900	-0.14321	46.569	-4.0433E-6	-0.11239	2.8885E-6

Results : Consolidation : Displacement Data : Lines

None

Results : Total : Displacement Data : Lines

None

Results : Immediate : Displacement Data : Grids

Ref.	Name	x	y	z	δz	Stress: Calc. Level	Stress: Vertical	Stress: Sum Princ.	Vert. Strain
		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	Displacement Grid 1	-30.00000	-30.00000	46.80900	0.09737	46.421	-2.2416E-6	-0.055837	693.98E-9
1	Displacement Grid 1	-24.40000	-30.00000	46.80900	0.08044	46.421	-3.0514E-6	-0.066455	825.91E-9
1	Displacement Grid 1	-18.80000	-30.00000	46.80900	0.05350	46.421	-4.1428E-6	-0.079045	982.35E-9
1	Displacement Grid 1	-13.20000	-30.00000	46.80900	0.01529	46.421	-5.5659E-6	-0.093644	1.1637E-6
1	Displacement Grid 1	-7.60000	-30.00000	46.80900	-0.03383	46.421	-7.3265E-6	-0.11002	1.3671E-6
1	Displacement Grid 1	-2.00000	-30.00000	46.80900	-0.09125	46.421	-9.3497E-6	-0.12756	1.5851E-6
1	Displacement Grid 1	3.60000	-30.00000	46.80900	-0.15225	46.421	-11.471E-6	-0.14535	1.8060E-6
1	Displacement Grid 1	9.20000	-30.00000	46.80900	-0.21125	46.421	-13.483E-6	-0.16229	2.0165E-6
1	Displacement Grid 1	14.80000	-30.00000	46.80900	-0.26358	46.421	-15.222E-6	-0.17745	2.2049E-6
1	Displacement Grid 1	20.40000	-30.00000	46.80900	-0.30675	46.421	-16.614E-6	-0.19022	2.3635E-6
1	Displacement Grid 1	26.00000	-30.00000	46.80900	-0.34056	46.421	-17.675E-6	-0.20034	2.4893E-6
1	Displacement Grid 1	31.60000	-30.00000	46.80900	-0.36628	46.421	-18.468E-6	-0.20781	2.5821E-6
1	Displacement Grid 1	37.20000	-30.00000	46.80900	-0.38562	46.421	-19.073E-6	-0.21274	2.6433E-6
1	Displacement Grid 1	42.80000	-30.00000	46.80900	-0.39960	46.421	-19.552E-6	-0.21519	2.6736E-6
1	Displacement Grid 1	48.40000	-30.00000	46.80900	-0.40762	46.421	-19.913E-6	-0.21505	2.6720E-6
1	Displacement Grid 1	54.00000	-30.00000	46.80900	-0.40690	46.421	-20.063E-6	-0.21199	2.6338E-6
1	Displacement Grid 1	59.60000	-30.00000	46.80900	-0.39286	46.421	-19.799E-6	-0.20541	2.5522E-6
1	Displacement Grid 1	65.20000	-30.00000	46.80900	-0.36100	46.421	-18.879E-6	-0.19482	2.4205E-6
1	Displacement Grid 1	70.80000	-30.00000	46.80900	-0.14150	46.569	-4.0358E-6	-0.11118	2.8575E-6
1	Displacement Grid 1	76.40000	-30.00000	46.80900	-0.09628	46.569	-3.4692E-6	-0.10003	2.5710E-6

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Displacement Grid 1	82.00000	-30.00000	46.80900	-0.04470	46.569	-2.8138E-6	-0.087666	2.2532E-6
1	Displacement Grid 1	87.60000	-30.00000	46.80900	0.00568	46.569	-2.1681E-6	-0.075157	1.9317E-6
1	Displacement Grid 1	93.20000	-30.00000	46.80900	0.04852	46.569	-1.6086E-6	-0.063428	1.6303E-6
1	Displacement Grid 1	98.80000	-30.00000	46.80900	0.08051	46.569	-1.1672E-6	-0.053042	1.3634E-6
1	Displacement Grid 1	104.40000	-30.00000	46.80900	0.10133	46.569	-839.32E-9	-0.044195	1.1360E-6
1	Displacement Grid 1	110.00000	-30.00000	46.80900	0.11255	46.569	-603.82E-9	-0.036838	946.90E-9
1	Displacement Grid 1	-30.00000	-26.20000	46.80900	0.08468	46.421	-2.7600E-6	-0.062260	773.78E-9
1	Displacement Grid 1	-24.40000	-26.20000	46.80900	0.05735	46.421	-3.8758E-6	-0.075228	934.92E-9
1	Displacement Grid 1	-18.80000	-26.20000	46.80900	0.01474	46.421	-5.4505E-6	-0.091014	1.1310E-6
1	Displacement Grid 1	-13.20000	-26.20000	46.80900	-0.04561	46.421	-7.6059E-6	-0.10982	1.3647E-6
1	Displacement Grid 1	-7.60000	-26.20000	46.80900	-0.12365	46.421	-10.397E-6	-0.13145	1.6334E-6
1	Displacement Grid 1	-2.00000	-26.20000	46.80900	-0.21538	46.421	-13.717E-6	-0.15508	1.9269E-6
1	Displacement Grid 1	3.60000	-26.20000	46.80900	-0.31280	46.421	-17.246E-6	-0.17926	2.2272E-6
1	Displacement Grid 1	9.20000	-26.20000	46.80900	-0.40614	46.421	-20.561E-6	-0.20223	2.5125E-6
1	Displacement Grid 1	14.80000	-26.20000	46.80900	-0.48749	46.421	-23.336E-6	-0.22253	2.7647E-6
1	Displacement Grid 1	20.40000	-26.20000	46.80900	-0.55306	46.421	-25.466E-6	-0.23933	2.9734E-6
1	Displacement Grid 1	26.00000	-26.20000	46.80900	-0.60318	46.421	-27.026E-6	-0.25244	3.1362E-6
1	Displacement Grid 1	31.60000	-26.20000	46.80900	-0.64064	46.421	-28.172E-6	-0.26206	3.2557E-6
1	Displacement Grid 1	37.20000	-26.20000	46.80900	-0.66883	46.421	-29.081E-6	-0.26852	3.3359E-6
1	Displacement Grid 1	42.80000	-26.20000	46.80900	-0.69006	46.421	-29.908E-6	-0.27208	3.3802E-6
1	Displacement Grid 1	48.40000	-26.20000	46.80900	-0.70393	46.421	-30.722E-6	-0.27271	3.3879E-6
1	Displacement Grid 1	54.00000	-26.20000	46.80900	-0.70598	46.421	-31.375E-6	-0.26982	3.3519E-6
1	Displacement Grid 1	59.60000	-26.20000	46.80900	-0.68788	46.421	-31.416E-6	-0.26226	3.2580E-6
1	Displacement Grid 1	65.20000	-26.20000	46.80900	-0.64074	46.421	-30.246E-6	-0.24882	3.0910E-6
1	Displacement Grid 1	70.80000	-26.20000	46.80900	-0.32859	46.569	-6.4619E-6	-0.14136	3.6329E-6
1	Displacement Grid 1	76.40000	-26.20000	46.80900	-0.25165	46.569	-5.4724E-6	-0.12581	3.2335E-6
1	Displacement Grid 1	82.00000	-26.20000	46.80900	-0.16324	46.569	-4.3051E-6	-0.10841	2.7863E-6
1	Displacement Grid 1	87.60000	-26.20000	46.80900	-0.07727	46.569	-3.1785E-6	-0.091007	2.3390E-6
1	Displacement Grid 1	93.20000	-26.20000	46.80900	-0.00489	46.569	-2.2482E-6	-0.075100	1.9302E-6
1	Displacement Grid 1	98.80000	-26.20000	46.80900	0.04882	46.569	-1.5574E-6	-0.061467	1.5799E-6
1	Displacement Grid 1	104.40000	-26.20000	46.80900	0.08421	46.569	-1.0747E-6	-0.050237	1.2913E-6
1	Displacement Grid 1	110.00000	-26.20000	46.80900	0.10453	46.569	-746.56E-9	-0.041181	1.0585E-6
1	Displacement Grid 1	-30.00000	-22.40000	46.80900	0.06705	46.421	-3.4076E-6	-0.069464	863.29E-9
1	Displacement Grid 1	-24.40000	-22.40000	46.80900	0.02544	46.421	-4.9583E-6	-0.085374	1.0610E-6
1	Displacement Grid 1	-18.80000	-22.40000	46.80900	-0.03938	46.421	-7.2706E-6	-0.10535	1.3091E-6
1	Displacement Grid 1	-13.20000	-22.40000	46.80900	-0.13226	46.421	-10.635E-6	-0.12995	1.6147E-6
1	Displacement Grid 1	-7.60000	-22.40000	46.80900	-0.27432	46.421	-15.264E-6	-0.15918	1.9778E-6
1	Displacement Grid 1	-2.00000	-22.40000	46.80900	-0.39965	46.421	-21.041E-6	-0.19196	2.3848E-6
1	Displacement Grid 1	3.60000	-22.40000	46.80900	-0.55448	46.421	-27.309E-6	-0.22589	2.8062E-6
1	Displacement Grid 1	9.20000	-22.40000	46.80900	-0.70141	46.421	-33.104E-6	-0.25796	3.2044E-6
1	Displacement Grid 1	14.80000	-22.40000	46.80900	-0.82676	46.421	-37.739E-6	-0.28574	3.5493E-6
1	Displacement Grid 1	20.40000	-22.40000	46.80900	-0.92501	46.421	-41.091E-6	-0.30814	3.8276E-6
1	Displacement Grid 1	26.00000	-22.40000	46.80900	-0.99797	46.421	-43.413E-6	-0.32522	4.0397E-6
1	Displacement Grid 1	31.60000	-22.40000	46.80900	-1.05137	46.421	-45.074E-6	-0.33760	4.1936E-6
1	Displacement Grid 1	37.20000	-22.40000	46.80900	-1.09168	46.421	-46.451E-6	-0.34610	4.2991E-6
1	Displacement Grid 1	42.80000	-22.40000	46.80900	-1.12369	46.421	-47.921E-6	-0.35137	4.3646E-6
1	Displacement Grid 1	48.40000	-22.40000	46.80900	-1.14793	46.421	-49.768E-6	-0.35362	4.3923E-6
1	Displacement Grid 1	54.00000	-22.40000	46.80900	-1.15758	46.421	-51.830E-6	-0.35197	4.3716E-6
1	Displacement Grid 1	59.60000	-22.40000	46.80900	-1.13754	46.421	-53.061E-6	-0.34414	4.2743E-6
1	Displacement Grid 1	65.20000	-22.40000	46.80900	-1.07003	46.421	-51.875E-6	-0.32732	4.0652E-6
1	Displacement Grid 1	70.80000	-22.40000	46.80900	-0.62681	46.569	-11.100E-6	-0.18518	4.7587E-6
1	Displacement Grid 1	76.40000	-22.40000	46.80900	-0.49732	46.569	-9.2305E-6	-0.16266	4.1802E-6
1	Displacement Grid 1	82.00000	-22.40000	46.80900	-0.34721	46.569	-6.9687E-6	-0.13711	3.5237E-6
1	Displacement Grid 1	87.60000	-22.40000	46.80900	-0.20266	46.569	-4.8531E-6	-0.11196	2.8775E-6
1	Displacement Grid 1	93.20000	-22.40000	46.80900	-0.08348	46.569	-3.2221E-6	-0.089794	2.3078E-6
1	Displacement Grid 1	98.80000	-22.40000	46.80900	0.00307	46.569	-2.1060E-6	-0.071598	1.8402E-6
1	Displacement Grid 1	104.40000	-22.40000	46.80900	0.05951	46.569	-1.3839E-6	-0.057221	1.4708E-6
1	Displacement Grid 1	110.00000	-22.40000	46.80900	0.09248	46.569	-923.98E-9	-0.046039	1.1834E-6
1	Displacement Grid 1	-30.00000	-18.60000	46.80900	0.04376	46.421	-4.2109E-6	-0.077485	962.95E-9
1	Displacement Grid 1	-24.40000	-18.60000	46.80900	-0.01659	46.421	-6.3791E-6	-0.097063	1.2062E-6
1	Displacement Grid 1	-18.80000	-18.60000	46.80900	-0.11280	46.421	-9.8301E-6	-0.12255	1.5227E-6
1	Displacement Grid 1	-13.20000	-18.60000	46.80900	-0.25317	46.421	-15.254E-6	-0.15528	1.9292E-6
1	Displacement Grid 1	-7.60000	-18.60000	46.80900	-0.44238	46.421	-23.358E-6	-0.19589	2.4335E-6
1	Displacement Grid 1	-2.00000	-18.60000	46.80900	-0.67238	46.421	-34.202E-6	-0.24310	3.0196E-6
1	Displacement Grid 1	3.60000	-18.60000	46.80900	-0.91920	46.421	-46.342E-6	-0.29279	3.6364E-6
1	Displacement Grid 1	9.20000	-18.60000	46.80900	-1.15078	46.421	-57.300E-6	-0.33927	4.2134E-6
1	Displacement Grid 1	14.80000	-18.60000	46.80900	-1.34309	46.421	-65.488E-6	-0.37830	4.6980E-6
1	Displacement Grid 1	20.40000	-18.60000	46.80900	-1.48865	46.421	-70.930E-6	-0.40860	5.0743E-6
1	Displacement Grid 1	26.00000	-18.60000	46.80900	-1.59305	46.421	-74.423E-6	-0.43095	5.3518E-6
1	Displacement Grid 1	31.60000	-18.60000	46.80900	-1.66753	46.421	-76.823E-6	-0.44688	5.5497E-6
1	Displacement Grid 1	37.20000	-18.60000	46.80900	-1.72391	46.421	-78.917E-6	-0.45804	5.6883E-6
1	Displacement Grid 1	42.80000	-18.60000	46.80900	-1.77134	46.421	-81.598E-6	-0.46593	5.7862E-6
1	Displacement Grid 1	48.40000	-18.60000	46.80900	-1.81400	46.421	-85.911E-6	-0.47152	5.8553E-6
1	Displacement Grid 1	54.00000	-18.60000	46.80900	-1.84164	46.421	-92.096E-6	-0.47380	5.8832E-6
1	Displacement Grid 1	59.60000	-18.60000	46.80900	-1.82709	46.421	-97.568E-6	-0.46818	5.8130E-6
1	Displacement Grid 1	65.20000	-18.60000	46.80900	-1.73444	46.421	-97.651E-6	-0.44803	5.5625E-6
1	Displacement Grid 1	70.80000	-18.60000	46.80900	-1.10558	46.569	-20.999E-6	-0.25265	6.4917E-6
1	Displacement Grid 1	76.40000	-18.60000	46.80900	-0.88741	46.569	-17.076E-6	-0.21831	5.6094E-6
1	Displacement Grid 1	82.00000	-18.60000	46.80900	-0.63153	46.569	-12.164E-6	-0.17856	4.5883E-6
1	Displacement Grid 1	87.60000	-18.60000	46.80900	-0.38910	46.569	-7.7888E-6	-0.14039	3.6078E-6
1	Displacement Grid 1	93.20000	-18.60000	46.80900	-0.19579	46.569	-4.7438E-6	-0.10848	2.7879E-6
1	Displacement Grid 1	98.80000	-18.60000	46.80900	-0.06026	46.569	-2.8812E-6	-0.083770	2.1530E-6
1	Displacement Grid 1	104.40000	-18.60000	46.80900	0.02587	46.569	-1.7874E-6	-0.065236	1.6767E-6
1	Displacement Grid 1	110.00000	-18.60000	46.80900	0.07591	46.569	-1.1418E-6	-0.051416	1.3216E-6
1	Displacement Grid 1	-30.00000	-14.80000	46.80900	0.01437	46.421	-5.1949E-6	-0.086318	1.0727E-6
1	Displacement Grid 1	-24.40000	-14.80000	46.80900	-0.07142	46.421	-8.2318E-6	-0.11043	1.3722E-6
1	Displacement Grid 1	-18.80000	-14.80000	46.80900	-0.20961	46.421	-13.448E-6	-0.14317	1.7789E-6
1	Displacement Grid 1	-13.20000	-14.80000	46.80900	-0.41849	46.421	-22.480E-6	-0.18747	2.3289E-6
1	Displacement Grid 1	-7.60000	-14.80000	46.80900	-0.71031	46.421	-37.603E-6	-0.24577	3.0525E-6
1	Displacement Grid 1	-2.00000	-14.80000	46.80900	-1.07626	46.421	-60.119E-6	-0.31726	3.9396E-6
1	Displacement Grid 1	3.60000	-14.80000	46.80900	-1.47390	46.421	-86.656E-6	-0.39445	4.8972E-6
1	Displacement Grid 1	9.20000	-14.80000	46.80900	-1.84157	46.421	-109.71E-6	-0.46536	5.7769E-6
1	Displacement Grid 1	14.80000	-14.80000	46.80900	-2.13603	46.421	-125.20E-6	-0.52202	6.4802E-6
1	Displacement Grid 1	20.40000	-14.80000	46.80900	-2.34930	46.421	-134.32E-6	-0.56361	6.9966E-6
1	Displacement Grid 1	26.00000	-14.80000	46.80900	-2.49599	46.421	-139.62E-6	-0.59290	7.3603E-6
1	Displacement Grid 1	31.60000	-14.80000	46.80900	-2.59746	46.421	-143.05E-6	-0.61326	7.6131E-6
1	Displacement Grid 1	37.20000	-14.80000	46.80900	-2.67429	46.421	-146.21E-6	-0.62781	7.7938E-6
1	Displacement Grid 1	42.80000	-14.80000	46.80900	-2.74403	46.421	-151.19E-6	-0.63970	7.9412E-6
1	Displacement Grid 1	48.40000	-14.80000	46.80900	-2.81754	46.421	-161.73E-6	-0.65211	8.0947E-6
1	Displacement Grid 1	54.00000	-14.80000	46.80900	-2.88511	46.421	-181.33E-6	-0.66535	8.2578E-6
1	Displacement Grid 1	59.60000	-14.80000	46.80900	-2.89684	46.421	-203.04E-6	-0.66986	8.3123E-6
1	Displacement Grid 1	65.20000	-14.80000	46.80900	-2.77806	46.421	-210.18E-6	-0.64882	8.0502E-6
1	Displacement Grid 1	70.80000	-14.80000	46.80900	-1.88752	46.569	-45.657E-6	-0.36547	9.3880E-6
1	Displacement Grid 1	76.40000	-14.80000	46.80900	-1.51557	46.569	-36.177E-6	-0.30920	7.9430E-6
1	Displacement Grid 1	82.00000	-14.80000	46.80900	-1.07185	46.569	-23.612E-6	-0.24199	6.2171E-6
1	Displacement Grid 1	87.60000	-14.80000	46.80900	-0.66220	46.569	-13.290E-6	-0.18009	4.6276E-6
1	Displacement Grid 1	93.20000	-14.80000	46.80900	-0.35155	46.569	-7.1721E-6	-0.13238	3.4020E-6
1	Displacement Grid 1	98.80000	-14.80000	46.80900	-0.14445	46.569	-3.9724E-6	-0.098303	2.5265E-6
1	Displacement Grid 1	104.40000	-14.80000	46.80900	-0.01769	46.569	-2.3061E-6	-0.074322	1.9102E-6
1	Displacement Grid 1	110.00000	-14.80000	46.80900	0.05456	46.569	-1.4041E-6	-0.057278	1.4722E-6
1	Displacement Grid 1	-30.00000	-11.00000	46.80900	-0.02119	46.421	-6.3762E-6	-0.095885	1.1915E-6
1	Displacement Grid 1	-24.40000	-11.00000	46.80900	-0.13866	46.421	-10.611E-6	-0.12551	1.5595E-6
1	Displacement Grid 1	-18.80000	-11.00000	46.80900	-0.33324	46.421	-18.541E-6	-0.16774	2.0839E-6
1	Displacement Grid 1	-13.20000	-11.00000	46.80900	-0.63918	46.421	-34.020E-6	-0.22864	2.8399E-6
1	Displacement Grid 1	-7.60000	-11.00000	46.80900	-1.08767	46.421	-64.385E-6	-0.31557	3.9183E-6
1	Displacement Grid 1	-2.00000	-11.00000	46.80900	-1.67664	46.421	-118.04E-6	-0.43154	5.3560E-6
1	Displacement Grid 1	3.60000	-11.00000	46.80900	-2.33047	46.421	-187.46E-6	-0.56243	6.9780E-6
1	Displacement Grid 1	9.20000	-11.00000	46.80900	-2.92227	46.421	-243.86E-6	-0.67875	8.4197E-6
1	Displacement Grid 1	14.80000	-11.00000	46.80900	-3.37258	46.421	-275.70E-6	-0.76428	9.4807E-6
1	Displacement Grid 1	20.40000	-11.00000	46.80900	-3.68086	46.421	-291.45E-6	-0.82210	10.198E-6
1	Displacement Grid 1	26.00000	-11.00000	46.80900	-3.88273	46.421	-299.47E-6	-0.86041	10.674E-6
1	Displacement Grid 1	31.60000	-11.00000	46.80900	-4.01731	46.421	-304.29E-6	-0.88612	10.993E-6
1	Displacement Grid 1	37.20000	-11.00000	46.80900	-4.11863	46.421	-308.95E-6	-0.90480	11.225E-6
1	Displacement Grid 1	42.80000	-11.00000	46.80900	-4.21747	46.421	-318.19E-6	-0.92253	11.445E-6
1	Displacement Grid 1	48.40000	-11.00000	46.80900	-4.34241	46.421	-345.38E-6	-0.94880	11.769E-6
1	Displacement Grid 1	54.00000	-11.00000	46.80900	-4.49686	46.421	-417.54E-6	-0.99306	12.314E-6
1	Displacement Grid 1	59.60000	-11.00000	46.80900	-4.59063	46.421	-516.11E-6	-1.0352	12.830E-6
1	Displacement Grid 1	65.20000	-11.00000	46.80900	-4.45813	46.421	-557.66E-6	-1.0244	12.693E-6
1	Displacement Grid 1	70.80000	-11.00000	46.80900	-3.20628	46.569	-123.28E-6	-0.57893	14.864E-6
1	Displacement Grid 1	76.40000	-11.00000	46.80900	-2.55729	46.569	-95.386E-6	-0.47687	12.244E-6
1	Displacement Grid 1	82.00000	-11.00000	46.80900	-1.75996	46.569	-53.834E-6	-0.34755	8.9262E-6
1	Displacement Grid 1	87.60000	-11.00000	46.80900	-1.05496	46.569	-24.390E-6	-0.23724	6.0949E-6
1	Displacement Grid 1	93.20000	-11.00000	46.80900	-0.55997	46.569	-11.075E-6	-0.16290	4.1861E-6
1	Displacement Grid 1	98.80000	-11.00000	46.80900	-0.25147	46.569	-5.4785E-6	-0.11539	2.9654E-6
1	Displacement Grid 1	104.40000	-11.00000	46.80900	-0.07130	46.569	-2.9549E-6	-0.084418	2.1697E-6
1	Displacement Grid 1	110.00000	-11.00000	46.80900	0.02864	46.569	-1.7111E-6	-0.063537	1.6331E-6
1	Displacement Grid 1	-30.00000	-7.20000	46.80900	-0.06227	46.421	-7.7531E-6	-0.10601	1.3173E-6
1	Displacement Grid 1	-24.40000	-7.20000	46.80900	-0.21828	46.421	-13.583E-6	-0.14217	1.7664E-6
1	Displacement Grid 1	-18.80000	-7.20000	46.80900	-0.48510	46.421	-25.575E-6	-0.19652	2.4411E-6
1	Displacement Grid 1	-13.20000	-7.20000	46.80900	-0.92458	46.421	-52.558E-6	-0.28118	3.4916E-6
1	Displacement Grid 1	-7.60000	-7.20000	46.80900	-1.61016	46.421	-118.37E-6	-0.41623	5.1655E-6

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Displacement Grid 1	-2.00000	-7.20000	46.80900	-2.57592	46.421	-273.84E-6	-0.62367	7.7328E-6
1	Displacement Grid 1	3.60000	-7.20000	46.80900	-3.69071	46.421	-517.12E-6	-0.87968	10.897E-6
1	Displacement Grid 1	9.20000	-7.20000	46.80900	-4.66484	46.421	-690.30E-6	-1.0923	13.528E-6
1	Displacement Grid 1	14.80000	-7.20000	46.80900	-5.35092	46.421	-762.04E-6	-1.2272	15.199E-6
1	Displacement Grid 1	20.40000	-7.20000	46.80900	-5.78817	46.421	-789.66E-6	-1.3081	16.203E-6
1	Displacement Grid 1	26.00000	-7.20000	46.80900	-6.05897	46.421	-801.64E-6	-1.3578	16.820E-6
1	Displacement Grid 1	31.60000	-7.20000	46.80900	-6.23207	46.421	-808.22E-6	-1.3897	17.216E-6
1	Displacement Grid 1	37.20000	-7.20000	46.80900	-6.36031	46.421	-814.77E-6	-1.4130	17.505E-6
1	Displacement Grid 1	42.80000	-7.20000	46.80900	-6.49342	46.421	-831.15E-6	-1.4385	17.821E-6
1	Displacement Grid 1	48.40000	-7.20000	46.80900	-6.69696	46.421	-904.11E-6	-1.4919	18.479E-6
1	Displacement Grid 1	54.00000	-7.20000	46.80900	-7.04262	46.421	-0.0012588	-1.6353	20.235E-6
1	Displacement Grid 1	59.60000	-7.20000	46.80900	-7.37966	46.421	-0.0019279	-1.8376	22.700E-6
1	Displacement Grid 1	65.20000	-7.20000	46.80900	-7.28249	46.421	-0.0021576	-1.8809	23.221E-6
1	Displacement Grid 1	70.80000	-7.20000	46.80900	-5.56794	46.569	-490.01E-6	-1.0763	27.592E-6
1	Displacement Grid 1	76.40000	-7.20000	46.80900	-4.39370	46.569	-380.30E-6	-0.86160	22.090E-6
1	Displacement Grid 1	82.00000	-7.20000	46.80900	-2.85545	46.569	-160.60E-6	-0.54762	14.053E-6
1	Displacement Grid 1	87.60000	-7.20000	46.80900	-1.60321	46.569	-48.219E-6	-0.32126	8.2511E-6
1	Displacement Grid 1	93.20000	-7.20000	46.80900	-0.82554	46.569	-17.190E-6	-0.20112	5.1675E-6
1	Displacement Grid 1	98.80000	-7.20000	46.80900	-0.38041	46.569	-7.4690E-6	-0.13490	3.4667E-6
1	Displacement Grid 1	104.40000	-7.20000	46.80900	-0.13375	46.569	-3.7322E-6	-0.095308	2.4495E-6
1	Displacement Grid 1	110.00000	-7.20000	46.80900	-0.00105	46.569	-2.0566E-6	-0.070031	1.8000E-6
1	Displacement Grid 1	-30.00000	-3.40000	46.80900	-0.10741	46.421	-9.2929E-6	-0.11640	1.4463E-6
1	Displacement Grid 1	-24.40000	-3.40000	46.80900	-0.30795	46.421	-17.136E-6	-0.15998	1.9876E-6
1	Displacement Grid 1	-18.80000	-3.40000	46.80900	-0.66266	46.421	-34.887E-6	-0.22924	2.8472E-6
1	Displacement Grid 1	-13.20000	-3.40000	46.80900	-1.27725	46.421	-81.602E-6	-0.34687	4.3060E-6
1	Displacement Grid 1	-7.60000	-3.40000	46.80900	-2.31215	46.421	-232.74E-6	-0.56405	6.9967E-6
1	Displacement Grid 1	-2.00000	-3.40000	46.80900	-3.93811	46.421	-831.79E-6	-0.99147	12.263E-6
1	Displacement Grid 1	3.60000	-3.40000	46.80900	-5.97672	46.421	-0.0023165	-1.6487	20.323E-6
1	Displacement Grid 1	9.20000	-3.40000	46.80900	-7.63720	46.421	-0.0030887	-2.1118	26.023E-6
1	Displacement Grid 1	14.80000	-3.40000	46.80900	-8.66896	46.421	-0.0032630	-2.3324	28.753E-6
1	Displacement Grid 1	20.40000	-3.40000	46.80900	-9.27155	46.421	-0.0033106	-2.4448	30.146E-6
1	Displacement Grid 1	26.00000	-3.40000	46.80900	-9.62355	46.421	-0.0033280	-2.5080	30.931E-6
1	Displacement Grid 1	31.60000	-3.40000	46.80900	-9.83857	46.421	-0.0033366	-2.5467	31.410E-6
1	Displacement Grid 1	37.20000	-3.40000	46.80900	-9.99299	46.421	-0.0033451	-2.5745	31.755E-6
1	Displacement Grid 1	42.80000	-3.40000	46.80900	-10.15842	46.421	-0.0033708	-2.6083	32.173E-6
1	Displacement Grid 1	48.40000	-3.40000	46.80900	-10.46016	46.421	-0.0035539	-2.7065	33.381E-6
1	Displacement Grid 1	54.00000	-3.40000	46.80900	-11.23764	46.421	-0.0065814	-3.2537	39.958E-6
1	Displacement Grid 1	59.60000	-3.40000	46.80900	-12.43212	46.421	-0.019915	-4.6465	56.278E-6
1	Displacement Grid 1	65.20000	-3.40000	46.80900	-12.49420	46.421	-0.021476	-4.9129	59.473E-6
1	Displacement Grid 1	70.80000	-3.40000	46.80900	-10.37728	46.569	-0.0050526	-2.9009	73.793E-6
1	Displacement Grid 1	76.40000	-3.40000	46.80900	-8.15357	46.569	-0.0043706	-2.3413	59.514E-6
1	Displacement Grid 1	82.00000	-3.40000	46.80900	-4.64644	46.569	-784.23E-6	-1.0169	26.021E-6
1	Displacement Grid 1	87.60000	-3.40000	46.80900	-2.32374	46.569	-98.229E-6	-0.44216	11.352E-6
1	Displacement Grid 1	93.20000	-3.40000	46.80900	-1.14107	46.569	-25.986E-6	-0.24658	6.3348E-6
1	Displacement Grid 1	98.80000	-3.40000	46.80900	-0.52584	46.569	-9.9085E-6	-0.15614	4.0124E-6
1	Displacement Grid 1	104.40000	-3.40000	46.80900	-0.20212	46.569	-4.6079E-6	-0.10657	2.7389E-6
1	Displacement Grid 1	110.00000	-3.40000	46.80900	-0.03304	46.569	-2.4259E-6	-0.076519	1.9667E-6
1	Displacement Grid 1	-30.00000	0.40000	46.80900	-0.15417	46.421	-10.922E-6	-0.12660	1.5730E-6
1	Displacement Grid 1	-24.40000	0.40000	46.80900	-0.40302	46.421	-21.127E-6	-0.17818	2.2135E-6
1	Displacement Grid 1	-18.80000	0.40000	46.80900	-0.85749	46.421	-46.354E-6	-0.26463	3.2864E-6
1	Displacement Grid 1	-13.20000	0.40000	46.80900	-1.68529	46.421	-123.75E-6	-0.42498	5.2740E-6
1	Displacement Grid 1	-7.60000	0.40000	46.80900	-3.20177	46.421	-467.41E-6	-0.77599	9.6119E-6
1	Displacement Grid 1	-2.00000	0.40000	46.80900	-6.01079	46.421	-0.0038238	-1.8328	22.500E-6
1	Displacement Grid 1	3.60000	0.40000	46.80900	-10.44526	46.421	-0.042911	-5.2670	62.276E-6
1	Displacement Grid 1	9.20000	0.40000	46.80900	-13.41526	46.421	-0.049801	-6.6284	78.686E-6
1	Displacement Grid 1	14.80000	0.40000	46.80900	-14.91047	46.421	-0.050213	-6.9869	83.113E-6
1	Displacement Grid 1	20.40000	0.40000	46.80900	-15.70641	46.421	-0.050290	-7.1380	84.986E-6
1	Displacement Grid 1	26.00000	0.40000	46.80900	-16.14682	46.421	-0.050314	-7.2162	85.957E-6
1	Displacement Grid 1	31.60000	0.40000	46.80900	-16.40402	46.421	-0.050324	-7.2616	86.520E-6
1	Displacement Grid 1	37.20000	0.40000	46.80900	-16.57981	46.421	-0.050334	-7.2930	86.909E-6
1	Displacement Grid 1	42.80000	0.40000	46.80900	-16.76320	46.421	-0.050367	-7.3318	87.389E-6
1	Displacement Grid 1	48.40000	0.40000	46.80900	-17.12970	46.421	-0.050684	-7.4699	89.082E-6
1	Displacement Grid 1	54.00000	0.40000	46.80900	-18.66136	46.421	-0.088251	-9.6628	113.54E-6
1	Displacement Grid 1	59.60000	0.40000	46.80900	-28.70106	46.421	-63.964	-124.64	-0.0032216
1	Displacement Grid 1	65.20000	0.40000	46.80900	-28.99247	46.421	-63.972	-125.47	-0.0032119
1	Displacement Grid 1	70.80000	0.40000	46.80900	-29.78536	46.569	-67.799	-138.10	-0.0069074
1	Displacement Grid 1	76.40000	0.40000	46.80900	-25.65576	46.569	-67.794	-136.47	-0.0069484
1	Displacement Grid 1	82.00000	0.40000	46.80900	-7.40190	46.569	-0.0053342	-2.2356	56.648E-6
1	Displacement Grid 1	87.60000	0.40000	46.80900	-3.16142	46.569	-178.93E-6	-0.59396	15.241E-6
1	Displacement Grid 1	93.20000	0.40000	46.80900	-1.48125	46.569	-36.685E-6	-0.29577	7.5978E-6
1	Displacement Grid 1	98.80000	0.40000	46.80900	-0.67714	46.569	-12.588E-6	-0.17773	4.5670E-6
1	Displacement Grid 1	104.40000	0.40000	46.80900	-0.27175	46.569	-5.5185E-6	-0.11759	3.0220E-6
1	Displacement Grid 1	110.00000	0.40000	46.80900	-0.06521	46.569	-2.7958E-6	-0.082691	2.1253E-6
1	Displacement Grid 1	-30.00000	4.20000	46.80900	-0.19930	46.421	-12.527E-6	-0.13606	1.6905E-6
1	Displacement Grid 1	-24.40000	4.20000	46.80900	-0.49655	46.421	-25.244E-6	-0.19562	2.4300E-6
1	Displacement Grid 1	-18.80000	4.20000	46.80900	-1.05451	46.421	-59.042E-6	-0.30018	3.7273E-6
1	Displacement Grid 1	-13.20000	4.20000	46.80900	-2.11549	46.421	-176.69E-6	-0.50972	6.3234E-6
1	Displacement Grid 1	-7.60000	4.20000	46.80900	-4.21388	46.421	-866.32E-6	-1.0472	12.953E-6
1	Displacement Grid 1	-2.00000	4.20000	46.80900	-8.89423	46.421	-0.017441	-3.6831	44.486E-6
1	Displacement Grid 1	3.60000	4.20000	46.80900	-26.42672	46.421	-69.528	-145.79	-0.0033736
1	Displacement Grid 1	9.20000	4.20000	46.80900	-31.49342	46.421	-69.592	-150.05	-0.0033254
1	Displacement Grid 1	14.80000	4.20000	46.80900	-33.49509	46.421	-69.593	-150.57	-0.0033190
1	Displacement Grid 1	20.40000	4.20000	46.80900	-34.48900	46.421	-69.593	-150.77	-0.0033166
1	Displacement Grid 1	26.00000	4.20000	46.80900	-35.01658	46.421	-69.593	-150.86	-0.0033155
1	Displacement Grid 1	31.60000	4.20000	46.80900	-35.31242	46.421	-69.593	-150.91	-0.0033149
1	Displacement Grid 1	37.20000	4.20000	46.80900	-35.50161	46.421	-69.593	-150.94	-0.0033144
1	Displacement Grid 1	42.80000	4.20000	46.80900	-35.67897	46.421	-69.593	-150.98	-0.0033140
1	Displacement Grid 1	48.40000	4.20000	46.80900	-36.00324	46.421	-69.593	-151.10	-0.0033125
1	Displacement Grid 1	54.00000	4.20000	46.80900	-37.14854	46.421	-69.608	-152.39	-0.0032975
1	Displacement Grid 1	59.60000	4.20000	46.80900	-40.00773	46.421	-69.983	-161.08	-0.0032175
1	Displacement Grid 1	65.20000	4.20000	46.80900	-39.91978	46.421	-69.988	-161.59	-0.0032115
1	Displacement Grid 1	70.80000	4.20000	46.80900	-41.20831	46.569	-69.997	-163.71	-0.0065879
1	Displacement Grid 1	76.40000	4.20000	46.80900	-35.32869	46.569	-69.989	-161.19	-0.0066513
1	Displacement Grid 1	82.00000	4.20000	46.80900	-9.95121	46.569	-0.0086778	-3.2718	82.770E-6
1	Displacement Grid 1	87.60000	4.20000	46.80900	-3.96412	46.569	-254.53E-6	-0.73827	18.939E-6
1	Displacement Grid 1	93.20000	4.20000	46.80900	-1.80570	46.569	-46.989E-6	-0.34231	8.7926E-6
1	Displacement Grid 1	98.80000	4.20000	46.80900	-0.82003	46.569	-15.154E-6	-0.19777	5.0817E-6
1	Displacement Grid 1	104.40000	4.20000	46.80900	-0.33686	46.569	-6.3768E-6	-0.12760	3.2793E-6
1	Displacement Grid 1	110.00000	4.20000	46.80900	-0.09508	46.569	-3.1380E-6	-0.088199	2.2668E-6
1	Displacement Grid 1	-30.00000	8.00000	46.80900	-0.23906	46.421	-13.961E-6	-0.14416	1.7911E-6
1	Displacement Grid 1	-24.40000	8.00000	46.80900	-0.58010	46.421	-29.041E-6	-0.21092	2.6199E-6
1	Displacement Grid 1	-18.80000	8.00000	46.80900	-1.23374	46.421	-71.211E-6	-0.33236	4.1264E-6
1	Displacement Grid 1	-13.20000	8.00000	46.80900	-2.51583	46.421	-230.52E-6	-0.58971	7.3139E-6
1	Displacement Grid 1	-7.60000	8.00000	46.80900	-5.18715	46.421	-0.0013453	-1.3245	16.366E-6
1	Displacement Grid 1	-2.00000	8.00000	46.80900	-12.02707	46.421	-0.081327	-6.9851	80.770E-6
1	Displacement Grid 1	3.60000	8.00000	46.80900	-33.37986	46.421	-69.959	-157.99	-0.0032541
1	Displacement Grid 1	9.20000	8.00000	46.80900	-39.35450	46.421	-69.992	-161.90	-0.0032080
1	Displacement Grid 1	14.80000	8.00000	46.80900	-41.76396	46.421	-69.993	-162.53	-0.0032003
1	Displacement Grid 1	20.40000	8.00000	46.80900	-42.93036	46.421	-69.993	-162.75	-0.0031975
1	Displacement Grid 1	26.00000	8.00000	46.80900	-43.53417	46.421	-69.993	-162.86	-0.0031962
1	Displacement Grid 1	31.60000	8.00000	46.80900	-43.86159	46.421	-69.993	-162.91	-0.0031955
1	Displacement Grid 1	37.20000	8.00000	46.80900	-44.05553	46.421	-69.993	-162.95	-0.0031951
1	Displacement Grid 1	42.80000	8.00000	46.80900	-44.20597	46.421	-69.993	-162.98	-0.0031947
1	Displacement Grid 1	48.40000	8.00000	46.80900	-44.40919	46.421	-69.993	-163.05	-0.0031938
1	Displacement Grid 1	54.00000	8.00000	46.80900	-44.81625	46.421	-69.994	-163.32	-0.0031905
1	Displacement Grid 1	59.60000	8.00000	46.80900	-45.18286	46.421	-69.997	-163.82	-0.0031846
1	Displacement Grid 1	65.20000	8.00000	46.80900	-44.46768	46.421	-69.998	-163.81	-0.0031847
1	Displacement Grid 1	70.80000	8.00000	46.80900	-45.19771	46.569	-69.999	-165.00	-0.0065552
1	Displacement Grid 1	76.40000	8.00000	46.80900	-38.39655	46.569	-69.991	-162.21	-0.0066255
1	Displacement Grid 1	82.00000	8.00000	46.80900	-11.48380	46.569	-0.0090840	-3.6435	92.263E-6
1	Displacement Grid 1	87.60000	8.00000	46.80900	-4.59196	46.569	-297.11E-6	-0.84200	21.600E-6
1	Displacement Grid 1	93.20000	8.00000	46.80900	-2.07452	46.569	-54.805E-6	-0.38005	9.7615E-6
1	Displacement Grid 1	98.80000	8.00000	46.80900	-0.93999	46.569	-17.262E-6	-0.21436	5.5080E-6
1	Displacement Grid 1	104.40000	8.00000	46.80900	-0.39155	46.569	-7.0944E-6	-0.13586	3.4915E-6
1	Displacement Grid 1	110.00000	8.00000	46.80900	-0.12011	46.569	-3.4232E-6	-0.092696	2.3824E-6
1	Displacement Grid 1	-30.00000	11.80000	46.80900	-0.26978	46.421	-15.080E-6	-0.15029	1.8673E-6
1	Displacement Grid 1	-24.40000	11.80000	46.80900	-0.64520	46.421	-32.046E-6	-0.22269	2.7660E-6
1	Displacement Grid 1	-18.80000	11.80000	46.80900	-1.37456	46.421	-80.906E-6	-0.35748	4.4380E-6
1	Displacement Grid 1	-13.20000	11.80000	46.80900	-2.83115	46.421	-272.38E-6	-0.65231	8.0890E-6
1	Displacement Grid 1	-7.60000	11.80000	46.80900	-5.93574	46.421	-0.0016746	-1.5296	18.890E-6
1	Displacement Grid 1	-2.00000	11.80000	46.80900	-14.06086	46.421	-0.10250	-8.5554	98.712E-6
1	Displacement Grid 1	3.60000	11.80000	46.80900	-36.55405	46.421	-69.980	-160.15	-0.0032289
1	Displacement Grid 1	9.20000	11.80000	46.80900	-42.81200	46.421	-69.998	-163.45	-0.0031892
1	Displacement Grid 1	14.80000	11.80000	46.80900	-45.48150	46.421	-69.998	-164.12	-0.0031809
1	Displacement Grid 1	20.40000	11.80000	46.80900	-46.77456	46.421	-69.999	-164.37	-0.0031778
1	Displacement Grid 1	26.00000	11.80000	46.80900	-47.43578	46.421	-69.999	-164.48	-0.0031764
1	Displacement Grid 1	31.60000	11.80000	46.80900	-47.78515	46.421	-69.999	-164.54	-0.0031757
1	Displacement Grid 1	37.20000	11.80000	46.80900	-47.97677	46.421	-69.999	-164.57	-0.0031752
1	Displacement Grid 1	42.80000	11.80000	46.80900	-48.09184	46.421	-69.999	-164.60	-0.0031750
1	Displacement Grid 1	48.40000	11.80000	46.80900	-48.17524	46.421	-69.999	-164.62	-0.0031747
1	Displacement Grid 1	54.00000	11.80000	46.80900	-48.21173	46.421	-69.999	-164.68	-0.0031740

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Displacement Grid 1	59.60000	11.80000	46.80900	-47.95755	46.421	-69.999	-164.70	-0.0031737
1	Displacement Grid 1	65.20000	11.80000	46.80900	-46.84576	46.421	-69.999	-164.51	-0.0031760
1	Displacement Grid 1	70.80000	11.80000	46.80900	-47.08295	46.569	-70.000	-165.38	-0.0065455
1	Displacement Grid 1	76.40000	11.80000	46.80900	-39.82619	46.569	-69.991	-162.50	-0.0066181
1	Displacement Grid 1	82.00000	11.80000	46.80900	-12.32582	46.569	-0.0091612	-3.7944	96.129E-6
1	Displacement Grid 1	87.60000	11.80000	46.80900	-5.00057	46.569	-315.98E-6	-0.90365	23.181E-6
1	Displacement Grid 1	93.20000	11.80000	46.80900	-2.26192	46.569	-59.600E-6	-0.40572	10.421E-6
1	Displacement Grid 1	98.80000	11.80000	46.80900	-1.02559	46.569	-18.708E-6	-0.22609	5.8093E-6
1	Displacement Grid 1	104.40000	11.80000	46.80900	-0.43081	46.569	-7.6039E-6	-0.14174	3.6426E-6
1	Displacement Grid 1	110.00000	11.80000	46.80900	-0.13807	46.569	-3.6271E-6	-0.095886	2.4644E-6
1	Displacement Grid 1	-30.00000	15.60000	46.80900	-0.28843	46.421	-15.759E-6	-0.15397	1.9129E-6
1	Displacement Grid 1	-24.40000	15.60000	46.80900	-0.68485	46.421	-33.874E-6	-0.22979	2.8541E-6
1	Displacement Grid 1	-18.80000	15.60000	46.80900	-1.46037	46.421	-86.715E-6	-0.37266	4.6264E-6
1	Displacement Grid 1	-13.20000	15.60000	46.80900	-3.02133	46.421	-295.60E-6	-0.68927	8.5467E-6
1	Displacement Grid 1	-7.60000	15.60000	46.80900	-6.36418	46.421	-0.0018044	-1.6351	20.193E-6
1	Displacement Grid 1	-2.00000	15.60000	46.80900	-14.97137	46.421	-0.10347	-8.8835	102.72E-6
1	Displacement Grid 1	3.60000	15.60000	46.80900	-37.92057	46.421	-69.981	-160.63	-0.0032230
1	Displacement Grid 1	9.20000	15.60000	46.80900	-44.40492	46.421	-69.998	-163.92	-0.0031833
1	Displacement Grid 1	14.80000	15.60000	46.80900	-47.21708	46.421	-69.999	-164.62	-0.0031747
1	Displacement Grid 1	20.40000	15.60000	46.80900	-48.58466	46.421	-69.999	-164.88	-0.0031715
1	Displacement Grid 1	26.00000	15.60000	46.80900	-49.27986	46.421	-69.999	-165.00	-0.0031700
1	Displacement Grid 1	31.60000	15.60000	46.80900	-49.64013	46.421	-69.999	-165.06	-0.0031693
1	Displacement Grid 1	37.20000	15.60000	46.80900	-49.82456	46.421	-69.999	-165.09	-0.0031689
1	Displacement Grid 1	42.80000	15.60000	46.80900	-49.90648	46.421	-69.999	-165.11	-0.0031687
1	Displacement Grid 1	48.40000	15.60000	46.80900	-49.90296	46.421	-69.999	-165.11	-0.0031686
1	Displacement Grid 1	54.00000	15.60000	46.80900	-49.75390	46.421	-69.999	-165.10	-0.0031688
1	Displacement Grid 1	59.60000	15.60000	46.80900	-49.24561	46.421	-69.999	-165.02	-0.0031697
1	Displacement Grid 1	65.20000	15.60000	46.80900	-47.92312	46.421	-69.999	-164.77	-0.0031729
1	Displacement Grid 1	70.80000	15.60000	46.80900	-47.88200	46.569	-70.000	-165.51	-0.0065421
1	Displacement Grid 1	76.40000	15.60000	46.80900	-40.42671	46.569	-69.991	-162.60	-0.0066156
1	Displacement Grid 1	82.00000	15.60000	46.80900	-12.70093	46.569	-0.0091809	-3.8527	97.626E-6
1	Displacement Grid 1	87.60000	15.60000	46.80900	-5.19784	46.569	-322.92E-6	-0.93177	23.903E-6
1	Displacement Grid 1	93.20000	15.60000	46.80900	-2.35669	46.569	-61.780E-6	-0.41851	10.749E-6
1	Displacement Grid 1	98.80000	15.60000	46.80900	-1.06969	46.569	-19.426E-6	-0.23214	5.9647E-6
1	Displacement Grid 1	104.40000	15.60000	46.80900	-0.45115	46.569	-7.8654E-6	-0.14481	3.7214E-6
1	Displacement Grid 1	110.00000	15.60000	46.80900	-0.14737	46.569	-3.7328E-6	-0.097555	2.5073E-6
1	Displacement Grid 1	-30.00000	19.40000	46.80900	-0.29311	46.421	-15.923E-6	-0.15489	1.9244E-6
1	Displacement Grid 1	-24.40000	19.40000	46.80900	-0.69472	46.421	-34.304E-6	-0.23155	2.8759E-6
1	Displacement Grid 1	-18.80000	19.40000	46.80900	-1.48145	46.421	-87.999E-6	-0.37632	4.6717E-6
1	Displacement Grid 1	-13.20000	19.40000	46.80900	-3.06683	46.421	-300.09E-6	-0.69767	8.6507E-6
1	Displacement Grid 1	-7.60000	19.40000	46.80900	-6.46122	46.421	-0.0018225	-1.6560	20.450E-6
1	Displacement Grid 1	-2.00000	19.40000	46.80900	-15.16014	46.421	-0.10354	-8.9319	103.32E-6
1	Displacement Grid 1	3.60000	19.40000	46.80900	-38.21354	46.421	-69.981	-160.71	-0.0032220
1	Displacement Grid 1	9.20000	19.40000	46.80900	-44.77459	46.421	-69.999	-164.02	-0.0031822
1	Displacement Grid 1	14.80000	19.40000	46.80900	-47.63237	46.421	-69.999	-164.72	-0.0031735
1	Displacement Grid 1	20.40000	19.40000	46.80900	-49.02238	46.421	-69.999	-164.99	-0.0031702
1	Displacement Grid 1	26.00000	19.40000	46.80900	-49.72613	46.421	-70.000	-165.11	-0.0031687
1	Displacement Grid 1	31.60000	19.40000	46.80900	-50.08572	46.421	-70.000	-165.17	-0.0031679
1	Displacement Grid 1	37.20000	19.40000	46.80900	-50.25973	46.421	-70.000	-165.20	-0.0031675
1	Displacement Grid 1	42.80000	19.40000	46.80900	-50.31532	46.421	-70.000	-165.21	-0.0031674
1	Displacement Grid 1	48.40000	19.40000	46.80900	-50.25715	46.421	-70.000	-165.20	-0.0031675
1	Displacement Grid 1	54.00000	19.40000	46.80900	-50.01546	46.421	-70.000	-165.16	-0.0031680
1	Displacement Grid 1	59.60000	19.40000	46.80900	-49.39726	46.421	-70.000	-165.06	-0.0031693
1	Displacement Grid 1	65.20000	19.40000	46.80900	-47.99064	46.421	-69.999	-164.78	-0.0031727
1	Displacement Grid 1	70.80000	19.40000	46.80900	-47.89899	46.569	-70.000	-165.51	-0.0065420
1	Displacement Grid 1	76.40000	19.40000	46.80900	-40.42795	46.569	-69.991	-162.60	-0.0066156
1	Displacement Grid 1	82.00000	19.40000	46.80900	-12.69855	46.569	-0.0091805	-3.8523	97.616E-6
1	Displacement Grid 1	87.60000	19.40000	46.80900	-5.19589	46.569	-322.78E-6	-0.93160	23.899E-6
1	Displacement Grid 1	93.20000	19.40000	46.80900	-2.35560	46.569	-61.738E-6	-0.41849	10.749E-6
1	Displacement Grid 1	98.80000	19.40000	46.80900	-1.06912	46.569	-19.414E-6	-0.23218	5.9656E-6
1	Displacement Grid 1	104.40000	19.40000	46.80900	-0.45083	46.569	-7.8621E-6	-0.14485	3.7225E-6
1	Displacement Grid 1	110.00000	19.40000	46.80900	-0.14717	46.569	-3.7320E-6	-0.097593	2.5082E-6
1	Displacement Grid 1	-30.00000	23.20000	46.80900	-0.28338	46.421	-15.557E-6	-0.15298	1.9006E-6
1	Displacement Grid 1	-24.40000	23.20000	46.80900	-0.67383	46.421	-33.292E-6	-0.22780	2.8294E-6
1	Displacement Grid 1	-18.80000	23.20000	46.80900	-1.43570	46.421	-84.676E-6	-0.36814	4.5702E-6
1	Displacement Grid 1	-13.20000	23.20000	46.80900	-2.96420	46.421	-286.31E-6	-0.67721	8.3975E-6
1	Displacement Grid 1	-7.60000	23.20000	46.80900	-6.22854	46.421	-0.0017452	-1.5964	19.716E-6
1	Displacement Grid 1	-2.00000	23.20000	46.80900	-14.67894	46.421	-0.10306	-8.7575	101.18E-6
1	Displacement Grid 1	3.60000	23.20000	46.80900	-37.54546	46.421	-69.981	-160.48	-0.0032248
1	Displacement Grid 1	9.20000	23.20000	46.80900	-44.05111	46.421	-69.998	-163.82	-0.0031846
1	Displacement Grid 1	14.80000	23.20000	46.80900	-46.86386	46.421	-69.999	-164.53	-0.0031759
1	Displacement Grid 1	20.40000	23.20000	46.80900	-48.22421	46.421	-69.999	-164.79	-0.0031727
1	Displacement Grid 1	26.00000	23.20000	46.80900	-48.91054	46.421	-69.999	-164.91	-0.0031712
1	Displacement Grid 1	31.60000	23.20000	46.80900	-49.25797	46.421	-69.999	-164.97	-0.0031704
1	Displacement Grid 1	37.20000	23.20000	46.80900	-49.41912	46.421	-69.999	-164.99	-0.0031701
1	Displacement Grid 1	42.80000	23.20000	46.80900	-49.45565	46.421	-69.999	-165.00	-0.0031700
1	Displacement Grid 1	48.40000	23.20000	46.80900	-49.36742	46.421	-69.999	-164.98	-0.0031702
1	Displacement Grid 1	54.00000	23.20000	46.80900	-49.08636	46.421	-69.999	-164.94	-0.0031708
1	Displacement Grid 1	59.60000	23.20000	46.80900	-48.43759	46.421	-69.999	-164.82	-0.0031722
1	Displacement Grid 1	65.20000	23.20000	46.80900	-47.04237	46.421	-69.999	-164.55	-0.0031756
1	Displacement Grid 1	70.80000	23.20000	46.80900	-47.12412	46.569	-70.000	-165.38	-0.0065454
1	Displacement Grid 1	76.40000	23.20000	46.80900	-39.82270	46.569	-69.991	-162.50	-0.0066182
1	Displacement Grid 1	82.00000	23.20000	46.80900	-12.31552	46.569	-0.0091594	-3.7923	96.076E-6
1	Displacement Grid 1	87.60000	23.20000	46.80900	-4.99397	46.569	-315.44E-6	-0.90294	23.163E-6
1	Displacement Grid 1	93.20000	23.20000	46.80900	-2.25857	46.569	-59.458E-6	-0.40563	10.418E-6
1	Displacement Grid 1	98.80000	23.20000	46.80900	-1.02388	46.569	-18.671E-6	-0.22619	5.8117E-6
1	Displacement Grid 1	104.40000	23.20000	46.80900	-0.42987	46.569	-7.5942E-6	-0.14187	3.6458E-6
1	Displacement Grid 1	110.00000	23.20000	46.80900	-0.13748	46.569	-3.6249E-6	-0.095998	2.4673E-6
1	Displacement Grid 1	-30.00000	27.00000	46.80900	-0.26027	46.421	-14.703E-6	-0.14840	1.8437E-6
1	Displacement Grid 1	-24.40000	27.00000	46.80900	-0.62455	46.421	-30.971E-6	-0.21892	2.7193E-6
1	Displacement Grid 1	-18.80000	27.00000	46.80900	-1.32857	46.421	-77.127E-6	-0.34901	4.3331E-6
1	Displacement Grid 1	-13.20000	27.00000	46.80900	-2.72414	46.421	-253.96E-6	-0.62942	7.8058E-6
1	Displacement Grid 1	-7.60000	27.00000	46.80900	-5.66682	46.421	-0.0015031	-1.4437	17.835E-6
1	Displacement Grid 1	-2.00000	27.00000	46.80900	-13.26898	46.421	-0.093917	-7.8295	90.328E-6
1	Displacement Grid 1	3.60000	27.00000	46.80900	-35.55379	46.421	-69.972	-159.37	-0.0032380
1	Displacement Grid 1	9.20000	27.00000	46.80900	-41.99846	46.421	-69.997	-163.15	-0.0031928
1	Displacement Grid 1	14.80000	27.00000	46.80900	-44.66589	46.421	-69.998	-163.84	-0.0031843
1	Displacement Grid 1	20.40000	27.00000	46.80900	-45.94232	46.421	-69.998	-164.09	-0.0031812
1	Displacement Grid 1	26.00000	27.00000	46.80900	-46.58582	46.421	-69.998	-164.20	-0.0031798
1	Displacement Grid 1	31.60000	27.00000	46.80900	-46.91029	46.421	-69.998	-164.26	-0.0031791
1	Displacement Grid 1	37.20000	27.00000	46.80900	-47.05649	46.421	-69.998	-164.28	-0.0031788
1	Displacement Grid 1	42.80000	27.00000	46.80900	-47.07999	46.421	-69.998	-164.29	-0.0031788
1	Displacement Grid 1	48.40000	27.00000	46.80900	-46.97921	46.421	-69.998	-164.27	-0.0031790
1	Displacement Grid 1	54.00000	27.00000	46.80900	-46.69249	46.421	-69.998	-164.22	-0.0031796
1	Displacement Grid 1	59.60000	27.00000	46.80900	-46.06546	46.421	-69.998	-164.11	-0.0031810
1	Displacement Grid 1	65.20000	27.00000	46.80900	-44.76077	46.421	-69.998	-163.86	-0.0031841
1	Displacement Grid 1	70.80000	27.00000	46.80900	-45.22388	46.569	-69.999	-164.99	-0.0065555
1	Displacement Grid 1	76.40000	27.00000	46.80900	-38.36011	46.569	-69.990	-162.19	-0.0066259
1	Displacement Grid 1	82.00000	27.00000	46.80900	-11.45504	46.569	-0.0090761	-3.6360	92.069E-6
1	Displacement Grid 1	87.60000	27.00000	46.80900	-4.57886	46.569	-295.70E-6	-0.84019	21.553E-6
1	Displacement Grid 1	93.20000	27.00000	46.80900	-2.06880	46.569	-54.532E-6	-0.37984	9.7561E-6
1	Displacement Grid 1	98.80000	27.00000	46.80900	-0.93725	46.569	-17.199E-6	-0.21452	5.5120E-6
1	Displacement Grid 1	104.40000	27.00000	46.80900	-0.39004	46.569	-7.0791E-6	-0.13607	3.4970E-6
1	Displacement Grid 1	110.00000	27.00000	46.80900	-0.11915	46.569	-3.4199E-6	-0.092882	2.3872E-6
1	Displacement Grid 1	-30.00000	30.80000	46.80900	-0.22614	46.421	-13.458E-6	-0.14153	1.7585E-6
1	Displacement Grid 1	-24.40000	30.80000	46.80900	-0.55235	46.421	-27.635E-6	-0.20581	2.5565E-6
1	Displacement Grid 1	-18.80000	30.80000	46.80900	-1.17272	46.421	-66.359E-6	-0.32111	3.9870E-6
1	Displacement Grid 1	-13.20000	30.80000	46.80900	-2.37508	46.421	-206.63E-6	-0.55969	6.9425E-6
1	Displacement Grid 1	-7.60000	30.80000	46.80900	-4.82686	46.421	-0.0010884	-1.2057	14.907E-6
1	Displacement Grid 1	-2.00000	30.80000	46.80900	-10.63863	46.421	-0.026152	-4.7734	57.390E-6
1	Displacement Grid 1	3.60000	30.80000	46.80900	-31.44547	46.421	-69.909	-155.46	-0.0032819
1	Displacement Grid 1	9.20000	30.80000	46.80900	-37.74715	46.421	-69.985	-160.85	-0.0032206
1	Displacement Grid 1	14.80000	30.80000	46.80900	-40.12376	46.421	-69.986	-161.49	-0.0032127
1	Displacement Grid 1	20.40000	30.80000	46.80900	-41.26058	46.421	-69.986	-161.71	-0.0032100
1	Displacement Grid 1	26.00000	30.80000	46.80900	-41.83827	46.421	-69.986	-161.81	-0.0032087
1	Displacement Grid 1	31.60000	30.80000	46.80900	-42.13055	46.421	-69.986	-161.86	-0.0032081
1	Displacement Grid 1	37.20000	30.80000	46.80900	-42.26003	46.421	-69.986	-161.88	-0.0032078
1	Displacement Grid 1	42.80000	30.80000	46.80900	-42.27494	46.421	-69.986	-161.89	-0.0032078
1	Displacement Grid 1	48.40000	30.80000	46.80900	-42.17365	46.421	-69.986	-161.87	-0.0032080
1	Displacement Grid 1	54.00000	30.80000	46.80900	-41.90341	46.421	-69.986	-161.82	-0.0032086
1	Displacement Grid 1	59.60000	30.80000	46.80900	-41.33433	46.421	-69.986	-161.72	-0.0032098
1	Displacement Grid 1	65.20000	30.80000	46.80900	-40.18507	46.421	-69.986	-161.50	-0.0032126
1	Displacement Grid 1	70.80000	30.80000	46.80900	-41.09759	46.569	-69.997	-163.59	-0.0065909
1	Displacement Grid 1	76.40000	30.80000	46.80900	-35.16557	46.569	-69.988	-161.08	-0.0066541
1	Displacement Grid 1	82.00000	30.80000	46.80900	-9.88288	46.569	-0.0086230	-3.2448	82.083E-6
1	Displacement Grid 1	87.60000	30.80000	46.80900	-3.94349	46.569	-251.41E-6	-0.73476	18.850E-6
1	Displacement Grid 1	93.20000	30.80000	46.80900	-1.79794	46.569	-46.572E-6	-0.34198	8.7841E-6
1	Displacement Grid 1	98.80000	30.80000	46.80900	-0.81647	46.569	-15.070E-6	-0.19800	5.0876E-6
1	Displacement Grid 1	104.40000	30.80000	46.80900	-0.33490	46.569	-6.3575E-6	-0.12790	3.2869E-6
1	Displacement Grid 1	110.00000	30.80000	46.80900	-0.09382	46.569	-3.1342E-6	-0.088458	2.2735E-6
1	Displacement Grid 1	-30.00000	34.60000	46.80900	-0.18429	46.421	-11.955E-6	-0.13292	1.6515E-6

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Displacement Grid 1	-24.40000	34.60000	46.80900	-0.46485	46.421	-23.707E-6	-0.18968	2.3563E-6
1	Displacement Grid 1	-18.80000	34.60000	46.80900	-0.98636	46.421	-54.010E-6	-0.28763	3.5716E-6
1	Displacement Grid 1	-13.20000	34.60000	46.80900	-1.96310	46.421	-153.95E-6	-0.47813	5.9324E-6
1	Displacement Grid 1	-7.60000	34.60000	46.80900	-3.84440	46.421	-676.22E-6	-0.93757	11.605E-6
1	Displacement Grid 1	-2.00000	34.60000	46.80900	-7.82073	46.421	-0.011207	-2.9026	35.248E-6
1	Displacement Grid 1	3.60000	34.60000	46.80900	-21.50539	46.421	-53.897	-103.11	-0.0027383
1	Displacement Grid 1	9.20000	34.60000	46.80900	-26.13383	46.421	-53.943	-106.67	-0.0026975
1	Displacement Grid 1	14.80000	34.60000	46.80900	-28.04539	46.421	-53.944	-107.17	-0.0026913
1	Displacement Grid 1	20.40000	34.60000	46.80900	-28.99627	46.421	-53.944	-107.36	-0.0026891
1	Displacement Grid 1	26.00000	34.60000	46.80900	-29.49101	46.421	-53.944	-107.45	-0.0026880
1	Displacement Grid 1	31.60000	34.60000	46.80900	-29.74444	46.421	-53.944	-107.49	-0.0026874
1	Displacement Grid 1	37.20000	34.60000	46.80900	-29.85600	46.421	-53.944	-107.51	-0.0026872
1	Displacement Grid 1	42.80000	34.60000	46.80900	-29.86539	46.421	-53.944	-107.51	-0.0026871
1	Displacement Grid 1	48.40000	34.60000	46.80900	-29.77138	46.421	-53.944	-107.50	-0.0026873
1	Displacement Grid 1	54.00000	34.60000	46.80900	-29.53137	46.421	-53.944	-107.45	-0.0026879
1	Displacement Grid 1	59.60000	34.60000	46.80900	-29.04282	46.421	-53.944	-107.37	-0.0026889
1	Displacement Grid 1	65.20000	34.60000	46.80900	-28.09201	46.421	-53.944	-107.18	-0.0026912
1	Displacement Grid 1	70.80000	34.60000	46.80900	-28.25972	46.569	-60.792	-118.86	-0.0063212
1	Displacement Grid 1	76.40000	34.60000	46.80900	-24.11635	46.569	-60.787	-117.29	-0.0063608
1	Displacement Grid 1	82.00000	34.60000	46.80900	-7.28414	46.569	-0.0049547	-2.1595	54.750E-6
1	Displacement Grid 1	87.60000	34.60000	46.80900	-3.13666	46.569	-174.39E-6	-0.58942	15.125E-6
1	Displacement Grid 1	93.20000	34.60000	46.80900	-1.47255	46.569	-36.192E-6	-0.29548	7.5902E-6
1	Displacement Grid 1	98.80000	34.60000	46.80900	-0.67316	46.569	-12.495E-6	-0.17807	4.5756E-6
1	Displacement Grid 1	104.40000	34.60000	46.80900	-0.26949	46.569	-5.4983E-6	-0.11797	3.0319E-6
1	Displacement Grid 1	110.00000	34.60000	46.80900	-0.06371	46.569	-2.7924E-6	-0.083022	2.1338E-6
1	Displacement Grid 1	-30.00000	38.40000	46.80900	-0.13844	46.421	-10.339E-6	-0.12316	1.5303E-6
1	Displacement Grid 1	-24.40000	38.40000	46.80900	-0.37051	46.421	-19.642E-6	-0.17194	2.1360E-6
1	Displacement Grid 1	-18.80000	38.40000	46.80900	-0.78979	46.421	-41.881E-6	-0.25214	3.1314E-6
1	Displacement Grid 1	-13.20000	38.40000	46.80900	-1.54118	46.421	-106.38E-6	-0.39635	4.9193E-6
1	Displacement Grid 1	-7.60000	38.40000	46.80900	-2.88261	46.421	-365.27E-6	-0.69456	8.6073E-6
1	Displacement Grid 1	-2.00000	38.40000	46.80900	-5.25284	46.421	-0.0023130	-1.4816	18.246E-6
1	Displacement Grid 1	3.60000	38.40000	46.80900	-8.71920	46.421	-0.014246	-3.3820	40.981E-6
1	Displacement Grid 1	9.20000	38.40000	46.80900	-11.27564	46.421	-0.017723	-4.3744	53.059E-6
1	Displacement Grid 1	14.80000	38.40000	46.80900	-12.65692	46.421	-0.018069	-4.6985	57.062E-6
1	Displacement Grid 1	20.40000	38.40000	46.80900	-13.40251	46.421	-0.018139	-4.8401	58.817E-6
1	Displacement Grid 1	26.00000	38.40000	46.80900	-13.80641	46.421	-0.018161	-4.9124	59.714E-6
1	Displacement Grid 1	31.60000	38.40000	46.80900	-14.01781	46.421	-0.018170	-4.9504	60.186E-6
1	Displacement Grid 1	37.20000	38.40000	46.80900	-14.11109	46.421	-0.018173	-4.9676	60.400E-6
1	Displacement Grid 1	42.80000	38.40000	46.80900	-14.11700	46.421	-0.018173	-4.9688	60.415E-6
1	Displacement Grid 1	48.40000	38.40000	46.80900	-14.03474	46.421	-0.018170	-4.9538	60.228E-6
1	Displacement Grid 1	54.00000	38.40000	46.80900	-13.83189	46.421	-0.018162	-4.9176	59.779E-6
1	Displacement Grid 1	59.60000	38.40000	46.80900	-13.43316	46.421	-0.018141	-4.8468	58.900E-6
1	Displacement Grid 1	65.20000	38.40000	46.80900	-12.69264	46.421	-0.018075	-4.7080	57.179E-6
1	Displacement Grid 1	70.80000	38.40000	46.80900	-10.21552	46.569	-0.0042159	-2.7243	69.384E-6
1	Displacement Grid 1	76.40000	38.40000	46.80900	-7.94932	46.569	-0.0036045	-2.1801	55.487E-6
1	Displacement Grid 1	82.00000	38.40000	46.80900	-4.57078	46.569	-706.25E-6	-0.98450	25.200E-6
1	Displacement Grid 1	87.60000	38.40000	46.80900	-2.30252	46.569	-94.807E-6	-0.43886	11.267E-6
1	Displacement Grid 1	93.20000	38.40000	46.80900	-1.13300	46.569	-25.554E-6	-0.24657	6.3347E-6
1	Displacement Grid 1	98.80000	38.40000	46.80900	-0.52189	46.569	-9.8248E-6	-0.15662	4.0248E-6
1	Displacement Grid 1	104.40000	38.40000	46.80900	-0.19974	46.569	-4.5903E-6	-0.10705	2.7513E-6
1	Displacement Grid 1	110.00000	38.40000	46.80900	-0.03137	46.569	-2.4236E-6	-0.076917	1.9769E-6
1	Displacement Grid 1	-30.00000	42.20000	46.80900	-0.09216	46.421	-8.7420E-6	-0.11287	1.4025E-6
1	Displacement Grid 1	-24.40000	42.20000	46.80900	-0.27721	46.421	-15.825E-6	-0.15385	1.9114E-6
1	Displacement Grid 1	-18.80000	42.20000	46.80900	-0.60101	46.421	-31.323E-6	-0.21774	2.7046E-6
1	Displacement Grid 1	-13.20000	42.20000	46.80900	-1.15344	46.421	-70.036E-6	-0.32318	4.0124E-6
1	Displacement Grid 1	-7.60000	42.20000	46.80900	-2.06349	46.421	-185.02E-6	-0.50904	6.3144E-6
1	Displacement Grid 1	-2.00000	42.20000	46.80900	-3.45114	46.421	-574.52E-6	-0.84763	10.495E-6
1	Displacement Grid 1	3.60000	42.20000	46.80900	-5.15753	46.421	-0.0014030	-1.3334	16.472E-6
1	Displacement Grid 1	9.20000	42.20000	46.80900	-6.59732	46.421	-0.0018975	-1.7030	21.030E-6
1	Displacement Grid 1	14.80000	42.20000	46.80900	-7.53178	46.421	-0.0020378	-1.8982	23.446E-6
1	Displacement Grid 1	20.40000	42.20000	46.80900	-8.08489	46.421	-0.0020802	-2.0013	24.724E-6
1	Displacement Grid 1	26.00000	42.20000	46.80900	-8.40035	46.421	-0.0020957	-2.0585	25.435E-6
1	Displacement Grid 1	31.60000	42.20000	46.80900	-8.57021	46.421	-0.0021021	-2.0899	25.824E-6
1	Displacement Grid 1	37.20000	42.20000	46.80900	-8.64584	46.421	-0.0021046	-2.1043	26.003E-6
1	Displacement Grid 1	42.80000	42.20000	46.80900	-8.64957	46.421	-0.0021047	-2.1052	26.013E-6
1	Displacement Grid 1	48.40000	42.20000	46.80900	-8.58092	46.421	-0.0021024	-2.0923	25.854E-6
1	Displacement Grid 1	54.00000	42.20000	46.80900	-8.41668	46.421	-0.0020963	-2.0622	25.481E-6
1	Displacement Grid 1	59.60000	42.20000	46.80900	-8.10542	46.421	-0.0020812	-2.0062	24.786E-6
1	Displacement Grid 1	65.20000	42.20000	46.80900	-7.55708	46.421	-0.0020413	-1.9052	23.533E-6
1	Displacement Grid 1	70.80000	42.20000	46.80900	-5.58690	46.569	-451.19E-6	-1.0605	27.193E-6
1	Displacement Grid 1	76.40000	42.20000	46.80900	-4.35229	46.569	-347.62E-6	-0.84208	21.594E-6
1	Displacement Grid 1	82.00000	42.20000	46.80900	-2.82519	46.569	-150.21E-6	-0.53979	13.853E-6
1	Displacement Grid 1	87.60000	42.20000	46.80900	-1.58983	46.569	-46.606E-6	-0.32018	8.2237E-6
1	Displacement Grid 1	93.20000	42.20000	46.80900	-0.81925	46.569	-16.900E-6	-0.20157	5.1790E-6
1	Displacement Grid 1	98.80000	42.20000	46.80900	-0.37687	46.569	-7.4072E-6	-0.13555	3.4834E-6
1	Displacement Grid 1	104.40000	42.20000	46.80900	-0.13140	46.569	-3.7199E-6	-0.095885	2.4643E-6
1	Displacement Grid 1	110.00000	42.20000	46.80900	0.00072	46.569	-2.0562E-6	-0.070492	1.8118E-6
1	Displacement Grid 1	-30.00000	46.00000	46.80900	-0.04839	46.421	-7.2625E-6	-0.10255	1.2744E-6
1	Displacement Grid 1	-24.40000	46.00000	46.80900	-0.19102	46.421	-12.497E-6	-0.13642	1.6950E-6
1	Displacement Grid 1	-18.80000	46.00000	46.80900	-0.43256	46.421	-22.933E-6	-0.18646	2.3162E-6
1	Displacement Grid 1	-13.20000	46.00000	46.80900	-0.82507	46.421	-45.380E-6	-0.26249	3.2598E-6
1	Displacement Grid 1	-7.60000	46.00000	46.80900	-1.42709	46.421	-96.695E-6	-0.37971	4.7131E-6
1	Displacement Grid 1	-2.00000	46.00000	46.80900	-2.26028	46.421	-208.03E-6	-0.55235	6.8511E-6
1	Displacement Grid 1	3.60000	46.00000	46.80900	-3.21625	46.421	-373.36E-6	-0.76060	9.4276E-6
1	Displacement Grid 1	9.20000	46.00000	46.80900	-4.06689	46.421	-498.45E-6	-0.93921	11.639E-6
1	Displacement Grid 1	14.80000	46.00000	46.80900	-4.68128	46.421	-556.54E-6	-1.0584	13.116E-6
1	Displacement Grid 1	20.40000	46.00000	46.80900	-5.07627	46.421	-580.58E-6	-1.1316	14.024E-6
1	Displacement Grid 1	26.00000	46.00000	46.80900	-5.31350	46.421	-591.01E-6	-1.1757	14.572E-6
1	Displacement Grid 1	31.60000	46.00000	46.80900	-5.44538	46.421	-595.71E-6	-1.2010	14.886E-6
1	Displacement Grid 1	37.20000	46.00000	46.80900	-5.50487	46.421	-597.61E-6	-1.2128	15.033E-6
1	Displacement Grid 1	42.80000	46.00000	46.80900	-5.50723	46.421	-597.68E-6	-1.2134	15.040E-6
1	Displacement Grid 1	48.40000	46.00000	46.80900	-5.45218	46.421	-595.92E-6	-1.2027	14.907E-6
1	Displacement Grid 1	54.00000	46.00000	46.80900	-5.32404	46.421	-591.38E-6	-1.1784	14.606E-6
1	Displacement Grid 1	59.60000	46.00000	46.80900	-5.08995	46.421	-581.28E-6	-1.1353	14.070E-6
1	Displacement Grid 1	65.20000	46.00000	46.80900	-4.69869	46.421	-558.34E-6	-1.0633	13.177E-6
1	Displacement Grid 1	70.80000	46.00000	46.80900	-3.26649	46.569	-118.58E-6	-0.58453	15.008E-6
1	Displacement Grid 1	76.40000	46.00000	46.80900	-2.56252	46.569	-90.752E-6	-0.47629	12.230E-6
1	Displacement Grid 1	82.00000	46.00000	46.80900	-1.75248	46.569	-51.608E-6	-0.34709	8.9145E-6
1	Displacement Grid 1	87.60000	46.00000	46.80900	-1.04860	46.569	-23.754E-6	-0.23782	6.1101E-6
1	Displacement Grid 1	93.20000	46.00000	46.80900	-0.55573	46.569	-10.918E-6	-0.16379	4.2090E-6
1	Displacement Grid 1	98.80000	46.00000	46.80900	-0.24851	46.569	-5.4422E-6	-0.11621	2.9865E-6
1	Displacement Grid 1	104.40000	46.00000	46.80900	-0.06904	46.569	-2.9491E-6	-0.085082	2.1867E-6
1	Displacement Grid 1	110.00000	46.00000	46.80900	0.03046	46.569	-1.7128E-6	-0.064053	1.6463E-6
1	Displacement Grid 1	-30.00000	49.80000	46.80900	-0.00922	46.421	-5.9575E-6	-0.092604	1.1508E-6
1	Displacement Grid 1	-24.40000	49.80000	46.80900	-0.11573	46.421	-9.7510E-6	-0.12030	1.4948E-6
1	Displacement Grid 1	-18.80000	49.80000	46.80900	-0.29069	46.421	-16.661E-6	-0.15918	1.9776E-6
1	Displacement Grid 1	-13.20000	49.80000	46.80900	-0.56278	46.421	-29.661E-6	-0.21415	2.6600E-6
1	Displacement Grid 1	-7.60000	49.80000	46.80900	-0.95670	46.421	-54.015E-6	-0.29072	3.6100E-6
1	Displacement Grid 1	-2.00000	49.80000	46.80900	-1.46858	46.421	-95.044E-6	-0.39045	4.8469E-6
1	Displacement Grid 1	3.60000	49.80000	46.80900	-2.03573	46.421	-147.03E-6	-0.50195	6.2290E-6
1	Displacement Grid 1	9.20000	49.80000	46.80900	-2.55454	46.421	-190.67E-6	-0.60256	7.4766E-6
1	Displacement Grid 1	14.80000	49.80000	46.80900	-2.95499	46.421	-216.90E-6	-0.67845	8.4181E-6
1	Displacement Grid 1	20.40000	49.80000	46.80900	-3.22952	46.421	-230.48E-6	-0.73032	9.0619E-6
1	Displacement Grid 1	26.00000	49.80000	46.80900	-3.40256	46.421	-237.29E-6	-0.76382	9.4778E-6
1	Displacement Grid 1	31.60000	49.80000	46.80900	-3.50186	46.421	-240.64E-6	-0.78383	9.7263E-6
1	Displacement Grid 1	37.20000	49.80000	46.80900	-3.54734	46.421	-242.05E-6	-0.79336	9.8447E-6
1	Displacement Grid 1	42.80000	49.80000	46.80900	-3.54883	46.421	-242.09E-6	-0.79379	9.8500E-6
1	Displacement Grid 1	48.40000	49.80000	46.80900	-3.50618	46.421	-240.78E-6	-0.78508	9.7418E-6
1	Displacement Grid 1	54.00000	49.80000	46.80900	-3.40934	46.421	-237.54E-6	-0.76581	9.5026E-6
1	Displacement Grid 1	59.60000	49.80000	46.80900	-3.23847	46.421	-230.92E-6	-0.73301	9.0953E-6
1	Displacement Grid 1	65.20000	49.80000	46.80900	-2.96629	46.421	-217.81E-6	-0.68194	8.4614E-6
1	Displacement Grid 1	70.80000	49.80000	46.80900	-1.94976	46.569	-45.303E-6	-0.37475	9.6268E-6
1	Displacement Grid 1	76.40000	49.80000	46.80900	-1.53492	46.569	-35.335E-6	-0.31318	8.0453E-6
1	Displacement Grid 1	82.00000	49.80000	46.80900	-1.07456	46.569	-23.055E-6	-0.24408	6.2711E-6
1	Displacement Grid 1	87.60000	49.80000	46.80900	-0.66036	46.569	-13.067E-6	-0.18162	4.6668E-6
1	Displacement Grid 1	93.20000	49.80000	46.80900	-0.34898	46.569	-7.1052E-6	-0.13360	3.4333E-6
1	Displacement Grid 1	98.80000	49.80000	46.80900	-0.14203	46.569	-3.9576E-6	-0.099257	2.5510E-6
1	Displacement Grid 1	104.40000	49.80000	46.80900	-0.01555	46.569	-2.3064E-6	-0.075055	1.9291E-6
1	Displacement Grid 1	110.00000	49.80000	46.80900	0.05641	46.569	-1.4079E-6	-0.057838	1.4866E-6
1	Displacement Grid 1	-30.00000	53.60000	46.80900	0.02419	46.421	-4.8480E-6	-0.083275	1.0349E-6
1	Displacement Grid 1	-24.40000	53.60000	46.80900	-0.05298	46.421	-7.5688E-6	-0.10581	1.3148E-6
1	Displacement Grid 1	-18.80000	53.60000	46.80900	-0.17651	46.421	-12.132E-6	-0.13600	1.6898E-6
1	Displacement Grid 1	-13.20000	53.60000	46.80900	-0.36168	46.421	-19.809E-6	-0.17621	2.1890E-6
1	Displacement Grid 1	-7.60000	53.60000	46.80900	-0.61811	46.421	-32.254E-6	-0.22821	2.8346E-6
1	Displacement Grid 1	-2.00000	53.60000	46.80900	-0.93757	46.421	-50.268E-6	-0.29105	3.6145E-6
1	Displacement Grid 1	3.60000	53.60000	46.80900	-1.28450	46.421	-71.304E-6	-0.35854	4.4519E-6
1	Displacement Grid 1	9.20000	53.60000	46.80900	-1.60730	46.421	-89.930E-6	-0.42099	5.2269E-6
1	Displacement Grid 1	14.80000	53.60000	46.80900	-1.86762	46.421	-102.90E-6	-0.47148	5.8536E-6
1	Displacement Grid 1	20.40000	53.60000	46.80900	-2.05508	46.421	-110.73E-6	-0.50856	6.3139E-6
1	Displacement Grid 1	26.00000	53.60000	46.80900	-2.17825	46.421	-115.14E-6	-0.53385	6.6281E-6
1	Displacement Grid 1	31.60000	53.60000	46.80900	-2.25106	46.421	-117.48E-6	-0.54951	6.8225E-6

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Displacement Grid 1	37.20000	53.60000	46.80900	-2.28493	46.421	-118.51E-6	-0.55710	6.9169E-6
1	Displacement Grid 1	42.80000	53.60000	46.80900	-2.28586	46.421	-118.54E-6	-0.55742	6.9208E-6
1	Displacement Grid 1	48.40000	53.60000	46.80900	-2.25378	46.421	-117.57E-6	-0.55044	6.8340E-6
1	Displacement Grid 1	54.00000	53.60000	46.80900	-2.18256	46.421	-115.31E-6	-0.53534	6.6465E-6
1	Displacement Grid 1	59.60000	53.60000	46.80900	-2.06080	46.421	-111.00E-6	-0.51055	6.3387E-6
1	Displacement Grid 1	65.20000	53.60000	46.80900	-1.87470	46.421	-103.37E-6	-0.47397	5.8845E-6
1	Displacement Grid 1	70.80000	53.60000	46.80900	-1.15798	46.569	-21.334E-6	-0.26169	6.7239E-6
1	Displacement Grid 1	76.40000	53.60000	46.80900	-0.90867	46.569	-17.023E-6	-0.22331	5.7380E-6
1	Displacement Grid 1	82.00000	53.60000	46.80900	-0.63791	46.569	-12.060E-6	-0.18152	4.6644E-6
1	Displacement Grid 1	87.60000	53.60000	46.80900	-0.38957	46.569	-7.7336E-6	-0.14236	3.6583E-6
1	Displacement Grid 1	93.20000	53.60000	46.80900	-0.19427	46.569	-4.7276E-6	-0.10988	2.8241E-6
1	Displacement Grid 1	98.80000	53.60000	46.80900	-0.05823	46.569	-2.8816E-6	-0.084813	2.1798E-6
1	Displacement Grid 1	104.40000	53.60000	46.80900	0.02790	46.569	-1.7926E-6	-0.066018	1.6968E-6
1	Displacement Grid 1	110.00000	53.60000	46.80900	0.07778	46.569	-1.1473E-6	-0.052007	1.3368E-6
1	Displacement Grid 1	-30.00000	57.40000	46.80900	0.05145	46.421	-3.9291E-6	-0.074707	928.43E-9
1	Displacement Grid 1	-24.40000	57.40000	46.80900	-0.00274	46.421	-5.8750E-6	-0.093006	1.1558E-6
1	Displacement Grid 1	-18.80000	57.40000	46.80900	-0.08790	46.421	-8.9113E-6	-0.11656	1.4484E-6
1	Displacement Grid 1	-13.20000	57.40000	46.80900	-0.21195	46.421	-13.577E-6	-0.14643	1.8194E-6
1	Displacement Grid 1	-7.60000	57.40000	46.80900	-0.37817	46.421	-20.391E-6	-0.18303	2.2738E-6
1	Displacement Grid 1	-2.00000	57.40000	46.80900	-0.57939	46.421	-29.350E-6	-0.22515	2.7968E-6
1	Displacement Grid 1	3.60000	57.40000	46.80900	-0.79526	46.421	-39.332E-6	-0.26930	3.3449E-6
1	Displacement Grid 1	9.20000	57.40000	46.80900	-0.99847	46.421	-48.445E-6	-0.31069	3.8588E-6
1	Displacement Grid 1	14.80000	57.40000	46.80900	-1.16747	46.421	-55.388E-6	-0.34557	4.2919E-6
1	Displacement Grid 1	20.40000	57.40000	46.80900	-1.29382	46.421	-60.041E-6	-0.37246	4.6258E-6
1	Displacement Grid 1	26.00000	57.40000	46.80900	-1.37976	46.421	-62.907E-6	-0.39157	4.8632E-6
1	Displacement Grid 1	31.60000	57.40000	46.80900	-1.43190	46.421	-64.527E-6	-0.40375	5.0144E-6
1	Displacement Grid 1	37.20000	57.40000	46.80900	-1.45651	46.421	-65.262E-6	-0.40975	5.0890E-6
1	Displacement Grid 1	42.80000	57.40000	46.80900	-1.45708	46.421	-65.283E-6	-0.40999	5.0919E-6
1	Displacement Grid 1	48.40000	57.40000	46.80900	-1.43358	46.421	-64.590E-6	-0.40445	5.0231E-6
1	Displacement Grid 1	54.00000	57.40000	46.80900	-1.38242	46.421	-63.017E-6	-0.39269	4.8771E-6
1	Displacement Grid 1	59.60000	57.40000	46.80900	-1.29735	46.421	-60.210E-6	-0.37395	4.6443E-6
1	Displacement Grid 1	65.20000	57.40000	46.80900	-1.17175	46.421	-55.646E-6	-0.34739	4.3145E-6
1	Displacement Grid 1	70.80000	57.40000	46.80900	-0.66709	46.569	-11.477E-6	-0.19305	4.9609E-6
1	Displacement Grid 1	76.40000	57.40000	46.80900	-0.51585	46.569	-9.3541E-6	-0.16757	4.3062E-6
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1	Displacement Grid 1	87.60000	57.40000	46.80900	-0.20390	46.569	-4.8641E-6	-0.11407	2.9317E-6
1	Displacement Grid 1	93.20000	57.40000	46.80900	-0.08246	46.569	-3.2317E-6	-0.091282	2.3461E-6
1	Displacement Grid 1	98.80000	57.40000	46.80900	0.00489	46.569	-2.1156E-6	-0.072684	1.8682E-6
1	Displacement Grid 1	104.40000	57.40000	46.80900	0.06149	46.569	-1.3923E-6	-0.058030	1.4915E-6
1	Displacement Grid 1	110.00000	57.40000	46.80900	0.09438	46.569	-930.74E-9	-0.046649	1.1991E-6
1	Displacement Grid 1	-30.00000	61.20000	46.80900	0.07276	46.421	-3.1813E-6	-0.066953	832.09E-9
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1	Displacement Grid 1	-18.80000	61.20000	46.80900	-0.02122	46.421	-6.6239E-6	-0.10034	1.2469E-6
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1	Displacement Grid 1	-7.60000	61.20000	46.80900	-0.21006	46.421	-13.512E-6	-0.14946	1.8570E-6
1	Displacement Grid 1	-2.00000	61.20000	46.80900	-0.33722	46.421	-18.396E-6	-0.17900	2.2239E-6
1	Displacement Grid 1	3.60000	61.20000	46.80900	-0.47264	46.421	-23.679E-6	-0.20947	2.6023E-6
1	Displacement Grid 1	9.20000	61.20000	46.80900	-0.60126	46.421	-28.593E-6	-0.23823	2.9594E-6
1	Displacement Grid 1	14.80000	61.20000	46.80900	-0.71067	46.421	-32.558E-6	-0.26308	3.2681E-6
1	Displacement Grid 1	20.40000	61.20000	46.80900	-0.79487	46.421	-35.416E-6	-0.28288	3.5140E-6
1	Displacement Grid 1	26.00000	61.20000	46.80900	-0.85377	46.421	-37.298E-6	-0.29739	3.6943E-6
1	Displacement Grid 1	31.60000	61.20000	46.80900	-0.89032	46.421	-38.417E-6	-0.30685	3.8117E-6
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1	Displacement Grid 1	98.80000	61.20000	46.80900	0.05059	46.569	-1.5718E-6	-0.062559	1.6080E-6
1	Displacement Grid 1	104.40000	61.20000	46.80900	0.08619	46.569	-1.0850E-6	-0.051052	1.3122E-6
1	Displacement Grid 1	110.00000	61.20000	46.80900	0.10646	46.569	-754.07E-9	-0.041799	1.0744E-6
1	Displacement Grid 1	-30.00000	65.00000	46.80900	0.08866	46.421	-2.5794E-6	-0.060004	745.76E-9
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1	Displacement Grid 1	31.60000	65.00000	46.80900	-0.53057	46.421	-24.260E-6	-0.23931	2.9732E-6
1	Displacement Grid 1	37.20000	65.00000	46.80900	-0.54267	46.421	-24.632E-6	-0.24302	3.0193E-6
1	Displacement Grid 1	42.80000	65.00000	46.80900	-0.54286	46.421	-24.642E-6	-0.24316	3.0210E-6
1	Displacement Grid 1	48.40000	65.00000	46.80900	-0.53112	46.421	-24.290E-6	-0.23972	2.9783E-6
1	Displacement Grid 1	54.00000	65.00000	46.80900	-0.50637	46.421	-23.535E-6	-0.23262	2.8901E-6
1	Displacement Grid 1	59.60000	65.00000	46.80900	-0.46696	46.421	-22.303E-6	-0.22175	2.7550E-6
1	Displacement Grid 1	65.20000	65.00000	46.80900	-0.41169	46.421	-20.514E-6	-0.20711	2.5732E-6
1	Displacement Grid 1	70.80000	65.00000	46.80900	-0.16174	46.569	-4.2657E-6	-0.11668	2.9988E-6
1	Displacement Grid 1	76.40000	65.00000	46.80900	-0.10656	46.569	-3.5983E-6	-0.10394	2.6713E-6
1	Displacement Grid 1	82.00000	65.00000	46.80900	-0.04876	46.569	-2.8849E-6	-0.090430	2.3242E-6
1	Displacement Grid 1	87.60000	65.00000	46.80900	0.00508	46.569	-2.2087E-6	-0.077135	1.9826E-6
1	Displacement Grid 1	93.20000	65.00000	46.80900	0.04962	46.569	-1.6334E-6	-0.064869	1.6673E-6
1	Displacement Grid 1	98.80000	65.00000	46.80900	0.08233	46.569	-1.1834E-6	-0.054110	1.3908E-6
1	Displacement Grid 1	104.40000	65.00000	46.80900	0.10335	46.569	-850.42E-9	-0.045000	1.1567E-6
1	Displacement Grid 1	110.00000	65.00000	46.80900	0.11452	46.569	-611.62E-9	-0.037452	962.67E-9

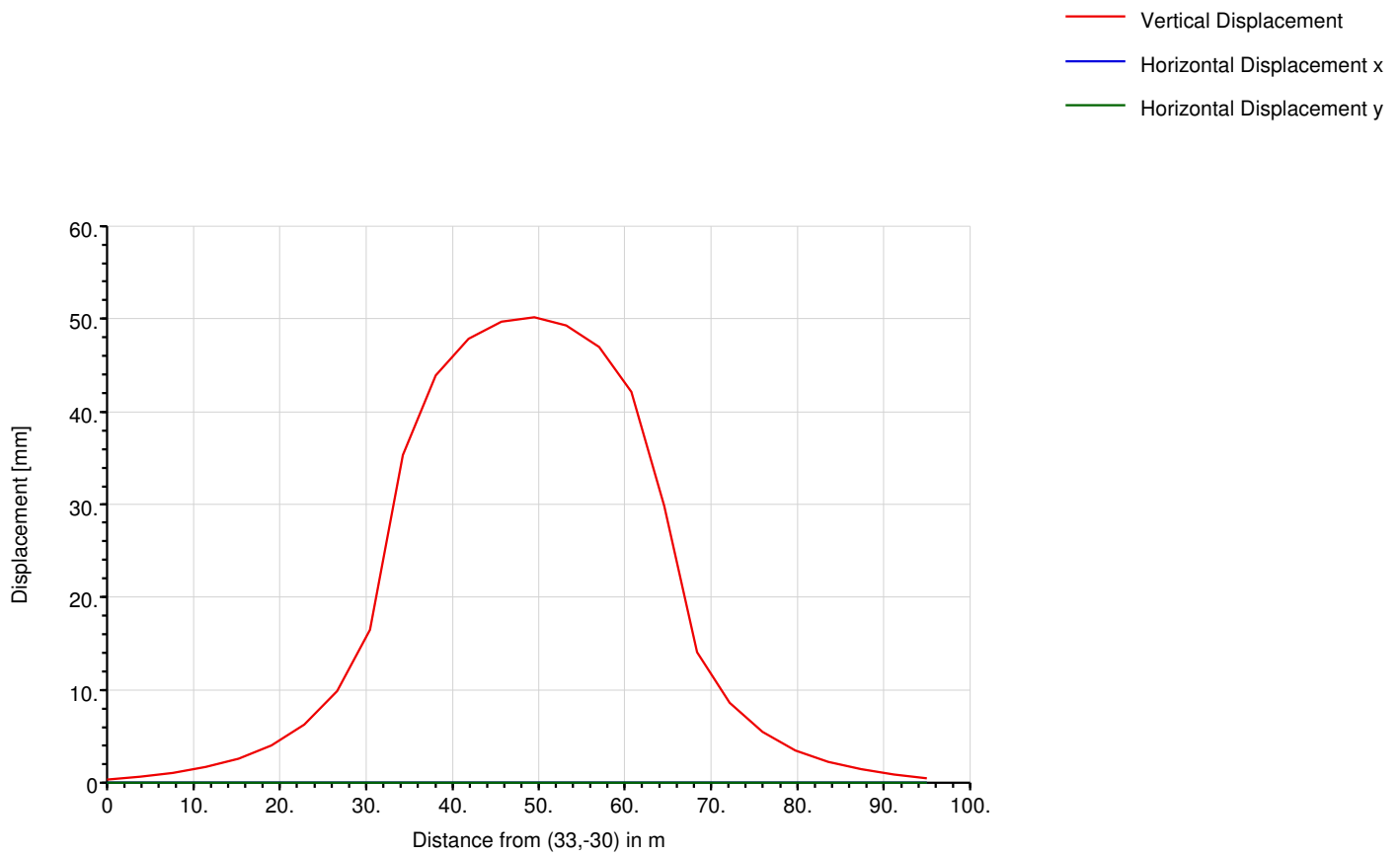
Results : Consolidation : Displacement Data : Grids

None

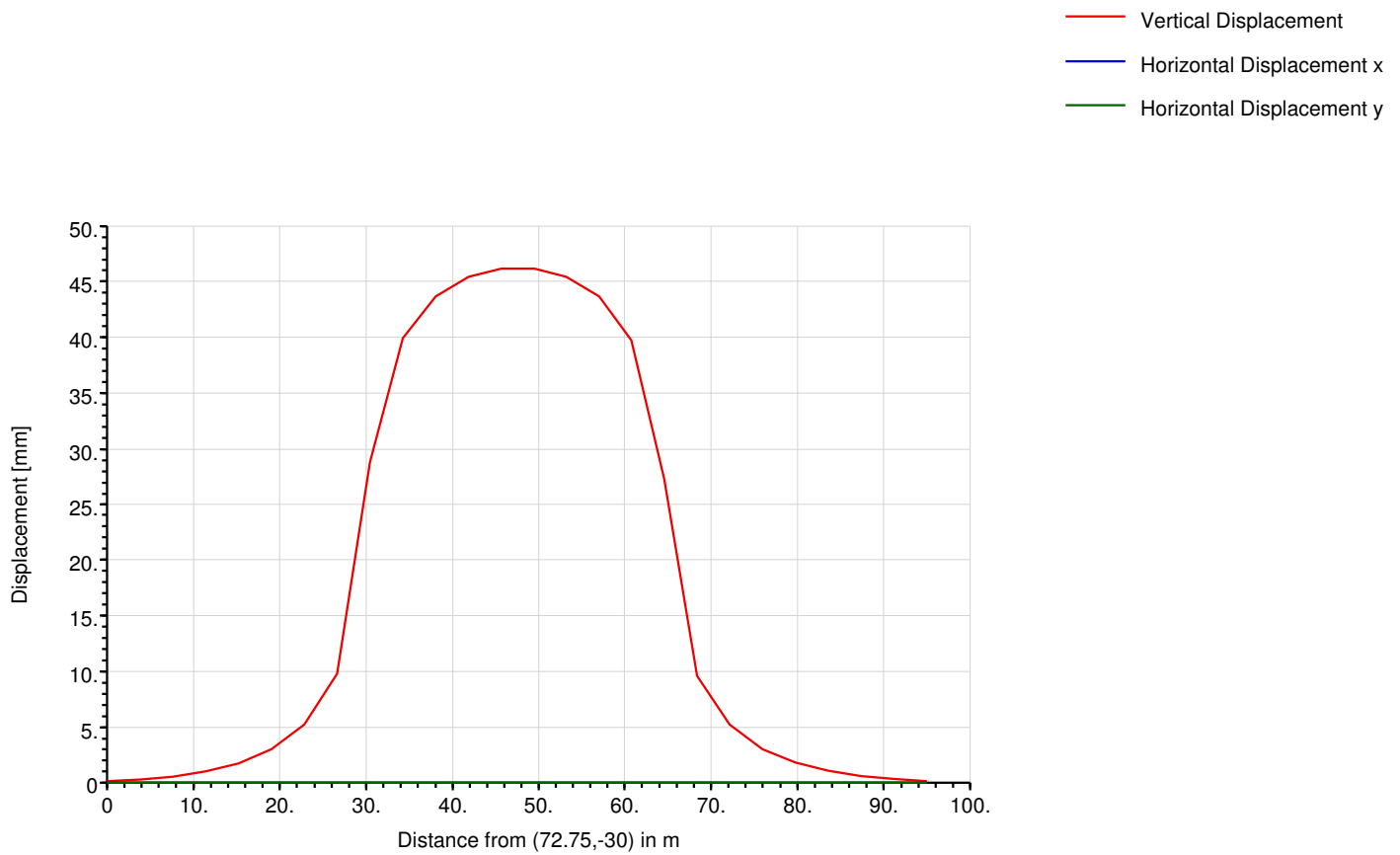
Results : Total : Displacement Data : Grids

None

Displacement for Displacement Line 2



Displacement for Displacement Line 3



Oasys

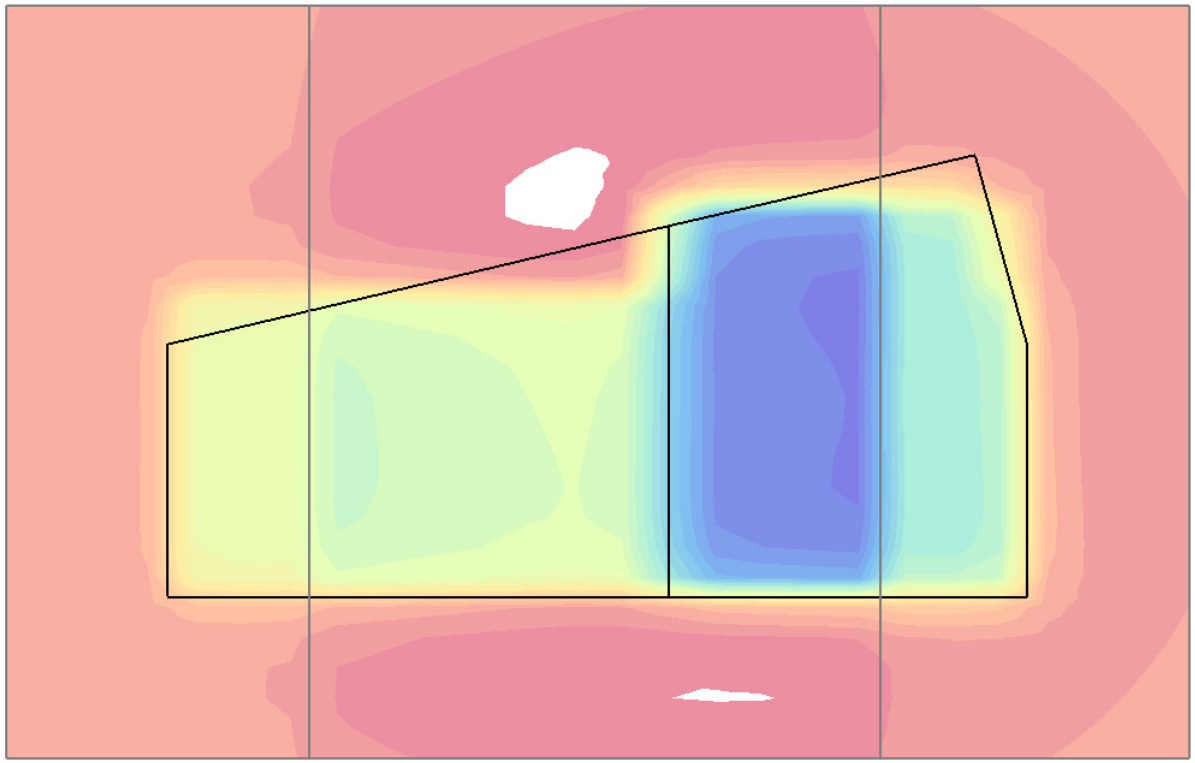
RSK ENVIRONMENT LIMITED

North London Business Park
Heave Assessment Blocks 1C & 1D
Basement Excavation_short term

Job No.	Sheet No.	Rev.
1921321		

Drg. Ref.

Made by ST | Date | Checked



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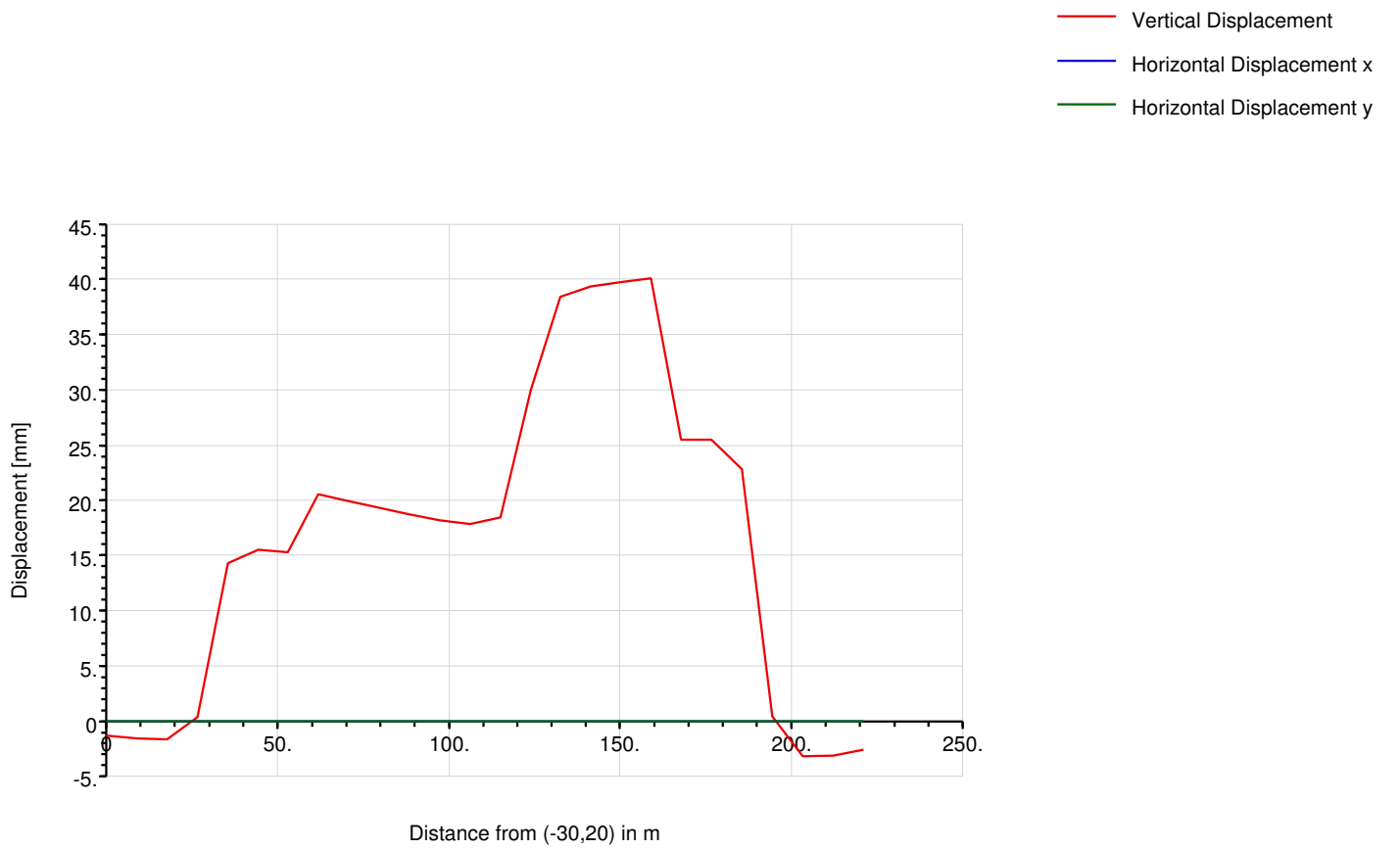

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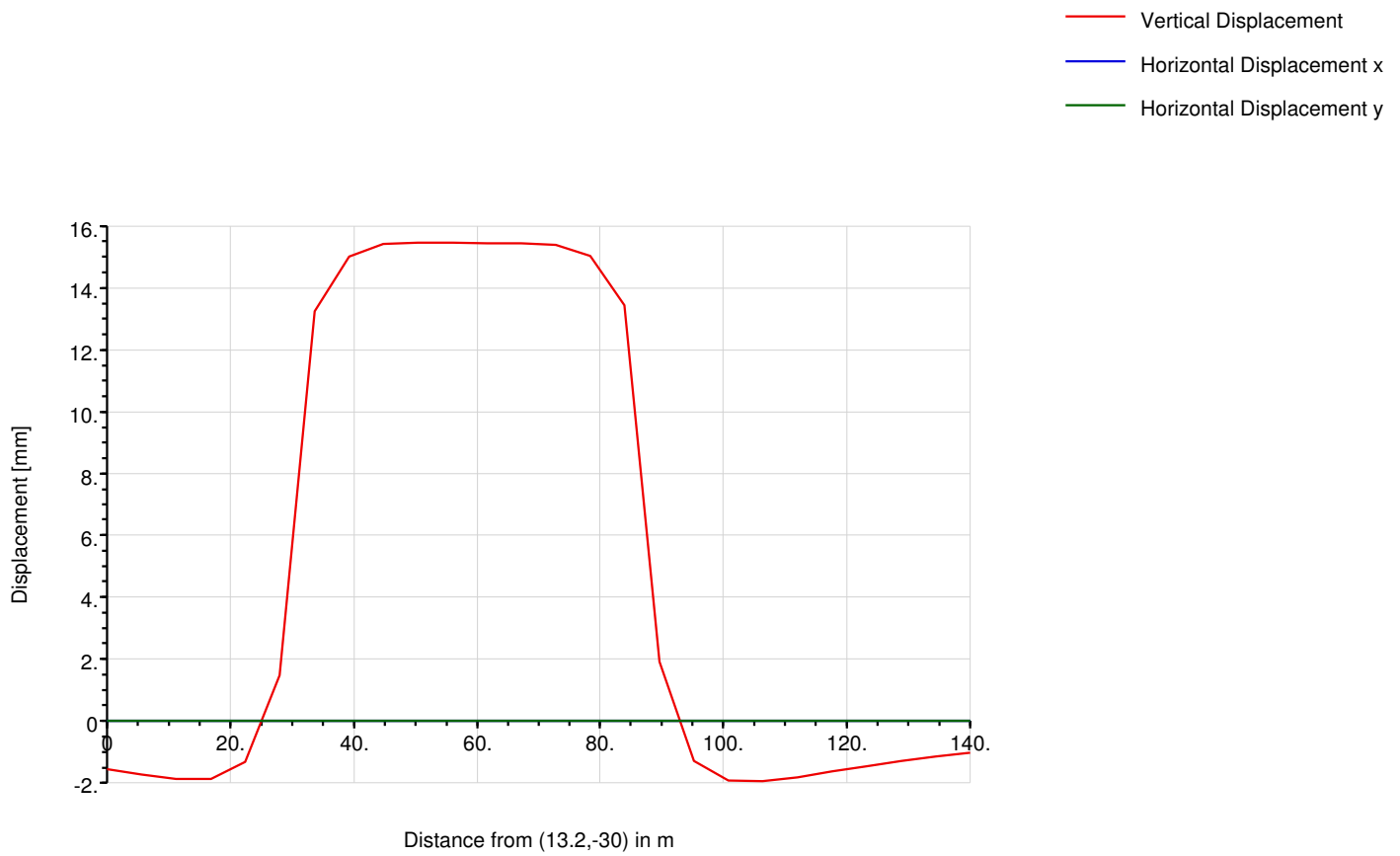

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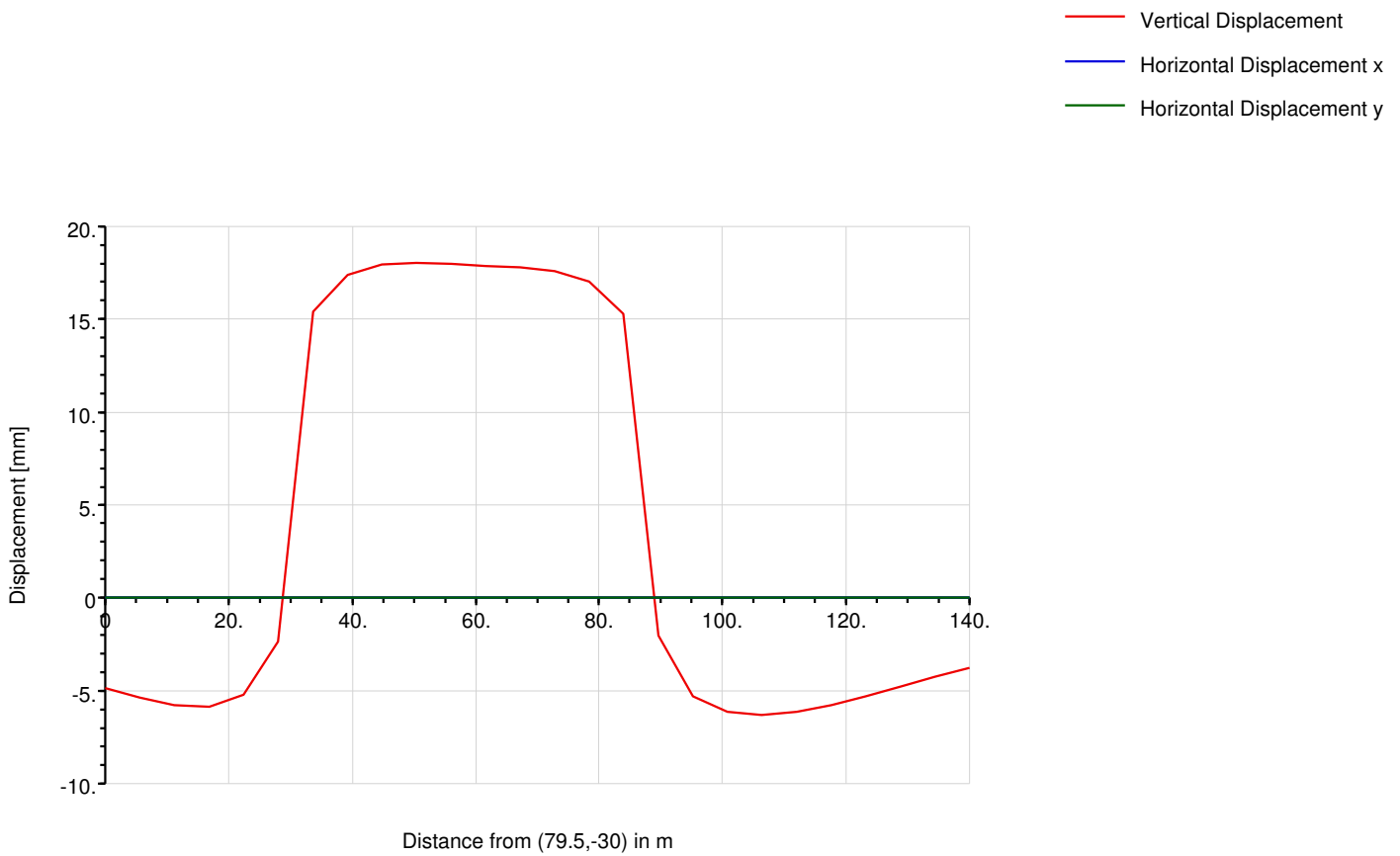

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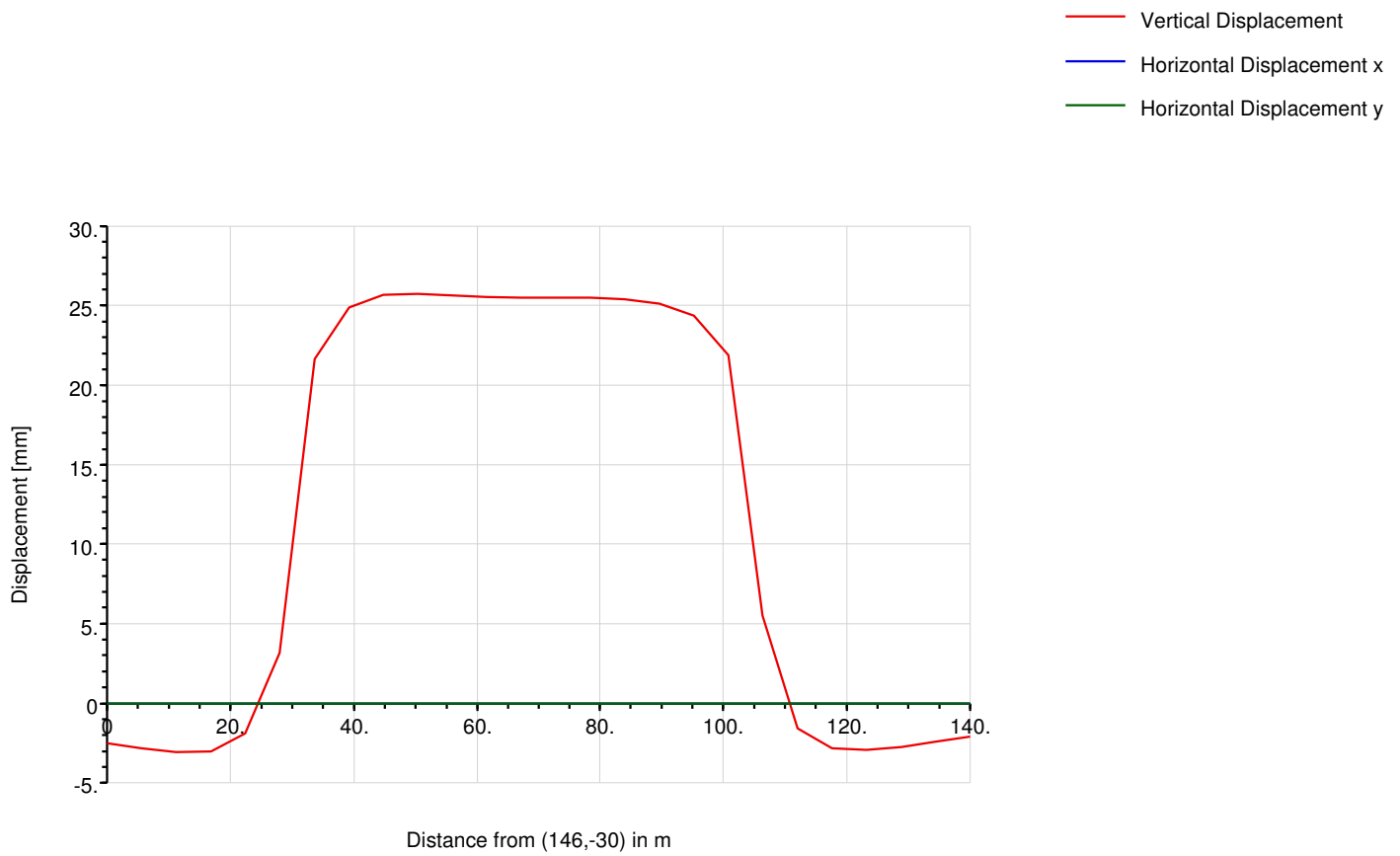


Oasys

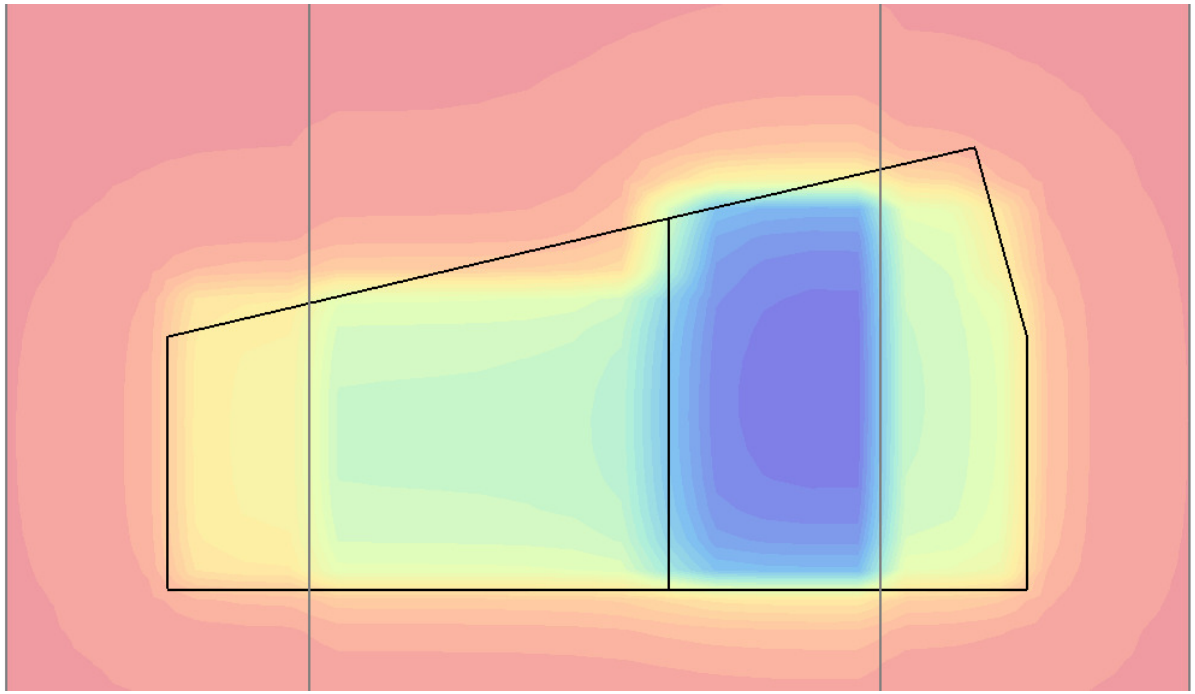
RSK ENVIRONMENT LIMITED

North London Business Park
Heave Assessment Blocks 1C & 1D
Basement Excavation_long term

Job No.	Sheet No.	Rev.
1921321		

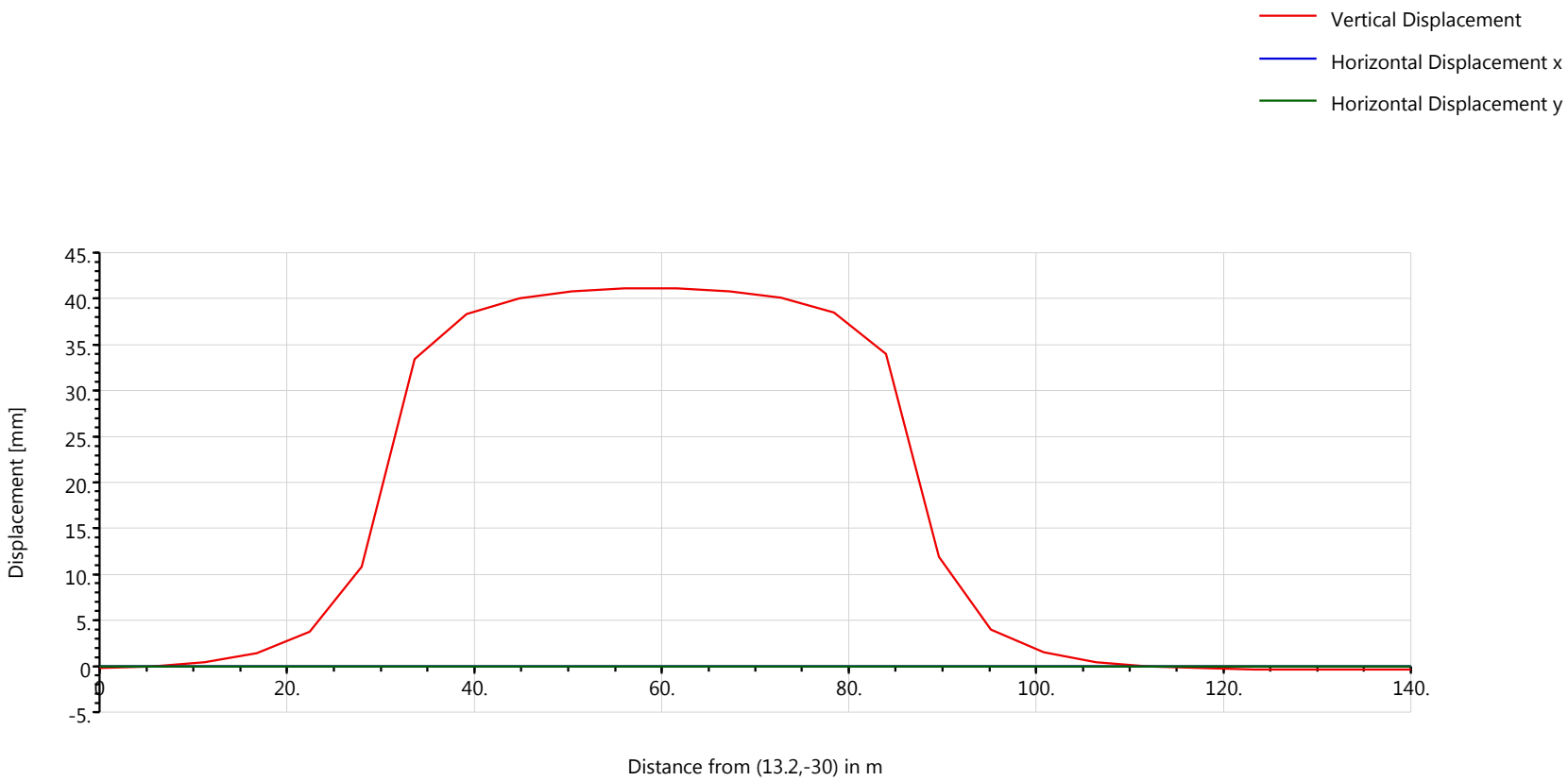
Drg. Ref.

Made by	Date	Checked
ST		



Displacement for Displacement Line 1

Displacement for Displacement Line 2



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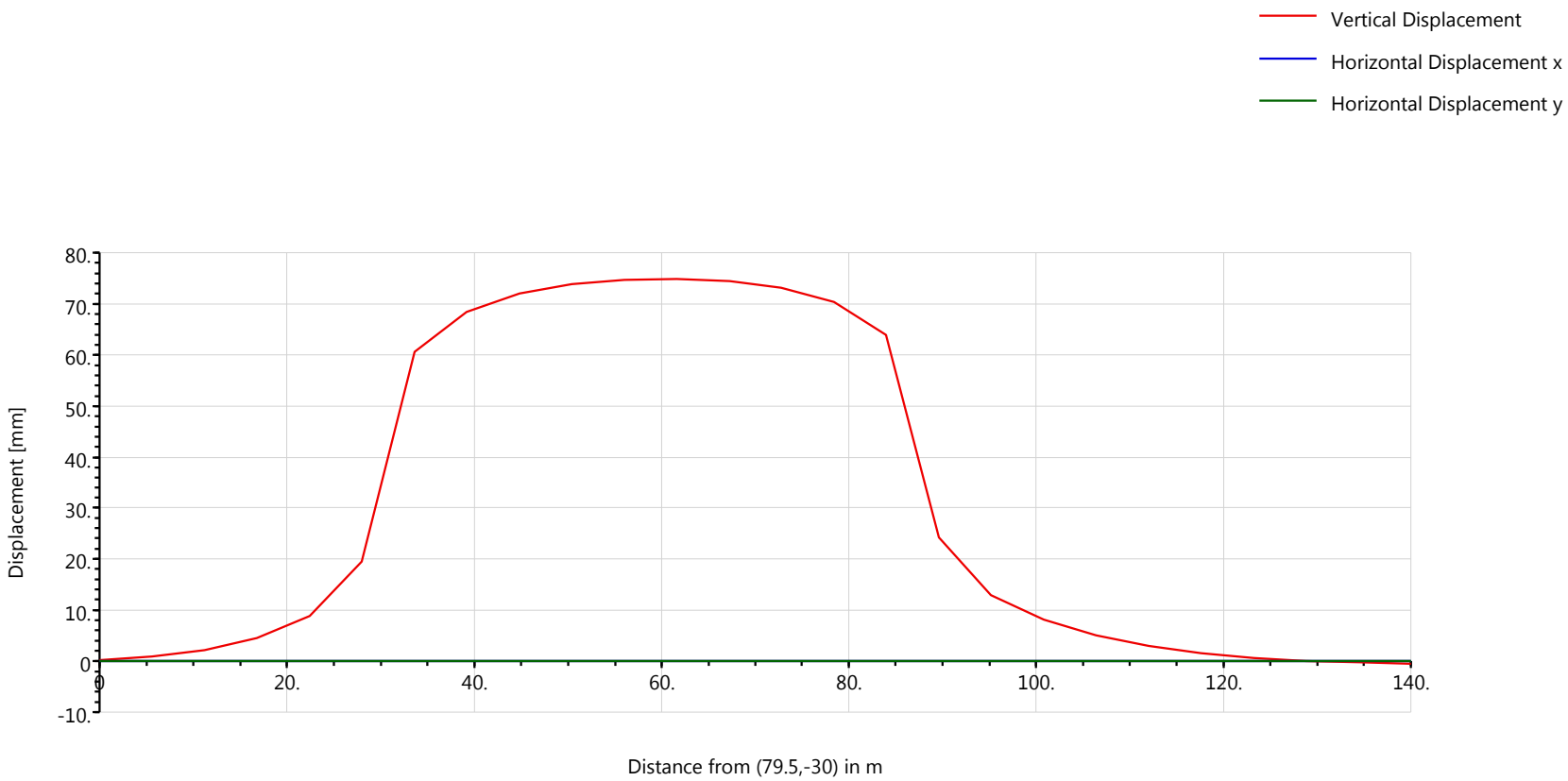
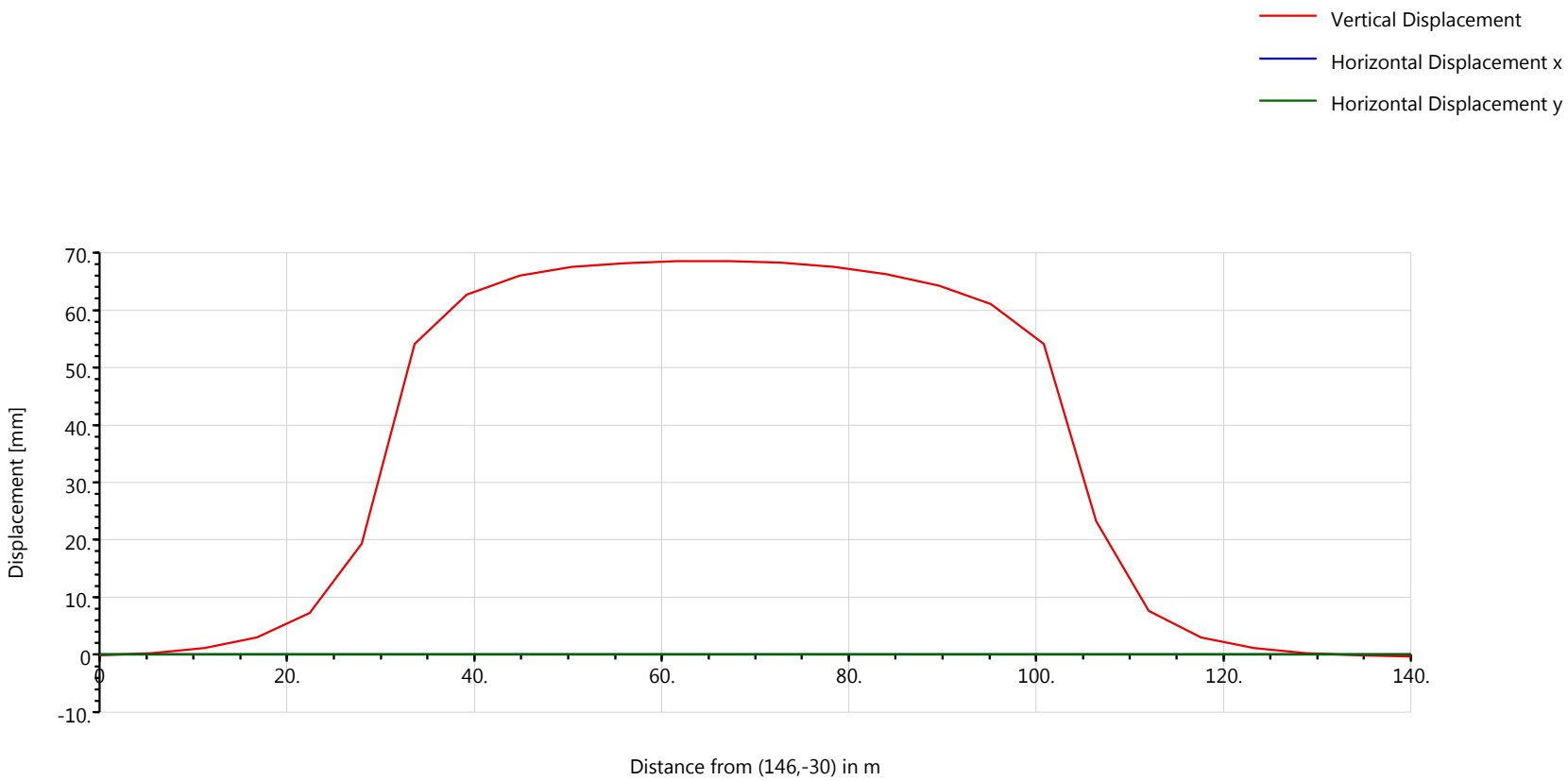


Displacement for Displacement Line 4



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RSK ENVIRONMENT LIMITED

North London Business Park
Heave Assessment Blocks 1E & 1F
Basement Excavation_short term

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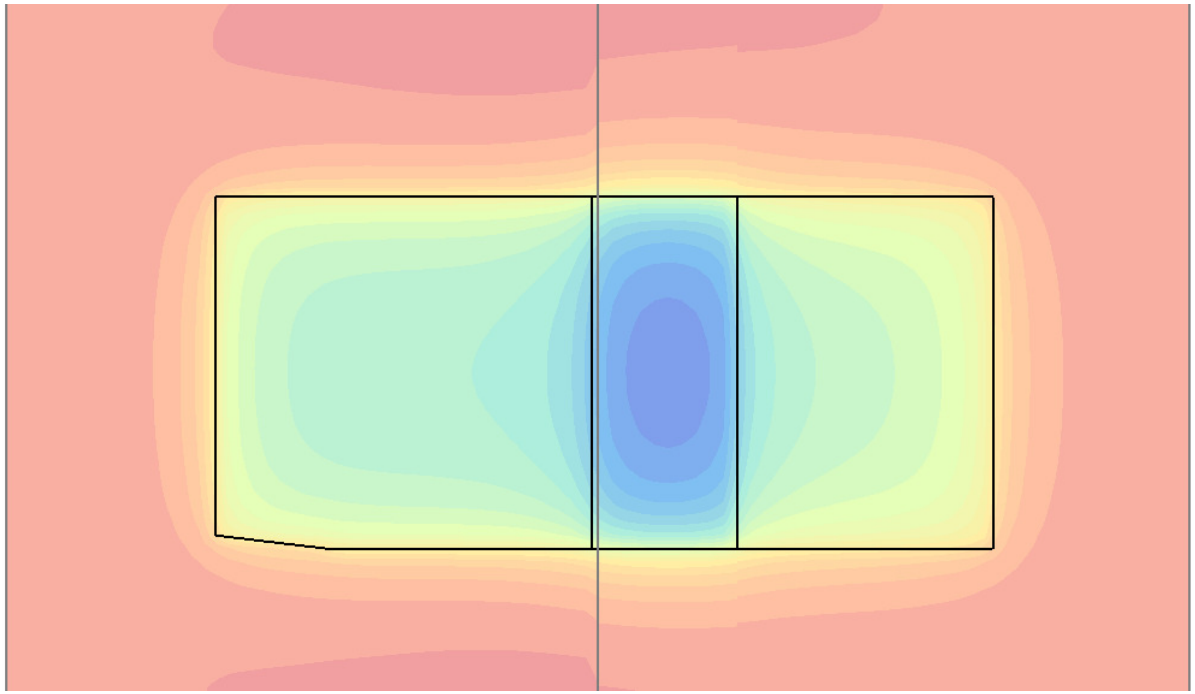
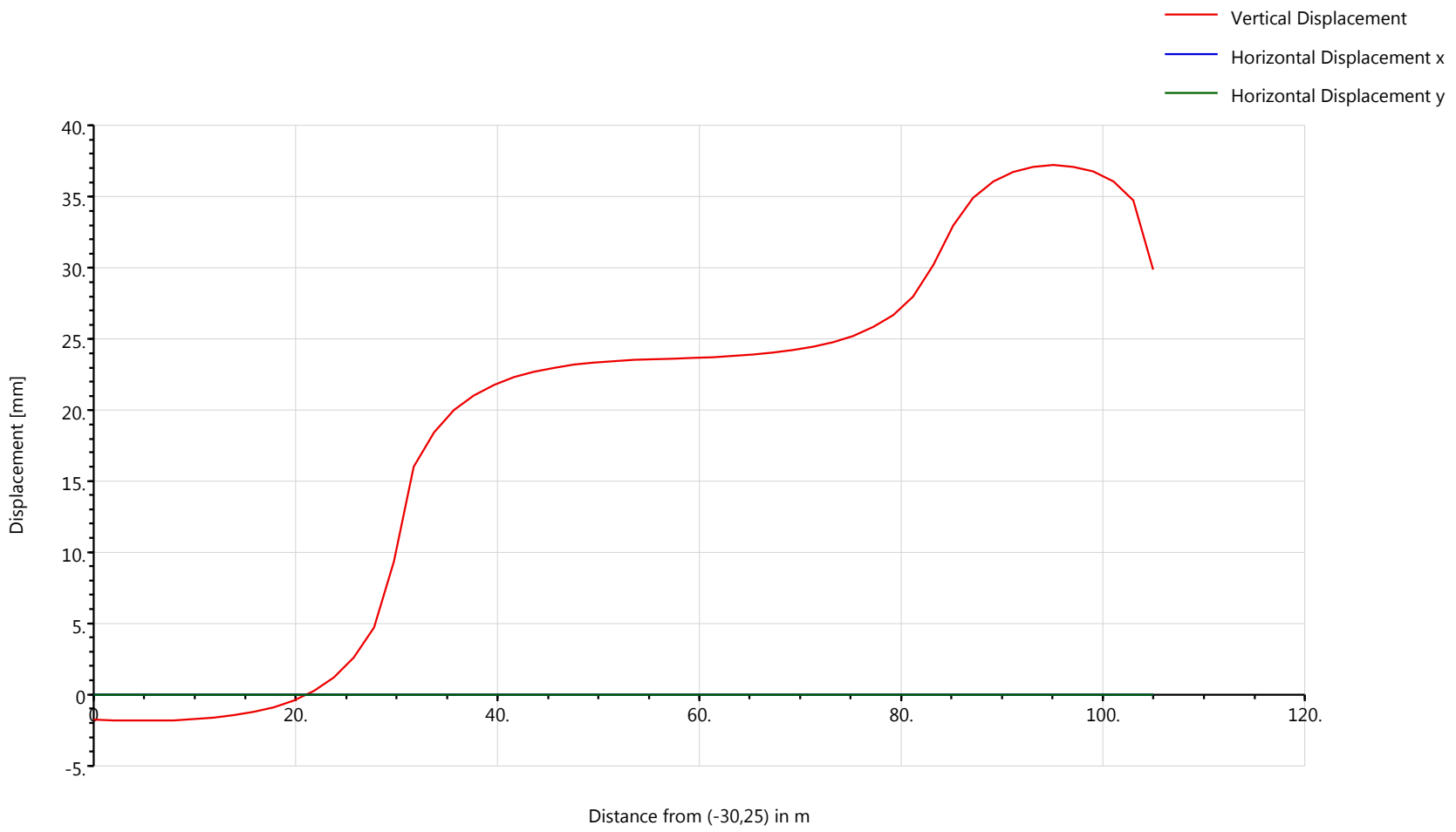
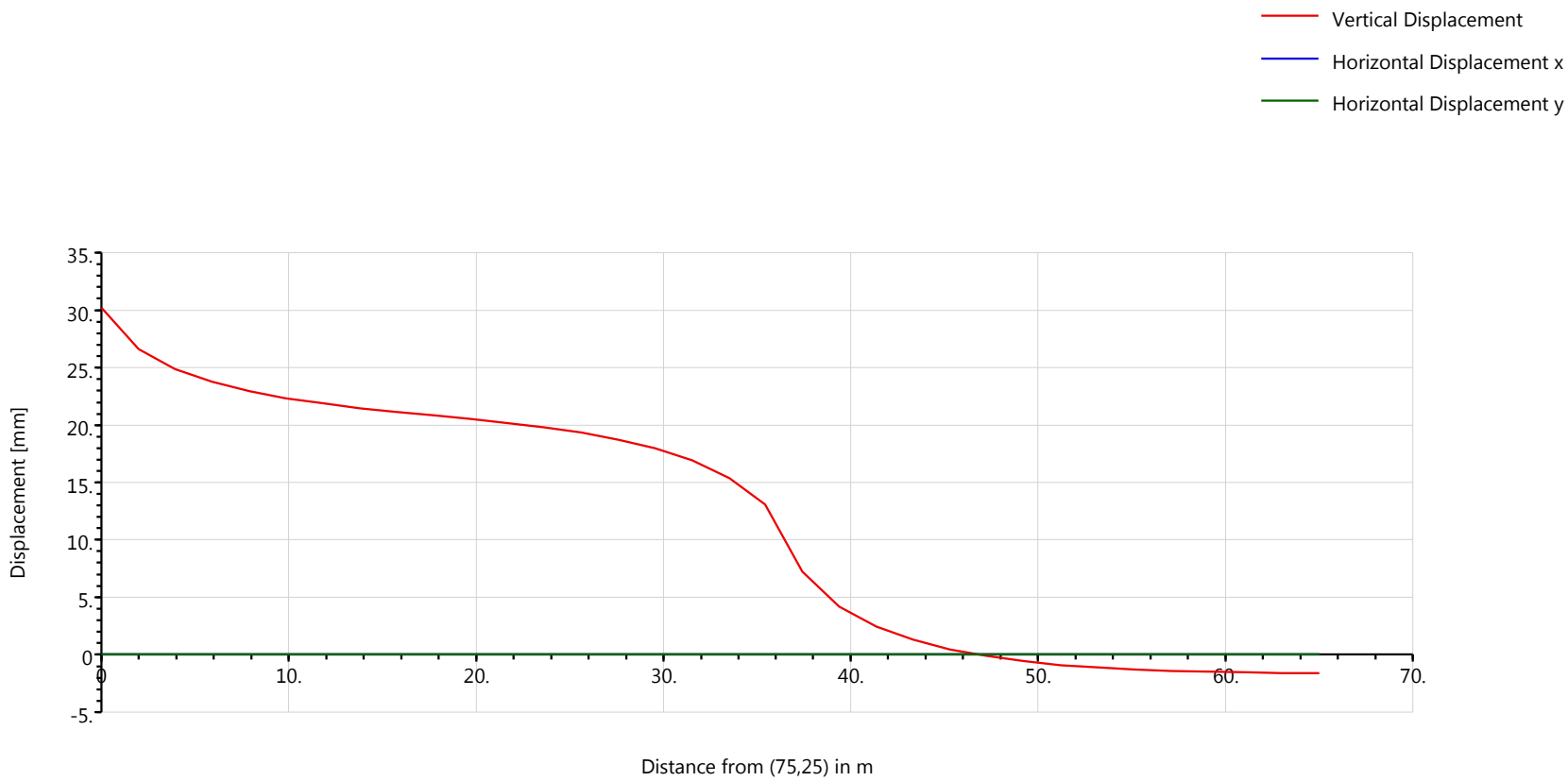


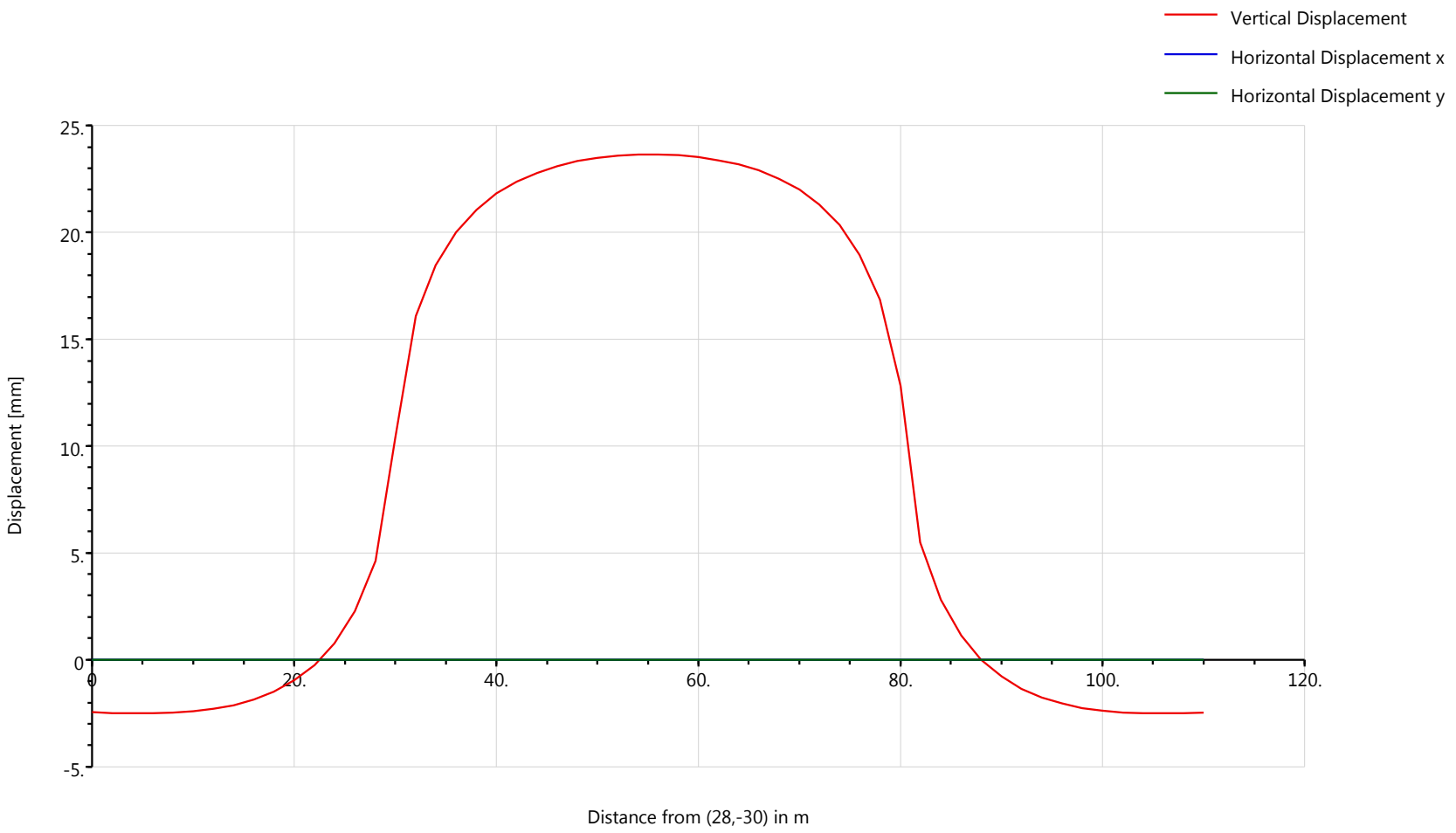
Displacement for Displacement Line 1a



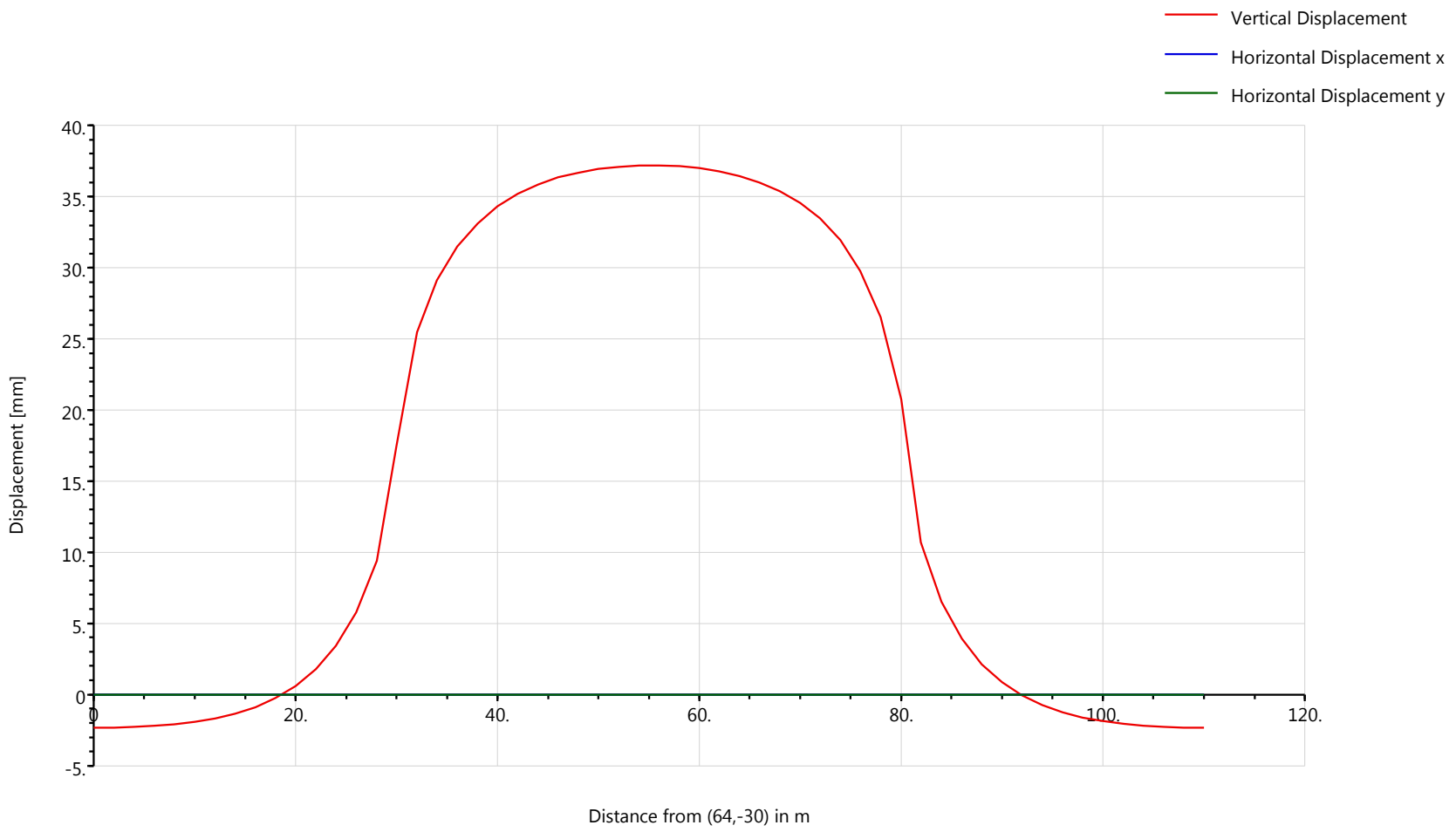
Displacement for Displacement Line 1b



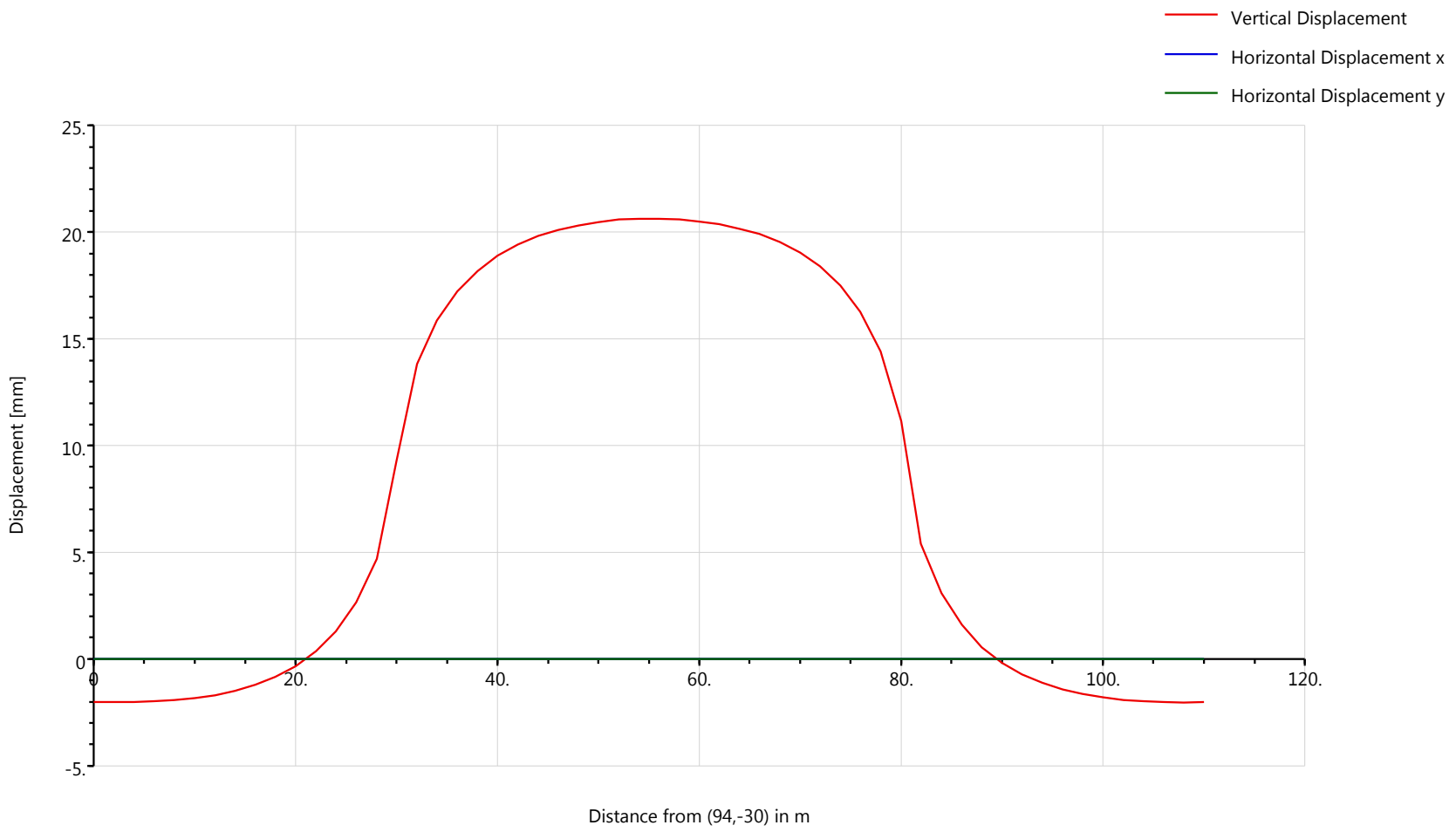
Displacement for Displacement Line 2



Displacement for Displacement Line 3



Displacement for Displacement Line 4



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RSK ENVIRONMENT LIMITED

North London Business Park
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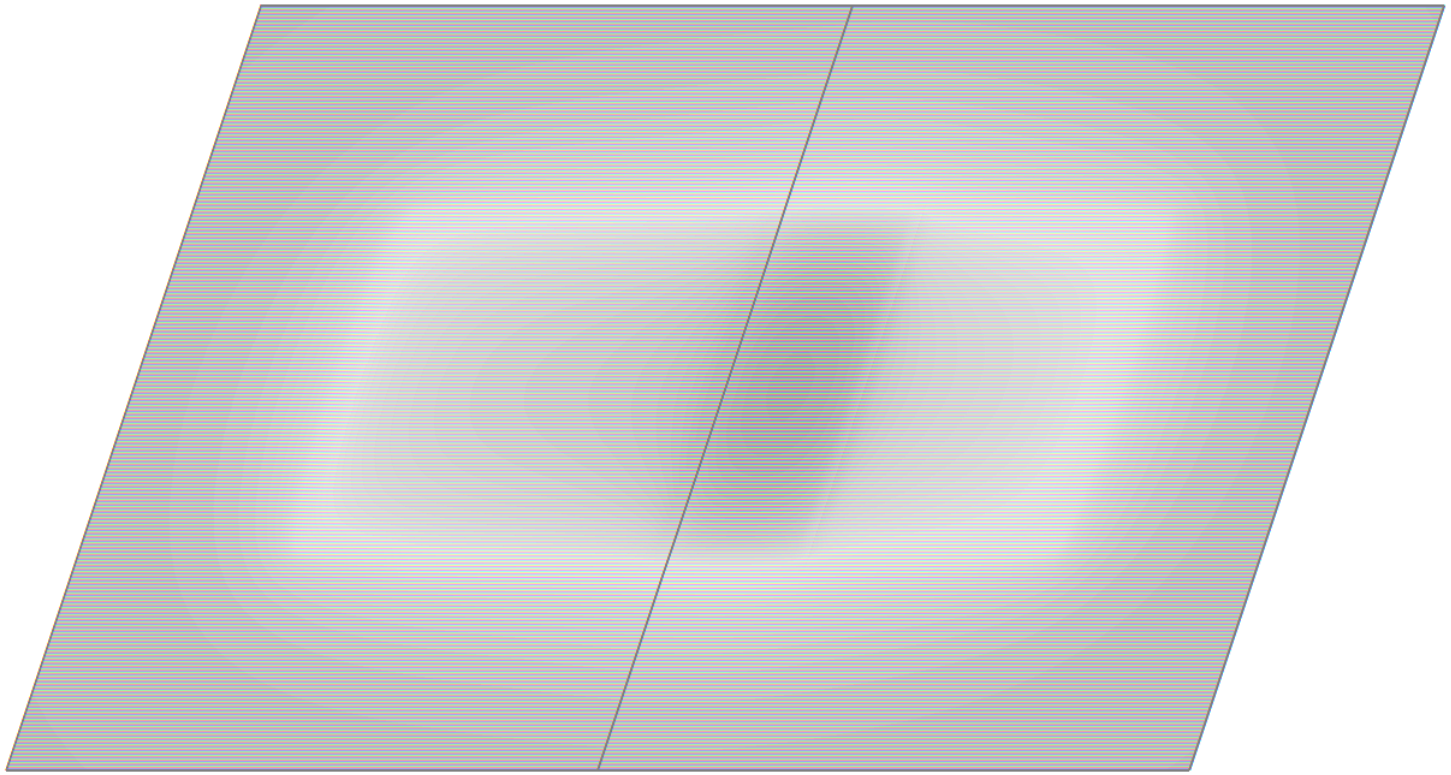
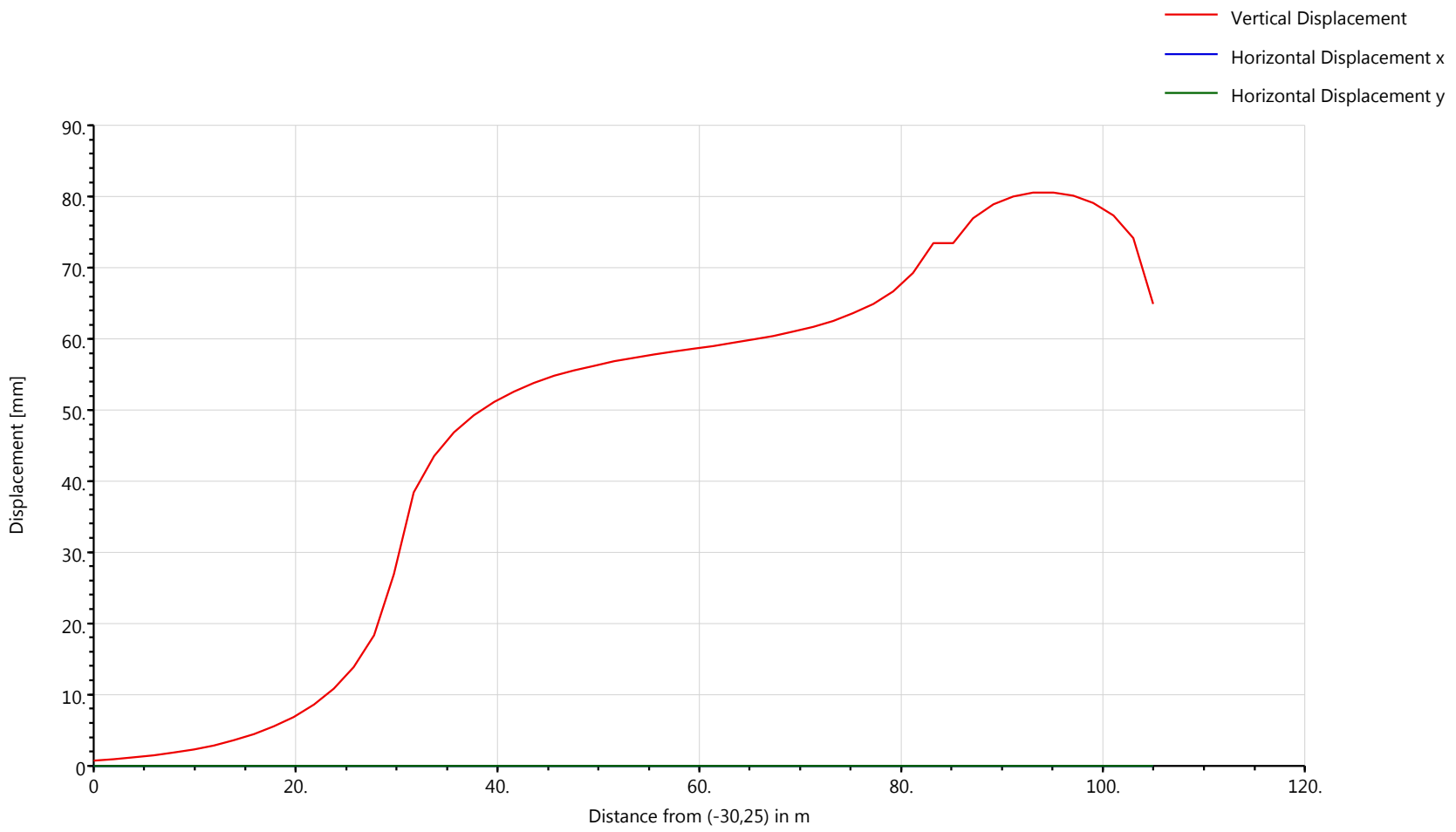
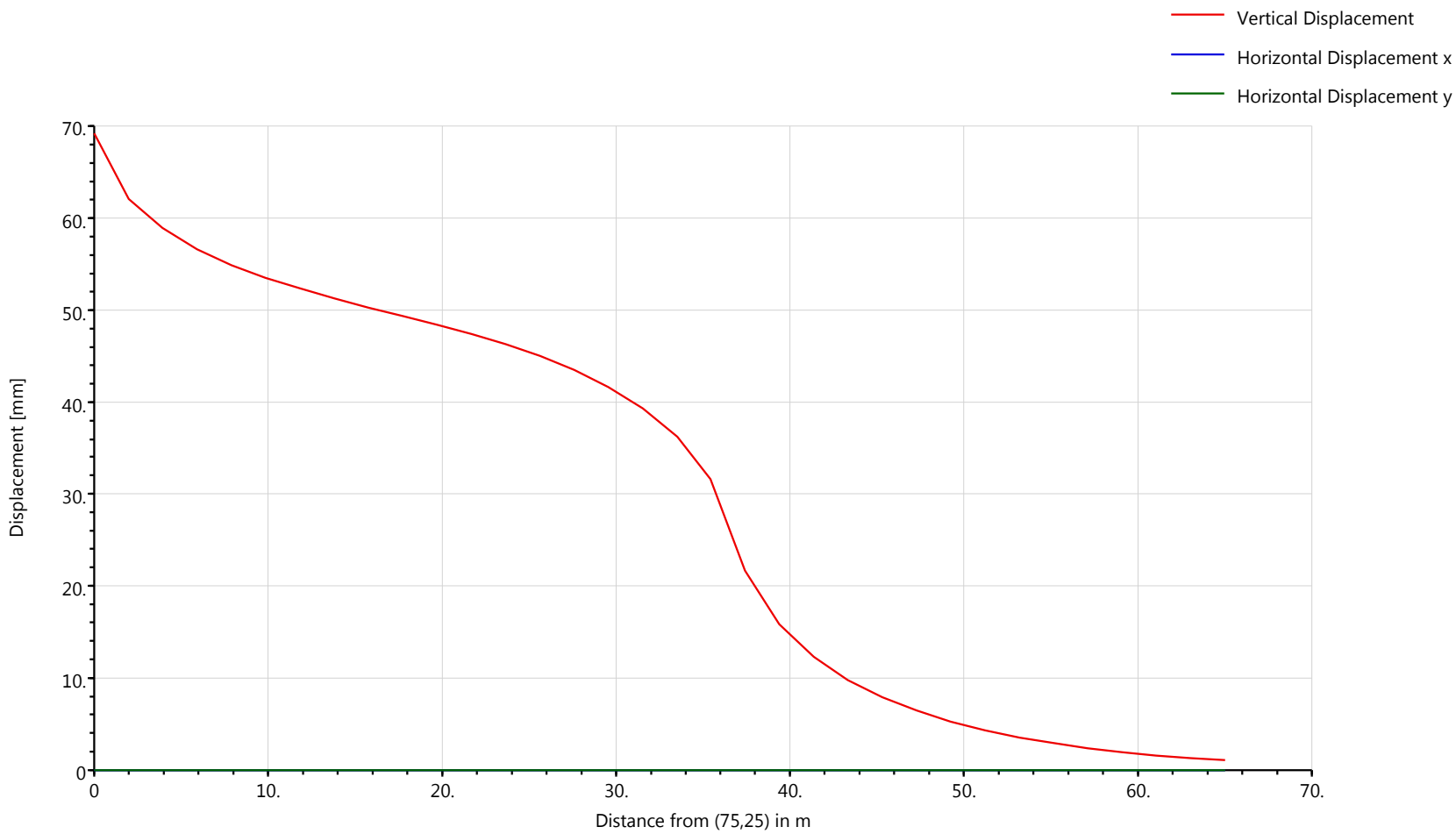


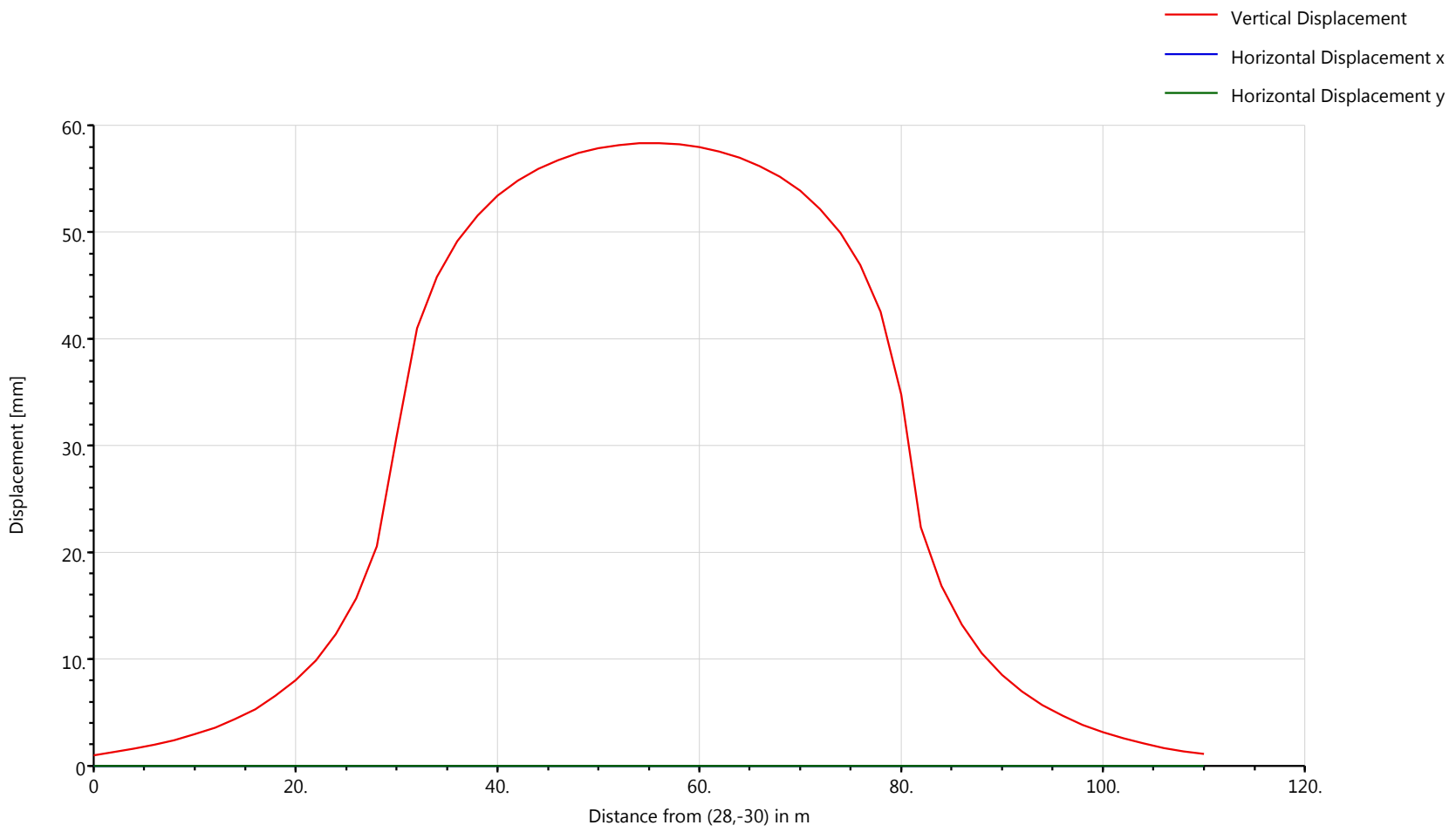
Displacement for Displacement Line 1a



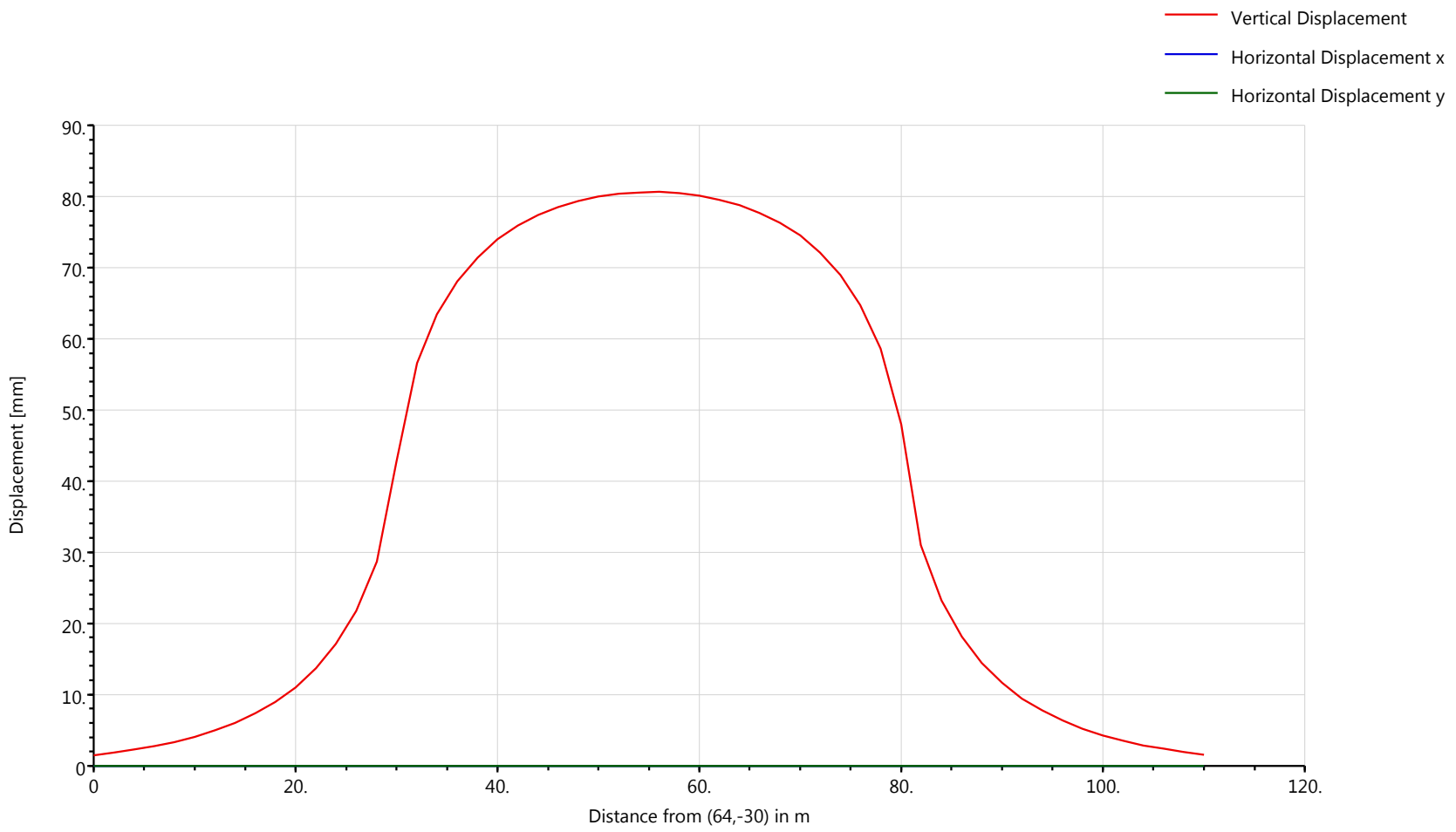
Displacement for Displacement Line 1b



Displacement for Displacement Line 2



Displacement for Displacement Line 3



Displacement for Displacement Line 4