



4041



Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number	1987732	1987733	1987734	1987735	1987736
Sample Reference	WS202	WS202	WS202	WS204	WS204
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	0.60	1.80	0.30	0.60
Date Sampled	23/08/2021	23/08/2021	24/08/2021	23/08/2021	23/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	11	7.5	< 1.0	4.3	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25	25	6.9	15	15
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	2.1	0.51	1.2	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	1.9	< 0.2	0.7	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	27	15	25	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	30	77	6.9	34	45
Lead (aqua regia extractable)	mg/kg	1	MCERTS	650	360	4.8	56	59
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.7	1.5	< 0.3	< 0.3	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	30	13	24	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	39	49	25	42	42
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	220	190	29	110	110

Monaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	9.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	16	56	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	41	130	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	20	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	57	190	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	57	210	< 10	< 10	< 10

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	-	< 1.0	-
Chloroethane	µg/kg	1	NONE	-	-	-	< 1.0	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	< 1.0	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	< 1.0	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	< 1.0	-



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Sample Reference		WS202	WS202	WS202	WS204	WS204
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.30	0.60	1.80	0.30	0.60
Date Sampled		23/08/2021	23/08/2021	24/08/2021	23/08/2021	23/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)		Units	Limit of detection	Accreditation Status		
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0



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Sample Reference	WS202	WS202	WS202	WS204	WS204
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	0.60	1.80	0.30	0.60
Date Sampled	23/08/2021	23/08/2021	24/08/2021	23/08/2021	23/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	< 0.2	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	< 0.2	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	< 0.1	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.37	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	0.35	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	0.19	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	0.24	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.25	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.18	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	0.24	-



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Sample Reference	WS202	WS202	WS202	WS204	WS204
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	0.60	1.80	0.30	0.60
Date Sampled	23/08/2021	23/08/2021	24/08/2021	23/08/2021	23/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-

PCBs

PCB Congener 077	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 081	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 105	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 114	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 118	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 123	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 126	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 156	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 157	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 167	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 169	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-
PCB Congener 189	mg/kg	0.001	NONE	-	< 0.001	-	< 0.001	-

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	-	< 0.012	-	< 0.012	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



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Lab Sample Number		1987737	1987738	1987739	1987740	1987741
Sample Reference		WS204	WS206	WS206	WS206	WS206
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		1.50	0.20	0.60	1.50	2.20
Date Sampled		25/08/2021	23/08/2021	23/08/2021	25/08/2021	25/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.1	11	4.7
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	Not-detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.0	9.3	11.0	8.2	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	< 0.1	0.6	0.1	1.3	0.2

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	-	-	< 0.10	-	-
Resorcinol	mg/kg	0.1	ISO 17025	-	-	< 0.10	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	-	-	< 0.30	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	-	-	< 0.20	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	-	-	< 0.10	-	-
Phenol	mg/kg	0.1	ISO 17025	-	-	< 0.10	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	-	-	< 0.10	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	-	-	< 0.30	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	-	-	< 1.3	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	2.3	0.42	0.97	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.52	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	4.8	1.1	1.9	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	4.3	1.1	1.7	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	2.7	0.57	1.1	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	2.5	0.65	0.92	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	2.9	0.61	1.3	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.4	0.58	0.63	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	2.9	0.79	1.1	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.6	0.45	0.67	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.49	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	1.9	0.52	0.80	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	28.1	6.79	11.0	< 0.80
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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987737	1987738	1987739	1987740	1987741		
Sample Reference		WS204	WS206	WS206	WS206	WS206		
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied		
Depth (m)		1.50	0.20	0.60	1.50	2.20		
Date Sampled		25/08/2021	23/08/2021	23/08/2021	25/08/2021	25/08/2021		
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.6	< 1.0	2.2	5.9	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.6	17	8.6	22	11
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.43	1.2	0.39	1.2	1.5
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.4	0.3	1.0	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	32	15	27	40
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.4	110	23	58	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	6.7	120	21	280	29
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.7	1.6	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	27	13	24	32
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	26	50	33	45	77
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	70	280	57	490	78

Monocyclic Aromatic Hydrocarbons

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	16	< 10	13	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	52	< 10	27	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	26	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	69	< 10	41	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	95	< 10	41	< 10

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	-	-	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	< 1.0	-	-



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987737	1987738	1987739	1987740	1987741
Sample Reference		WS204	WS206	WS206	WS206	WS206
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		1.50	0.20	0.60	1.50	2.20
Date Sampled		25/08/2021	23/08/2021	23/08/2021	25/08/2021	25/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987737	1987738	1987739	1987740	1987741
Sample Reference		WS204	WS206	WS206	WS206	WS206
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		1.50	0.20	0.60	1.50	2.20
Date Sampled		25/08/2021	23/08/2021	23/08/2021	25/08/2021	25/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
SVOCs						
Aniline	mg/kg	0.1	NONE	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	0.42
Anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	1.1
Pyrene	mg/kg	0.05	MCERTS	-	-	1.1
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	0.57
Chrysene	mg/kg	0.05	MCERTS	-	-	0.65
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.61
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.58
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	0.79



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number	1987737	1987738	1987739	1987740	1987741
Sample Reference	WS204	WS206	WS206	WS206	WS206
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.50	0.20	0.60	1.50	2.20
Date Sampled	25/08/2021	23/08/2021	23/08/2021	25/08/2021	25/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-

PCBs

PCB Congener 077	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 081	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 105	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 114	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 118	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 123	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 126	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 156	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 157	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 167	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 169	mg/kg	0.001	NONE	-	-	< 0.001	-	-
PCB Congener 189	mg/kg	0.001	NONE	-	-	< 0.001	-	-

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	-	-	< 0.012	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987742	1987743	1987744	1987745
Sample Reference		WS207	WS207A	TP310	TP310
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.50	0.50	0.30	0.60
Date Sampled		24/08/2021	24/08/2021	24/08/2021	24/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.9	10
Total mass of sample received	kg	0.001	NONE	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.9	8.7	8.9	8.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.1	0.6	0.9	0.6

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	-	-	-	-
Resorcinol	mg/kg	0.1	ISO 17025	-	-	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	-	-	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	-	-	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	-	-	-	-
Phenol	mg/kg	0.1	ISO 17025	-	-	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	-	-	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.1	0.83	0.31
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	2.8	2.0	0.90
Pyrene	mg/kg	0.05	MCERTS	< 0.05	2.4	1.8	0.85
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.5	0.98	0.47
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.95	0.93	0.50
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.2	1.1	0.59
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.70	0.67	0.40
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.2	1.1	0.66
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.63	0.61	0.38
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.74	0.73	0.45

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	13.2	10.7	5.51
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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987742	1987743	1987744	1987745
Sample Reference		WS207	WS207A	TP310	TP310
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.50	0.50	0.30	0.60
Date Sampled		24/08/2021	24/08/2021	24/08/2021	24/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
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Heavy Metals / Metalloids							
Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	6.1	4.4	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	17	12	12
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.25	0.71	0.68	0.61
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.4	0.8	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.7	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	20	18	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.1	30	41	63
Lead (aqua regia extractable)	mg/kg	1	MCERTS	18	460	150	68
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	2.4	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.0	16	14	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	19	38	37	49
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	64	150	110	120

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	50	24	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	48	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	59	30	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	110	30	< 10

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987742	1987743	1987744	1987745
Sample Reference		WS207	WS207A	TP310	TP310
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.50	0.50	0.30	0.60
Date Sampled		24/08/2021	24/08/2021	24/08/2021	24/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
1,1-Dichloroethene	µg/kg	1	NONE	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-
Benzene	µg/kg	1	MCERTS	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-
Toluene	µg/kg	1	MCERTS	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-
Styrene	µg/kg	1	MCERTS	-	-
Tribromomethane	µg/kg	1	NONE	-	-
o-Xylene	µg/kg	1	MCERTS	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number		1987742	1987743	1987744	1987745
Sample Reference		WS207	WS207A	TP310	TP310
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.50	0.50	0.30	0.60
Date Sampled		24/08/2021	24/08/2021	24/08/2021	24/08/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
SVOCs					
Aniline	mg/kg	0.1	NONE	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-



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Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number	1987742	1987743	1987744	1987745
Sample Reference	WS207	WS207A	TP310	TP310
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50	0.50	0.30	0.60
Date Sampled	24/08/2021	24/08/2021	24/08/2021	24/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-

PCBs

PCB Congener 077	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 081	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 105	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 114	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 118	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 123	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 126	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 156	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 157	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 167	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 169	mg/kg	0.001	NONE	-	-	< 0.001	-
PCB Congener 189	mg/kg	0.001	NONE	-	-	< 0.001	-

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	-	-	< 0.012	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 21-95464
Project / Site name: Colt DCS Data Centre Hayes
Your Order No: CL3065

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1987738	WS206	0.20	137	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.



Analytical Report Number: 21-95464

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3065

Lab Sample Number	1987746		
Sample Reference	WS206		
Sample Number	None Supplied		
Depth (m)	0.60		
Date Sampled	23/08/2021		
Time Taken	None Supplied		

Analytical Parameter (Bulk Analysis)	Units	Limit of detection	Accreditation Status
Asbestos Identification	Type	N/A	ISO 17025 Chrysotile - Hard/Cement Type Material

U/S = Unsuitable Sample I/S = Insufficient Sample



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**Analytical Report Number : 21-95464****Project / Site name: Colt DCS Data Centre Hayes**

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1987732	WS202	None Supplied	0.3	Brown loam and sand with gravel and vegetation.
1987733	WS202	None Supplied	0.6	Brown loam and sand with gravel and vegetation.
1987734	WS202	None Supplied	1.8	Brown clay and sand with gravel.
1987735	WS204	None Supplied	0.3	Brown loam and clay with gravel and vegetation.
1987736	WS204	None Supplied	0.6	Brown loam and clay with gravel and vegetation.
1987737	WS204	None Supplied	1.5	Brown sand with gravel and vegetation.
1987738	WS206	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
1987739	WS206	None Supplied	0.6	Brown loam and sand with gravel and vegetation.
1987740	WS206	None Supplied	1.5	Brown clay and loam with gravel and vegetation.
1987741	WS206	None Supplied	2.2	Brown clay and loam with gravel and vegetation.
1987742	WS207	None Supplied	0.5	Brown loam and sand with gravel and vegetation.
1987743	WS207A	None Supplied	0.5	Brown loam and sand with gravel and vegetation.
1987744	TP310	None Supplied	0.3	Brown clay and loam with gravel and vegetation.
1987745	TP310	None Supplied	0.6	Brown clay and loam with gravel and vegetation.



4041 MCERTS

**Analytical Report Number : 21-95464****Project / Site name: Colt DCS Data Centre Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in Bulks	Asbestos Identification in bulk material with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	W	ISO 17025
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE



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**Analytical Report Number : 21-95464****Project / Site name: Colt DCS Data Centre Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.****Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**



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Analytical Report Number : 21-95468

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	25/08/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	27/08/2021
Your order number:	CL3065	Analysis completed by:	03/09/2021
Report Issue Number:	1	Report issued on:	03/09/2021
Samples Analysed:	7 leachate samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



i2 Analytical

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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes				Landfill Waste Acceptance Criteria	
Lab Reference (Sample Number)	1987769				Limits	
Sampling Date	23/08/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Sample ID	WS202				Hazardous Waste Landfill	
Depth (m)	0.60					
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0110			0.0933	0.5	2
Barium *	0.0185			0.157	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0054			0.046	0.5	10
Copper *	0.011			0.093	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0055			0.0464	0.5	10
Nickel *	0.0041			0.035	0.4	10
Lead *	0.0086			0.073	0.5	10
Antimony *	0.010			0.086	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.014			0.11	4	50
Chloride *	4.8			41	800	15000
Fluoride	0.68			5.8	10	150
Sulphate *	24			200	1000	20000
TDS*	89			750	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	9.63			81.3	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.	*= UKAS accredited (liquid eluate analysis only)					
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation	** = MCERTS accredited					

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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	1987770				Landfill Waste Acceptance Criteria	
Sampling Date	23/08/2021				Limits	
Sample ID	WS204				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	0.30				Hazardous Waste Landfill	
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0023			0.0210	0.5	2
Barium *	0.0119			0.106	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0031			0.027	0.5	10
Copper *	0.0044			0.039	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0065			0.0578	0.5	10
Nickel *	0.0031			0.028	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0047			0.042	4	50
Chloride *	1.3			12	800	15000
Fluoride	0.78			7.0	10	150
Sulphate *	4.8			43	1000	20000
TDS*	58			520	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	12.4			111	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	1987771				Landfill Waste Acceptance Criteria	
Sampling Date	23/08/2021				Limits	
Sample ID	WS204				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	0.60				Hazardous Waste Landfill	
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0034			0.0304	0.5	2
Barium *	0.0114			0.102	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0026			0.023	0.5	10
Copper *	0.0051			0.045	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0031			0.028	0.4	10
Lead *	0.0026			0.023	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0058			0.052	4	50
Chloride *	1.4			12	800	15000
Fluoride	0.24			2.1	10	150
Sulphate *	10			90	1000	20000
TDS*	57			500	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	10.8			95.8	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	1987772				Landfill Waste Acceptance Criteria	
Sampling Date	23/08/2021				Limits	
Sample ID	WS206				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	0.60				Hazardous Waste Landfill	
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.0010			< 0.0100	0.5	2
Barium *	0.0129			0.120	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.012			0.12	0.5	10
Copper *	0.0023			0.022	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0017			0.016	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0072			0.067	4	50
Chloride *	3.3			31	800	15000
Fluoride	0.12			1.1	10	150
Sulphate *	26			240	1000	20000
TDS*	160			1400	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	3.23			30.1	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	1987773				Landfill Waste Acceptance Criteria	
Sampling Date	23/08/2021				Limits	
Sample ID	WS206				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	1.50				Hazardous Waste Landfill	
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.0010			< 0.0100	0.5	2
Barium *	0.0187			0.150	20	300
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0021			0.017	0.5	10
Copper *	0.0098			0.078	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0037			0.029	0.4	10
Lead *	0.0084			0.067	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0091			0.073	4	50
Chloride *	2.0			16	800	15000
Fluoride	0.87			7.0	10	150
Sulphate *	7.3			58	1000	20000
TDS*	48			390	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	17.8			143	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	1987774				Landfill Waste Acceptance Criteria	
Sampling Date	23/08/2021				Limits	
Sample ID	WS207				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	0.50					Hazardous Waste Landfill
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0050			0.0476	0.5	2
Barium *	0.0493			0.470	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	< 0.0004			< 0.0040	0.5	10
Copper *	0.0013			0.012	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0024			0.023	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0027			0.026	4	50
Chloride *	0.94			8.9	800	15000
Fluoride	0.10			0.98	10	150
Sulphate *	3.7			35	1000	20000
TDS*	39			370	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	6.76			64.3	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
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Waste Acceptance Criteria Analytical Results

Report No:	21-95468					
					Client: CONCEPT	
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	1987775				Landfill Waste Acceptance Criteria	
Sampling Date	23/08/2021				Limits	
Sample ID	TP310				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	0.60				Hazardous Waste Landfill	
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0015			0.0131	0.5	2
Barium *	0.0099			0.0892	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0008			0.0068	0.5	10
Copper *	0.0036			0.033	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0031			0.028	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	0.010			0.091	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0072			0.064	4	50
Chloride *	1.1			9.5	800	15000
Fluoride	0.094			0.84	10	150
Sulphate *	2.1			19	1000	20000
TDS*	46			410	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	11.2			101	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
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Analytical Report Number : 21-95468

Project / Site name: Colt DCS Data Centre Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1 ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-97909

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	03/09/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	08/09/2021
Your order number:	CL3091	Analysis completed by:	16/09/2021
Report Issue Number:	1	Report issued on:	16/09/2021
Samples Analysed:	2 soil samples		

Signed: *A. Czerwińska*

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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**Analytical Report Number: 21-97909****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3091**

Lab Sample Number		2002414	2002415		
Sample Reference		BH105	BH105		
Sample Number		None Supplied	None Supplied		
Depth (m)		0.30	0.60		
Date Sampled		02/09/2021	02/09/2021		
Time Taken		None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	2.4	6.4
Total mass of sample received	kg	0.001	NONE	0.90	0.90

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.4	9.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	2.5	0.2

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	-	< 0.10
Resorcinol	mg/kg	0.1	ISO 17025	-	< 0.10
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	-	< 0.30
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	-	< 0.20
2-Isopropylphenol	mg/kg	0.1	ISO 17025	-	< 0.10
Phenol	mg/kg	0.1	ISO 17025	-	< 0.10
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	-	< 0.10
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	-	< 0.30

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	-	< 1.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80
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**Analytical Report Number: 21-97909****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3091**

Lab Sample Number	2002414	2002415			
Sample Reference	BH105	BH105			
Sample Number	None Supplied	None Supplied			
Depth (m)	0.30	0.60			
Date Sampled	02/09/2021	02/09/2021			
Time Taken	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.2	8.9
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.25	0.76
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	1.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.7	10
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14	39
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.1	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	15	25
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	45	39

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	8.4	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	150	26
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	400	85
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	160	26
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	550	110

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	13	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	320	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	530	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	330	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	870	< 10



Analytical Report Number: 21-97909

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3091

Lab Sample Number		2002414	2002415
Sample Reference		BH105	BH105
Sample Number		None Supplied	None Supplied
Depth (m)		0.30	0.60
Date Sampled		02/09/2021	02/09/2021
Time Taken		None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status

PCBs

PCB Congener 077	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 081	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 105	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 114	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 118	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 123	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 126	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 156	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 157	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 167	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 169	mg/kg	0.001	NONE	-	< 0.001
PCB Congener 189	mg/kg	0.001	NONE	-	< 0.001

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	-	< 0.012
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U/S = Unsuitable Sample I/S = Insufficient Sample



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**Analytical Report Number : 21-97909****Project / Site name: Colt DCS Data Centre, Hayes**

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2002414	BH105	None Supplied	0.3	Brown loam and sand with rubble and brick.
2002415	BH105	None Supplied	0.6	Brown loam and sand with rubble and brick.



Analytical Report Number : 21-97909

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE



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**Analytical Report Number : 21-97909****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Ana Gonzalez**

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Analytical Report Number : 21-97910

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	03/09/2021
Your job number:		Samples instructed on / Analysis started on:	08/09/2021
Your order number:	CL3091	Analysis completed by:	15/09/2021
Report Issue Number:	1	Report issued on:	15/09/2021
Samples Analysed:	1 10:1 WAC sample		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

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soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-97910					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2002420			Limits		
Sampling Date	02/09/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	BH105					
Depth (m)	0.60					
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0044			0.0394	0.5	2
Barium *	0.0313			0.282	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0040			0.036	0.5	10
Copper *	0.013			0.12	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0054			0.0487	0.5	10
Nickel *	0.0018			0.016	0.4	10
Lead *	0.0021			0.019	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0035			0.031	4	50
Chloride *	2.8			25	800	15000
Fluoride	0.78			7.1	10	150
Sulphate *	970			8700	1000	20000
TDS*	750			6800	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	3.50			31.5	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-97910

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-98236

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	07/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	09/09/2021
Your order number:	CL3100	Analysis completed by:	20/09/2021
Report Issue Number:	1	Report issued on:	20/09/2021
Samples Analysed:	4 soil samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



4041

**Analytical Report Number: 21-98236****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3100**

Lab Sample Number	2004220	2004221	2004222	2004223
Sample Reference	BH102B	BH104	BH104	BH104
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	2.00	0.30	0.70	1.30
Date Sampled	06/09/2021	06/09/2021	06/09/2021	06/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	5.3
Total mass of sample received	kg	0.001	NONE	1.5
				1.5
				1.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.8	9.9	8.1	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.6	0.5	1.4	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.45	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.11	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.63	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.65	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.34	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.24	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.37	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.11	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.35	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.17	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.21	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	3.63	< 0.80	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	2.9	3.7	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.7	13	11	12
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.63	0.71	0.69	0.60
Boron (water soluble)	mg/kg	0.2	MCERTS	2.9	0.8	0.8	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	21	28	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	16	15	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	32	25	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	15	13	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	33	35	48	29
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	65	65	32



4041 MCERTS



Analytical Report Number: 21-98236

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3100

Lab Sample Number		2004220	2004221	2004222	2004223
Sample Reference		BH102B	BH104	BH104	BH104
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		2.00	0.30	0.70	1.30
Date Sampled		06/09/2021	06/09/2021	06/09/2021	06/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	7.8	8.5	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	19	18	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	56	51	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	35	26	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	83	78	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	120	100	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	17	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	25	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	25	< 10	< 10

PCBs

PCB Congener 077	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 081	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 105	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 114	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 118	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 123	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 126	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 156	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 157	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 167	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 169	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-
PCB Congener 189	mg/kg	0.001	NONE	-	< 0.001	< 0.001	-

Total PCBs - WHO12

Total PCBs	mg/kg	0.012	NONE	-	< 0.012	< 0.012	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



4041 MCERTS



Analytical Report Number : 21-98236

Project / Site name: Colt DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2004220	BH102B	None Supplied	2	Brown gravel with vegetation.**
2004221	BH104	None Supplied	0.3	Brown loam and sand with gravel and vegetation.
2004222	BH104	None Supplied	0.7	Brown clay and sand.
2004223	BH104	None Supplied	1.3	Brown sandy clay with gravel.

**Non MCERTS Matrix.



4041

**Analytical Report Number : 21-98236****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**



4041 MCERTS



Analytical Report Number : 21-98236

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Kasia Mazerant**

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Analytical Report Number : 21-98241

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	07/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	09/09/2021
Your order number:	CL3100	Analysis completed by:	15/09/2021
Report Issue Number:	1	Report issued on:	15/09/2021
Samples Analysed:	2 leachate samples		

Izabela Wójcik
Signed:

Izabela Wójcik
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-98241					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2004242			Limits		
Sampling Date	06/09/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	BH104					
Depth (m)	0.30					
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0039			0.0364	0.5	2
Barium *	0.0181			0.168	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0046			0.043	0.5	10
Copper *	0.010			0.095	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0026			0.024	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0032			0.030	4	50
Chloride *	1.1			11	800	15000
Fluoride	0.13			1.2	10	150
Sulphate *	22			210	1000	20000
TDS*	140			1300	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	5.75			53.2	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-98241					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2004243			Limits		
Sampling Date	06/09/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	BH104					
Depth (m)	0.70					
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0076			0.0666	0.5	2
Barium *	0.0132			0.115	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0016			0.014	0.5	10
Copper *	0.0061			0.053	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0031			0.027	0.4	10
Lead *	0.0018			0.016	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0046			0.040	4	50
Chloride *	0.97			8.5	800	15000
Fluoride	0.10			0.91	10	150
Sulphate *	15			130	1000	20000
TDS*	66			580	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	6.45			56.5	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-98241

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1 ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-98624

Replaces Analytical Report Number: 21-98624, issue no. 1
Client references/information amended.

Project / Site name:	Cold DCS Data Centre, Hayes	Samples received on:	09/09/2021
Your job number:	21 3600	Samples instructed on / Analysis started on:	13/09/2021
Your order number:	CL3107	Analysis completed by:	04/10/2021
Report Issue Number:	2	Report issued on:	04/10/2021
Samples Analysed:	2 soil samples		

Signed: *A. Czerwińska*

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-98624
Project / Site name: Cold DCS Data Centre, Hayes
Your Order No: CL3107

Lab Sample Number		2006168	2006169
Sample Reference		BH105	BH105
Sample Number		None Supplied	None Supplied
Depth (m)		1.20-1.50	2.50-3.00
Date Sampled		07/09/2021	07/09/2021
Time Taken		None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status
Stone Content	%	0.1	NONE
Moisture Content	%	0.01	NONE
Total mass of sample received	kg	0.001	NONE

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.0	0.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benz(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	12
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.96	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	2.6	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	33	48
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	45	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	40
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	93
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	73	77

Analytical Report Number: 21-98624

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3107

Lab Sample Number		2006168	2006169
Sample Reference		BH105	BH105
Sample Number		None Supplied	None Supplied
Depth (m)		1.20-1.50	2.50-3.00
Date Sampled		07/09/2021	07/09/2021
Time Taken		None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-98624
Project / Site name: Cold DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2006168	BH105	None Supplied	1.20-1.50	Brown clay and loam with gravel.
2006169	BH105	None Supplied	2.50-3.00	Brown clay.



4041

**Analytical Report Number : 21-98624****Project / Site name: Cold DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.****Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

**Kasia Mazerant**

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Analytical Report Number : 21-98626

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	09/09/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	13/09/2021
Your order number:	CL3107	Analysis completed by:	17/09/2021
Report Issue Number:	1	Report issued on:	17/09/2021
Samples Analysed:	2 leachate samples		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-98626					
					Client: CONCEPT	
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2006176				Landfill Waste Acceptance Criteria	
Sampling Date	07/09/2021				Limits	
Sample ID	BH105				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	1.20-1.50					Hazardous Waste Landfill
Solid Waste Analysis						
TOC (**) **	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units) **	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.0010			< 0.0100	0.5	2
Barium *	0.0290			0.240	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0012			0.010	0.5	10
Copper *	0.010			0.085	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0119			0.0984	0.5	10
Nickel *	0.0072			0.059	0.4	10
Lead *	0.0020			0.017	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0098			0.081	4	50
Chloride *	5.5			45	800	15000
Fluoride	0.65			5.4	10	150
Sulphate *	22			180	1000	20000
TDS*	49			410	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	32.2			266	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.	*= UKAS accredited (liquid eluate analysis only)					
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation	** = MCERTS accredited					

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-98626					
					Client: CONCEPT	
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2006177				Landfill Waste Acceptance Criteria	
Sampling Date	07/09/2021				Limits	
Sample ID	BH105				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Depth (m)	2.50-3.00					Hazardous Waste Landfill
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0018			0.0142	0.5	2
Barium *	0.0305			0.241	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0006			0.0044	0.5	10
Copper *	0.0068			0.054	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0040			0.032	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.014			0.11	4	50
Chloride *	4.5			36	800	15000
Fluoride	0.86			6.8	10	500
Sulphate *	43			340	1000	20000
TDS*	110			840	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	9.17			72.4	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
* = UKAS accredited (liquid eluate analysis only)						
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation						
** = MCERTS accredited						

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-98626

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1 ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-99225

Replaces Analytical Report Number: 21-99225, issue no. 1
Additional analysis undertaken.

Project / Site name:	Colt DSC Data Centre, Hayes	Samples received on:	13/09/2021
Your job number:	21-3600	Samples instructed on/ Analysis started on:	14/09/2021
Your order number:	CL3114	Analysis completed by:	11/10/2021
Report Issue Number:	2	Report issued on:	11/10/2021
Samples Analysed:	5 soil samples		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-99225

Project / Site name: Colt DSC Data Centre, Hayes

Your Order No: CL3114

Lab Sample Number	2009982	2009983	2009984	2009985	2009986
Sample Reference	WS208	WS208	WS208	WS213	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.40	1.00-1.20	2.40	0.30	1.00
Date Sampled	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	4.0	7.8
Total mass of sample received	kg	0.001	NONE	0.50	0.50
				1.4	0.50
					1.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	< 0.001	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.8	8.6	8.2	10.8	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.4	0.2	0.2	0.7	0.4

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	-	-	-
Resorcinol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	-	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	< 0.30	< 0.30	-	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	< 0.20	< 0.20	-	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	-	-	-
Phenol	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	-	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	< 0.10	< 0.10	-	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	< 0.30	< 0.30	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	< 1.3	< 1.3	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.61	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.85	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.84	< 0.05
Benz(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.57	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.41	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.53	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.25	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.52	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.23	< 0.05
Diben(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.28	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	5.09	< 0.80
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Analytical Report Number: 21-99225

Project / Site name: Colt DSC Data Centre, Hayes

Your Order No: CL3114

Lab Sample Number	2009982	2009983	2009984	2009985	2009986
Sample Reference	WS208	WS208	WS208	WS213	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.40	1.00-1.20	2.40	0.30	1.00
Date Sampled	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.3	12	11	17	8.5
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.32	0.61	0.68	0.44	0.39
Boron (water soluble)	mg/kg	0.2	MCERTS	1.0	< 0.2	0.4	1.9	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	< 0.2	< 0.2	0.6	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	18	19	17	59
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	8.9	9.2	12	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	33	6.7	8.7	61	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.9	15	18	11	34
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	16	32	29	23	22
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	79	33	37	91	31

Monaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10



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MCERTS

**Analytical Report Number: 21-99225****Project / Site name: Colt DSC Data Centre, Hayes****Your Order No: CL3114**

Lab Sample Number	2009982	2009983	2009984	2009985	2009986
Sample Reference	WS208	WS208	WS208	WS213	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.40	1.00-1.20	2.40	0.30	1.00
Date Sampled	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
PCBs					
PCB Congener 077	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 081	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 105	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 114	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 118	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 123	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 126	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 156	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 157	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 167	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 169	mg/kg	0.001	NONE	< 0.001	< 0.001
PCB Congener 189	mg/kg	0.001	NONE	< 0.001	< 0.001

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	< 0.012	< 0.012	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 21-99225

Project / Site name: Colt DSC Data Centre, Hayes

Your Order No: CL3114

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2009985	WS213	0.30	128	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.



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Analytical Report Number : 21-99225

Project / Site name: Colt DSC Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2009982	WS208	None Supplied	0.4	Brown loam and sand with gravel and vegetation.
2009983	WS208	None Supplied	1.00-1.20	Brown sand with gravel.
2009984	WS208	None Supplied	2.4	Brown sandy clay with gravel.
2009985	WS213	None Supplied	0.3	Brown loam and sand with gravel and vegetation.
2009986	WS213	None Supplied	1	Brown loam and clay with gravel.



4041 MCERTS

**Analytical Report Number : 21-99225****Project / Site name: Colt DSC Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025



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MCERTS

**Analytical Report Number : 21-99225****Project / Site name: Colt DSC Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.****Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

**Ana Gonzalez**

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Analytical Report Number : 21-99228

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	13/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	14/09/2021
Your order number:	CL3114	Analysis completed by:	21/09/2021
Report Issue Number:	1	Report issued on:	21/09/2021
Samples Analysed:	3 leachate samples		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-99228			Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2009993			Limits		
Sampling Date	10/09/2021	Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill		
Sample ID	WS208					
Depth (m)	0.40					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1		10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg			
Arsenic *	< 0.0010		< 0.0100	0.5	2	25
Barium *	0.103		0.972	20	100	300
Cadmium *	< 0.0001		< 0.0008	0.04	1	5
Chromium *	0.0087		0.082	0.5	10	70
Copper *	0.0064		0.060	2	50	100
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004		< 0.0040	0.5	10	30
Nickel *	0.0025		0.023	0.4	10	40
Lead *	< 0.0010		< 0.010	0.5	10	50
Antimony *	< 0.0017		< 0.017	0.06	0.7	5
Selenium *	< 0.0040		< 0.040	0.1	0.5	7
Zinc *	0.0048		0.046	4	50	200
Chloride *	0.97		9.1	800	15000	25000
Fluoride	0.15		1.4	10	150	500
Sulphate *	23		220	1000	20000	50000
TDS*	240		2200	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	3.59		33.7	500	800	1000
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-99228					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2009994			Limits		
Sampling Date	10/09/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS208					
Depth (m)	1.00-1.20					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.0010			< 0.0100	0.5	2
Barium *	0.0082			0.0748	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0009			0.0078	0.5	10
Copper *	0.0059			0.053	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0032			0.030	0.4	10
Lead *	0.0015			0.014	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0039			0.036	4	50
Chloride *	1.6			15	800	15000
Fluoride	0.17			1.6	10	150
Sulphate *	3.0			27	1000	20000
TDS*	24			220	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	7.05			64.0	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.	*= UKAS accredited (liquid eluate analysis only)					
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation	** = MCERTS accredited					

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-99228			Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2009995			Limits		
Sampling Date	10/09/2021	Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill		
Sample ID	WS213					
Depth (m)	0.30					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1		10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg			
Arsenic *	< 0.0010		< 0.0100	0.5	2	25
Barium *	0.134		1.23	20	100	300
Cadmium *	< 0.0001		< 0.0008	0.04	1	5
Chromium *	0.011		0.099	0.5	10	70
Copper *	0.011		0.10	2	50	100
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004		< 0.0040	0.5	10	30
Nickel *	0.0021		0.020	0.4	10	40
Lead *	< 0.0010		< 0.010	0.5	10	50
Antimony *	0.0064		0.058	0.06	0.7	5
Selenium *	< 0.0040		< 0.040	0.1	0.5	7
Zinc *	0.0034		0.032	4	50	200
Chloride *	1.9		18	800	15000	25000
Fluoride	0.13		1.2	10	150	500
Sulphate *	18		160	1000	20000	50000
TDS*	640		5900	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	3.71		34.1	500	800	1000
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-99228

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-10257

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	15/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	16/09/2021
Your order number:	CL3117	Analysis completed by:	27/09/2021
Report Issue Number:	1	Report issued on:	27/09/2021
Samples Analysed:	8 soil samples		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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**Analytical Report Number: 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3117**

Lab Sample Number	2012796	2012797	2012798	2012799	2012800
Sample Reference	WS213	WS213	WS214	WS214	WS215
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.55	2.70	0.30	1.00	0.60
Date Sampled	13/09/2021	13/09/2021	13/09/2021	14/09/2021	14/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.1	14
Total mass of sample received	kg	0.001	NONE	1.0	1.0
Asbestos in Soil	Type	N/A	ISO 17025	-	-
				Not-detected	Not-detected
				Not-detected	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8.4	11.5	10.1	9.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	< 0.1	< 0.1	0.3	0.8	1.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39	0.47	0.83
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.10
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.77	1.0	1.7
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.70	0.93	1.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.31	0.58	1.1
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.40	0.47	0.81
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39	0.68	1.6
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.20	0.30	1.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.36	0.63	0.88
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.21	0.39	0.58
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.22
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.26	0.51	0.74

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	3.99	5.96	11.5
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	3.4	5.7
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.0	6.2	9.1	15	15
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.41	0.51	0.51	0.85	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	< 0.2	0.9	0.8	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.7	0.7
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	18	23	39	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	6.0	7.2	25	36	120
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.4	5.0	28	69	240
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.3	14	14	27	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	28	21	34	41	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	26	26	72	2000	470



4041 MCERTS

**Analytical Report Number: 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3117**

Lab Sample Number	2012796	2012797	2012798	2012799	2012800
Sample Reference	WS213	WS213	WS214	WS214	WS215
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.55	2.70	0.30	1.00	0.60
Date Sampled	13/09/2021	13/09/2021	13/09/2021	14/09/2021	14/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.1
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	3.0	4.9
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	9.6
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	14	26	26
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	20	14
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	20	36	41
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	20	56	55

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	11	13	17
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	15	18	24
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	15	18	24

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	-	-	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-



4041



Analytical Report Number: 21-10257

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3117

Lab Sample Number		2012796	2012797	2012798	2012799	2012800
Sample Reference		WS213	WS213	WS214	WS214	WS215
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		1.55	2.70	0.30	1.00	0.60
Date Sampled		13/09/2021	13/09/2021	13/09/2021	14/09/2021	14/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-



4041 MCERTS

**Analytical Report Number: 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3117**

Lab Sample Number		2012796	2012797	2012798	2012799	2012800
Sample Reference		WS213	WS213	WS214	WS214	WS215
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		1.55	2.70	0.30	1.00	0.60
Date Sampled		13/09/2021	13/09/2021	13/09/2021	14/09/2021	14/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	0.39
Anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	0.77
Pyrene	mg/kg	0.05	MCERTS	-	-	0.70
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	0.31
Chrysene	mg/kg	0.05	MCERTS	-	-	0.40
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.39
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.20
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	0.36
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	0.21
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	0.26

U/S = Unsuitable Sample I/S = Insufficient Sample



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**Analytical Report Number: 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3117**

Lab Sample Number		2012801	2012802	2012803
Sample Reference		TP306	WS205	WS205A
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.80	0.50	0.20
Date Sampled		14/09/2021	14/09/2021	14/09/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	10
Total mass of sample received	kg	0.001	NONE	1.0
				1.0
				1.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.1	8.8	8.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.6	1.1	0.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.60	0.33	0.48
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.1	0.91	1.4
Pyrene	mg/kg	0.05	MCERTS	1.1	0.91	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.55	0.52	1.0
Chrysene	mg/kg	0.05	MCERTS	0.63	0.43	0.80
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.76	0.58	1.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.30	0.29	0.52
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.69	0.55	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.40	0.38	0.59
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.61	0.43	0.76

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	6.74	5.33	9.18
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	7.1	13
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.94	0.31	0.63
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	< 0.2	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	1.0	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	13	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	41	19	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	83	39	60
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	1.0
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	8.4	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47	15	37
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	73	75



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**Analytical Report Number: 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3117**

Lab Sample Number		2012801	2012802	2012803
Sample Reference		TP306	WS205	WS205A
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.80	0.50	0.20
Date Sampled		14/09/2021	14/09/2021	14/09/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Monoaromatics & Oxygenates				
Benzene	µg/kg	1	MCERTS	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	9.7	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	16	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	20	21	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	40	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	46	21	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	46	61	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	59	15
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	140	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	61	22
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	200	22

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-



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Analytical Report Number: 21-10257

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3117

Lab Sample Number		2012801	2012802	2012803
Sample Reference		TP306	WS205	WS205A
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.80	0.50	0.20
Date Sampled		14/09/2021	14/09/2021	14/09/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Bromodichloromethane	µg/kg	1	MCERTS	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-
Toluene	µg/kg	1	MCERTS	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-
Dibromochloromethane	µg/kg	1	ISO 17025	-
Tetrachloroethene	µg/kg	1	NONE	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-
Chlorobenzene	µg/kg	1	MCERTS	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-
Ethylbenzene	µg/kg	1	MCERTS	-
p & m-Xylene	µg/kg	1	MCERTS	-
Styrene	µg/kg	1	MCERTS	-
Tribromomethane	µg/kg	1	NONE	-
o-Xylene	µg/kg	1	MCERTS	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-
Isopropylbenzene	µg/kg	1	MCERTS	-
Bromobenzene	µg/kg	1	MCERTS	-
n-Propylbenzene	µg/kg	1	ISO 17025	-
2-Chlorotoluene	µg/kg	1	MCERTS	-
4-Chlorotoluene	µg/kg	1	MCERTS	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-
tert-Butylbenzene	µg/kg	1	MCERTS	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-
sec-Butylbenzene	µg/kg	1	MCERTS	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-
Butylbenzene	µg/kg	1	MCERTS	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-



4041 MCERTS

**Analytical Report Number: 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3117**

Lab Sample Number		2012801	2012802	2012803
Sample Reference		TP306	WS205	WS205A
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.80	0.50	0.20
Date Sampled		14/09/2021	14/09/2021	14/09/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-
Naphthalene	mg/kg	0.05	MCERTS	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-
4-Chloroaniline	mg/kg	0.1	NONE	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-
Acenaphthylene	mg/kg	0.05	MCERTS	-
Acenaphthene	mg/kg	0.05	MCERTS	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-
Dibenzofuran	mg/kg	0.2	MCERTS	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-
Fluorene	mg/kg	0.05	MCERTS	-
Azobenzene	mg/kg	0.3	MCERTS	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-
Phenanthrene	mg/kg	0.05	MCERTS	-
Anthracene	mg/kg	0.05	MCERTS	-
Carbazole	mg/kg	0.3	MCERTS	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-
Anthraquinone	mg/kg	0.3	MCERTS	-
Fluoranthene	mg/kg	0.05	MCERTS	-
Pyrene	mg/kg	0.05	MCERTS	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-
Chrysene	mg/kg	0.05	MCERTS	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number : 21-10257

Project / Site name: Colt DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2012796	WS213	None Supplied	1.55	Brown sandy clay with gravel.
2012797	WS213	None Supplied	2.7	Brown sand.
2012798	WS214	None Supplied	0.3	Brown loam and sand with concrete and gravel
2012799	WS214	None Supplied	1	Brown loam and sand with vegetation and gravel.
2012800	WS215	None Supplied	0.6	Brown loam and clay with gravel and vegetation.
2012801	TP306	None Supplied	0.8	Brown loam and clay with gravel.
2012802	WS205	None Supplied	0.5	Brown clay and sand with gravel.
2012803	WS205A	None Supplied	0.2	Brown loam and sand with gravel.



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MCERTS

**Analytical Report Number : 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE



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**Analytical Report Number : 21-10257****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-10263

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	15/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	16/09/2021
Your order number:	CL3117	Analysis completed by:	22/09/2021
Report Issue Number:	1	Report issued on:	22/09/2021
Samples Analysed:	4 leachate samples		

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-10263					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2012845			Landfill Waste Acceptance Criteria		
Sampling Date	13/09/2021			Limits		
Sample ID	WS213			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	1.55					
Solid Waste Analysis						
TOC (**)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (ug/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.010			< 0.0100	0.5	2
Barium *	0.0066			0.0590	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0006			0.0055	0.5	10
Copper *	0.0023			0.020	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0034			0.031	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0041			0.037	4	50
Chloride *	1.8			16	800	15000
Fluoride	0.11			0.97	10	150
Sulphate *	6.3			56	1000	20000
TDS*	24			210	4000	60000
Phenol Index (Monohydric Phenols) *	0.015			0.13	1	-
DOC	9.15			81.6	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.	*= UKAS accredited (liquid eluate analysis only)					
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation	** = MCERTS accredited					

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-10263					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2012846			Landfill Waste Acceptance Criteria		
Sampling Date	13/09/2021			Limits		
Sample ID	WS214			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.30					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.010			< 0.0100	0.5	2
Barium *	0.0201			0.186	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0087			0.081	0.5	10
Copper *	0.022			0.21	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0025			0.0230	0.5	10
Nickel *	0.0039			0.036	0.4	10
Lead *	0.0032			0.030	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0049			0.045	4	50
Chloride *	5.0			47	800	15000
Fluoride	0.13			1.2	10	150
Sulphate *	82			760	1000	20000
TDS*	350			3200	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	7.08			65.7	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				*= UKAS accredited (liquid eluate analysis only)		
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Waste Acceptance Criteria Analytical Results

Report No:	21-10263					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2012847			Landfill Waste Acceptance Criteria		
Sampling Date	13/09/2021			Limits		
Sample ID	WS215			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.60					
Solid Waste Analysis						
TOC (**)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0304			0.258	0.5	2
Barium *	0.0164			0.139	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0035			0.030	0.5	10
Copper *	0.037			0.32	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0437			0.372	0.5	10
Nickel *	0.0061			0.052	0.4	10
Lead *	0.0046			0.039	0.5	10
Antimony *	0.033			0.28	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0059			0.051	4	50
Chloride *	17			150	800	15000
Fluoride	0.25			2.1	10	150
Sulphate *	77			650	1000	20000
TDS*	150			1300	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	13.1			112	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

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Waste Acceptance Criteria Analytical Results

Report No:	21-10263					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2012848			Landfill Waste Acceptance Criteria		
Sampling Date	13/09/2021			Limits		
Sample ID	WS205A			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.20					
Solid Waste Analysis						
TOC (**)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0096			0.0849	0.5	2
Barium *	0.0104			0.0919	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0016			0.014	0.5	10
Copper *	0.0058			0.051	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0026			0.023	0.4	10
Lead *	0.0034			0.030	0.5	10
Antimony *	0.0060			0.053	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0050			0.045	4	50
Chloride *	1.5			13	800	15000
Fluoride	0.22			2.0	10	150
Sulphate *	4.6			40	1000	20000
TDS*	50			440	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	7.27			64.1	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				*= UKAS accredited (liquid eluate analysis only)		
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Analytical Report Number : 21-10263

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Ana Gonzalez**

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Analytical Report Number : 21-10502

Replaces Analytical Report Number: 21-10502, issue no. 2
Client references/information amended.

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	16/09/2021
Your job number:	21 3600	Samples instructed on / Analysis started on:	17/09/2021
Your order number:	CL3121	Analysis completed by:	11/01/2022
Report Issue Number:	3	Report issued on:	11/01/2022
Samples Analysed:	4 soil samples		

Signed: *Agnieszka Czerwińska*

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

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soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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**Analytical Report Number: 21-10502****Project / Site name: Colt DCS Data Centre Hayes****Your Order No: CL3121**

Lab Sample Number		2013972	2013973	2013974	2013975
Sample Reference		WS207C	WS207C	BH106	BH106
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.30	1.00-1.20	0.50	1.30
Date Sampled		15/09/2021	15/09/2021	15/09/2021	15/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.6	7.9
Total mass of sample received	kg	0.001	NONE	1.9	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA		SCA	

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.9	9.1	7.4	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.5	0.4	1.5	0.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	1.8	0.79	0.29	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.58	0.27	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	4.5	2.0	0.54	< 0.05
Pyrene	mg/kg	0.05	MCERTS	4.1	1.7	0.45	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.1	1.2	0.33	< 0.05
Chrysene	mg/kg	0.05	MCERTS	2.1	0.91	0.33	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	2.9	1.0	0.44	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.4	0.64	0.27	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.9	1.1	0.36	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	0.59	0.20	< 0.05
Diben(a,h)anthracene	mg/kg	0.05	MCERTS	0.45	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.8	0.70	0.28	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	27.1	10.9	3.49	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	10	9.4	3.8	3.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20	23	11	13
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.90	0.54	0.83	0.71
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	0.7	1.6	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.0	1.6	0.4	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	18	36	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	63	64	39	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	280	270	110	12
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	1.2	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	13	16	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	41	32	36	32
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	260	320	120	85



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**Analytical Report Number: 21-10502****Project / Site name: Colt DCS Data Centre Hayes****Your Order No: CL3121**

Lab Sample Number	2013972	2013973	2013974	2013975
Sample Reference	WS207C	WS207C	BH106	BH106
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	1.00-1.20	0.50	1.30
Date Sampled	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	4.8
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	15
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	200
TPH-CWG - Aliphatic > EC35 - EC44 EH_CU_1D_AL	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	60
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	MCERTS	< 10	< 10	< 10	220
TPH-CWG - Aliphatic (EC5 - EC44) EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	< 10	< 10	280

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.1
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	6.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	< 10	< 10	12
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	20	14	< 10	85
TPH-CWG - Aromatic > EC35 - EC44 EH_CU_1D_AR	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	29
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	MCERTS	28	17	13	100
TPH-CWG - Aromatic (EC5 - EC44) EH_CU+HS_1D_AR	mg/kg	10	NONE	28	17	13	130

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-10502
Project / Site name: Colt DCS Data Centre Hayes
Your Order No: CL3121

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2013972	WS207C	0.30	140	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 21-10502

Project / Site name: Colt DCS Data Centre Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2013972	WS207C	None Supplied	0.3	Brown loam and clay with gravel and brick.
2013973	WS207C	None Supplied	1.00-1.20	Brown sandy clay with gravel and brick.
2013974	BH106	None Supplied	0.5	Brown clay and loam with gravel.
2013975	BH106	None Supplied	1.3	Brown sand with gravel.



4041

**Analytical Report Number : 21-10502****Project / Site name: Colt DCS Data Centre Hayes****Water matrix abbreviations:****Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.****Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.****Information in Support of Analytical Results**



4041 MCERTS

**Analytical Report Number : 21-10502****Project / Site name: Colt DCS Data Centre Hayes****Water matrix abbreviations:****Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

**Ana Gonzalez**

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Analytical Report Number : 21-10503

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	16/09/2021
Your job number:	21 3600	Samples instructed on / Analysis started on:	17/09/2021
Your order number:	CL3121	Analysis completed by:	23/09/2021
Report Issue Number:	1	Report issued on:	23/09/2021
Samples Analysed:	10:1 WAC sample		

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-10503					
				Client: CONCEPT		
Location	Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)	2013976			Landfill Waste Acceptance Criteria		
Sampling Date	15/09/2021			Limits		
Sample ID	BH106			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.50					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0033			0.0291	0.5	2
Barium *	0.0537			0.476	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.11			0.97	0.5	10
Copper *	0.011			0.10	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0147			0.130	0.5	10
Nickel *	0.0034			0.030	0.4	10
Lead *	0.0028			0.025	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0041			0.036	4	50
Chloride *	1.2			10	800	15000
Fluoride	0.23			2.0	10	150
Sulphate *	63			560	1000	20000
TDS*	140			1200	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	10.6			94.1	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-10503

Project / Site name: Colt DCS Data Centre Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-10640

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	17/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	17/09/2021
Your order number:	CL3122	Analysis completed by:	28/09/2021
Report Issue Number:	1	Report issued on:	28/09/2021
Samples Analysed:	4 soil samples		

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



4041



Analytical Report Number: 21-10640

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3122

Lab Sample Number		2014943	2014944	2014945	2014946
Sample Reference		TP302	TP302	BH104A	BH104A
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.20	2.00	0.30	1.00-1.20
Date Sampled		16/09/2021	16/09/2021	16/09/2021	16/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	6.8
Total mass of sample received	kg	0.001	NONE	1.4	1.7
				1.8	1.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	9.8	11.6	10.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.6	0.4	0.3	0.6

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Resorcinol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	< 0.30	-	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	< 0.20	-	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Phenol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	< 0.30	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	< 1.3	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	1.5	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.95	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	2.1	26	0.46	0.95
Anthracene	mg/kg	0.05	MCERTS	0.65	6.7	0.20	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	5.0	24	0.56	1.2
Pyrene	mg/kg	0.05	MCERTS	4.6	18	0.56	1.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.2	11	0.38	0.80
Chrysene	mg/kg	0.05	MCERTS	2.3	7.9	0.37	0.69
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	3.4	8.8	0.36	0.81
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.6	3.7	0.21	0.49
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.0	7.6	0.33	0.93
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.9	4.2	< 0.05	0.55
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.5	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.2	4.7	< 0.05	0.67

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	29.9	126	3.43	8.26
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Analytical Report Number: 21-10640

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3122

Lab Sample Number	2014943	2014944	2014945	2014946
Sample Reference	TP302	TP302	BH104A	BH104A
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	2.00	0.30	1.00-1.20
Date Sampled	16/09/2021	16/09/2021	16/09/2021	16/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	7.3	< 1.0	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	12	10	16
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.7	2.3	0.60	0.95
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	0.8	1.3	1.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	23	24	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	96	12	27	38
Lead (aqua regia extractable)	mg/kg	1	MCERTS	260	6.1	46	87
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.4	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	13	15	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	38	36	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	230	33	91	100

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	5.2	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	15	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	24	28	28	18
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	14	26
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	30	35	48	19
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	30	35	61	45

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	2.8	12	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	12	98	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	29	150	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	47	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	43	260	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	43	310	< 10	< 10



Analytical Report Number: 21-10640

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3122

Lab Sample Number	2014943	2014944	2014945	2014946
Sample Reference	TP302	TP302	BH104A	BH104A
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	2.00	0.30	1.00-1.20
Date Sampled	16/09/2021	16/09/2021	16/09/2021	16/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

PCBs

PCB Congener 077	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 081	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 105	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 114	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 118	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 123	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 126	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 156	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 157	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 167	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 169	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-
PCB Congener 189	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	< 0.012	-	< 0.012	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



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**Analytical Report Number : 21-10640****Project / Site name: Colt DCS Data Centre, Hayes**

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2014943	TP302	None Supplied	0.2	Brown clay and loam with gravel and vegetation.
2014944	TP302	None Supplied	2	Brown clay and sand with gravel.
2014945	BH104A	None Supplied	0.3	Brown loam and sand with gravel and vegetation.
2014946	BH104A	None Supplied	1.00-1.20	Brown clay and loam with gravel and vegetation.



4041

**Analytical Report Number : 21-10640****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE



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**Analytical Report Number : 21-10640****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Ana Gonzalez**

Concept Site Investigations

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t: 01923 225404**f:** 01923 237404**e:** reception@i2analytical.com**Analytical Report Number : 21-10644**

Replaces Analytical Report Number: 21-10644, issue no. 1
Client references/information amended.

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	17/09/2021
Your job number:	21-3600	Samples instructed on/ Analysis started on:	17/09/2021
Your order number:	CL3122	Analysis completed by:	24/09/2021
Report Issue Number:	2	Report issued on:	01/10/2021
Samples Analysed:	2 leachate samples		

Signed:

Joanna Wawrzeczko
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results

Report No:	21-10644					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2014965			Landfill Waste Acceptance Criteria		
Sampling Date	16/09/2021			Limits		
Sample ID	TP302 2.00			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)						
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.010			< 0.0100	0.5	2
Barium *	0.0080			0.0740	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0017			0.016	0.5	10
Copper *	< 0.0007			< 0.0070	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0034			0.032	0.4	10
Lead *	0.0013			0.012	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0065			0.060	4	50
Chloride *	1.0			9.3	800	15000
Fluoride	0.14			1.3	10	150
Sulphate *	2.3			21	1000	20000
TDS*	18			160	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	5.59			51.8	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				*= UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-10644					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2014966			Landfill Waste Acceptance Criteria		
Sampling Date	16/09/2021			Limits		
Sample ID	BH104A 1.00			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)						
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.0010			< 0.0100	0.5	2
Barium *	0.0501			0.450	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.016			0.15	0.5	10
Copper *	0.0089			0.080	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0037			0.033	0.4	10
Lead *	0.0016			0.014	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0041			0.036	4	50
Chloride *	1.1			10	800	15000
Fluoride	0.11			1.0	10	150
Sulphate *	26			230	1000	20000
TDS*	510			4600	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	4.23			38.0	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-10644

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-10961

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	20/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	20/09/2021
Your order number:	CL3123	Analysis completed by:	30/09/2021
Report Issue Number:	1	Report issued on:	30/09/2021
Samples Analysed:	5 soil samples		

Signed:

Zina Abdul Razzak
Senior Quality Specialist

For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



4041



Analytical Report Number: 21-10961

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3123

Lab Sample Number		2016553	2016554	2016555	2016556	2016557
Sample Reference		TP303	TP303	TP303	BH104C	BH104C
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.65-0.80	1.00	2.00	3.50-4.00	6.00-6.50
Date Sampled		17/09/2021	17/09/2021	17/09/2021	17/09/2021	17/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	9.8	6.8
Total mass of sample received	kg	0.001	NONE	1.5	1.5	1.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.1	8.6	9.0	8.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.3	0.6	< 0.1	< 0.1	0.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	5.5	3.0	2.8	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.2	12	11	8.9	10
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.75	0.65	0.51	0.46	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	0.7	0.3	< 0.2	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	22	15	13	45
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	13	15	4.1	30
Lead (aqua regia extractable)	mg/kg	1	MCERTS	79	77	8.0	3.9	14
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	14	13	15	37
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	35	27	20	79
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	93	62	28	22	79

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0



4041



Analytical Report Number: 21-10961

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3123

Lab Sample Number		2016553	2016554	2016555	2016556	2016557
Sample Reference		TP303	TP303	TP303	BH104C	BH104C
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.65-0.80	1.00	2.00	3.50-4.00	6.00-6.50
Date Sampled		17/09/2021	17/09/2021	17/09/2021	17/09/2021	17/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



4041 MCERTS

**Analytical Report Number : 21-10961****Project / Site name: Colt DCS Data Centre, Hayes**

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2016553	TP303	None Supplied	0.65-0.80	Brown clay and sand with gravel.
2016554	TP303	None Supplied	1	Brown clay with gravel.
2016555	TP303	None Supplied	2	Light brown sand with gravel.
2016556	BH104C	None Supplied	3.50-4.00	Light brown sand with gravel.
2016557	BH104C	None Supplied	6.00-6.50	Brown clay.



4041

Analytical Report Number : 21-10961**Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.****Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

**Ana Gonzalez**

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Analytical Report Number : 21-10963

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	20/09/2021
Your job number:	21-3600	Samples instructed on / Analysis started on:	20/09/2021
Your order number:	CL3123	Analysis completed by:	27/09/2021
Report Issue Number:	1	Report issued on:	27/09/2021
Samples Analysed:	3 leachate samples		

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-10963					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2016562			Landfill Waste Acceptance Criteria		
Sampling Date	17/09/2021			Limits		
Sample ID	TP303			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.65-0.80					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0089			0.0765	0.5	25
Barium *	0.0185			0.158	20	300
Cadmium *	< 0.0001			< 0.0008	0.04	5
Chromium *	0.0053			0.045	0.5	70
Copper *	0.014			0.12	2	100
Mercury *	< 0.0005			< 0.0050	0.01	2
Molybdenum *	0.0245			0.210	0.5	30
Nickel *	0.010			0.086	0.4	40
Lead *	< 0.0010			< 0.010	0.5	50
Antimony *	< 0.0017			< 0.017	0.06	5
Selenium *	< 0.0040			< 0.040	0.1	7
Zinc *	0.0081			0.069	4	200
Chloride *	7.1			61	800	25000
Fluoride	0.36			3.1	10	500
Sulphate *	19			160	1000	20000
TDS*	76			650	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	20.7			178	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				*= UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-10963					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2016563			Landfill Waste Acceptance Criteria		
Sampling Date	17/09/2021			Limits		
Sample ID	TP303			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	2.00					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.010			< 0.0100	0.5	2
Barium *	0.0162			0.152	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0015			0.014	0.5	10
Copper *	0.0011			0.010	2	50
Mercury *	0.0015			0.0145	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0036			0.034	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0041			0.038	4	50
Chloride *	1.6			15	800	15000
Fluoride	0.23			2.1	10	150
Sulphate *	6.4			60	1000	20000
TDS*	40			370	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	11.2			105	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				*= UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
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Waste Acceptance Criteria Analytical Results						
Report No:	21-10963					
Client: CONCEPT						
Location	Colt DCS Data Centre, Hayes				Landfill Waste Acceptance Criteria	
Lab Reference (Sample Number)	2016564				Limits	
Sampling Date	17/09/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill
Sample ID	BH104C				Hazardous Waste Landfill	
Depth (m)	6.00-6.50					
Solid Waste Analysis						
TOC (%)**	-				3%	5%
Loss on Ignition (%) **	-				--	--
BTEX (µg/kg) **	-				6000	--
Sum of PCBs (mg/kg) **	-				1	--
Mineral Oil (mg/kg)	-				500	--
Total PAH (WAC-17) (mg/kg)	-				100	--
pH (units)**	-				--	>6
Acid Neutralisation Capacity (mol / kg)	-				--	To be evaluated
Eluate Analysis		10:1		10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)		mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.010			< 0.0100	0.5	2
Barium *	0.0184			0.147	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.0050			0.040	0.5	10
Copper *	0.0090			0.072	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0060			0.048	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	0.0036			0.029	0.06	0.7
Selenium *	0.023			0.18	0.1	0.5
Zinc *	0.0068			0.055	4	50
Chloride *	5.1			41	800	15000
Fluoride	0.48			3.9	10	150
Sulphate *	21			170	1000	20000
TDS*	62			500	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	13.0			104	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
* = UKAS accredited (liquid eluate analysis only)						
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation						
** = MCERTS accredited						

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Analytical Report Number : 21-10963

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-12346

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	24/09/2021
Your job number:	CL3137	Samples instructed on/ Analysis started on:	27/09/2021
Your order number:	21-3600	Analysis completed by:	06/10/2021
Report Issue Number:	1	Report issued on:	06/10/2021
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: 21-3600

Lab Sample Number		2023893	2023894	2023895	2023896
Sample Reference		TP304	TP304	TP401	TP401
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.20	0.60	0.30	0.70
Date Sampled		22/09/2021	22/09/2021	23/09/2021	23/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.6	16
Total mass of sample received	kg	0.001	NONE	1.2	1.2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	8.0	9.2	10.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	4.7	0.7	0.4	0.5

Phenols by HPLC

Catechol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Resorcinol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Cresols (o-, m-, p-)	mg/kg	0.3	ISO 17025	< 0.30	-	-	-
Total Naphthols (sum of 1- and 2- Naphthol)	mg/kg	0.2	ISO 17025	< 0.20	-	-	-
2-Isopropylphenol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Phenol	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Trimethylphenol (2,3,5-)	mg/kg	0.1	ISO 17025	< 0.10	-	-	-
Total Xylenols and Ethylphenols	mg/kg	0.3	ISO 17025	< 0.30	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (HPLC)	mg/kg	1.3	ISO 17025	< 1.3	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.70	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	1.5	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	5.5	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	3.1	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	6.9	< 0.05	< 0.05	0.37
Anthracene	mg/kg	0.05	MCERTS	2.9	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	11	< 0.05	< 0.05	0.57
Pyrene	mg/kg	0.05	MCERTS	11	< 0.05	< 0.05	0.51
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.9	< 0.05	< 0.05	0.47
Chrysene	mg/kg	0.05	MCERTS	5.1	< 0.05	< 0.05	0.32
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	6.6	< 0.05	< 0.05	0.39
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	2.6	< 0.05	< 0.05	0.21
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.9	< 0.05	< 0.05	0.33
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.1	< 0.05	< 0.05	0.26
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.4	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5.0	< 0.05	< 0.05	0.34

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	79.3	< 0.80	< 0.80	3.77
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Analytical Report Number: 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: 21-3600

Lab Sample Number	2023893	2023894	2023895	2023896
Sample Reference	TP304	TP304	TP401	TP401
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.60	0.30	0.70
Date Sampled	22/09/2021	22/09/2021	23/09/2021	23/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation	Status

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.5	4.1	< 1.0	2.2
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	9.4	11
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.77	0.74	0.37	0.56
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	2.8	0.2	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.3	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	23	10	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	30	20	84	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	94	24	17	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	16	8.1	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	34	38	51	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	89	68	80	80

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	4.4	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	56	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	78	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	850	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	1100	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	990	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	2100	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	5.4	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	56	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	120	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	1700	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	1400	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	1900	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	3300	< 10	< 10	< 10



Analytical Report Number: 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: 21-3600

Lab Sample Number	2023893	2023894	2023895	2023896
Sample Reference	TP304	TP304	TP401	TP401
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.60	0.30	0.70
Date Sampled	22/09/2021	22/09/2021	23/09/2021	23/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation	

VOCs

Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	-	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	-	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	-	-
Tribromomethane	µg/kg	1	NONE	< 1.0	-	-	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	-	-



Analytical Report Number: 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: 21-3600

Lab Sample Number		2023893	2023894	2023895	2023896
Sample Reference		TP304	TP304	TP401	TP401
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.20	0.60	0.30	0.70
Date Sampled		22/09/2021	22/09/2021	23/09/2021	23/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-
				-	-



Analytical Report Number: 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: 21-3600

Lab Sample Number	2023893	2023894	2023895	2023896
Sample Reference	TP304	TP304	TP401	TP401
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.60	0.30	0.70
Date Sampled	22/09/2021	22/09/2021	23/09/2021	23/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation	Status

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	-	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	0.70	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	2.1	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	1.5	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	5.5	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	2.2	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Fluorene	mg/kg	0.05	MCERTS	3.1	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	0.5	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	6.9	-	-	-
Anthracene	mg/kg	0.05	MCERTS	2.9	-	-	-
Carbazole	mg/kg	0.3	MCERTS	0.8	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	11	-	-	-
Pyrene	mg/kg	0.05	MCERTS	11	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.9	-	-	-
Chrysene	mg/kg	0.05	MCERTS	5.1	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	6.6	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	2.6	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.9	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.1	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.4	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5.0	-	-	-

Analytical Report Number: 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: 21-3600

Lab Sample Number	2023893	2023894	2023895	2023896
Sample Reference	TP304	TP304	TP401	TP401
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.60	0.30	0.70
Date Sampled	22/09/2021	22/09/2021	23/09/2021	23/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation	Status

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2023893	TP304	None Supplied	0.2	Black clay and loam with tar.
2023894	TP304	None Supplied	0.6	Brown clay and loam with gravel.
2023895	TP401	None Supplied	0.3	Brown clay and loam with gravel.
2023896	TP401	None Supplied	0.7	Brown clay and sand with gravel.



Analytical Report Number : 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Phenols, speciated, in soil, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE



Analytical Report Number : 21-12346

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-12349

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	24/09/2021
Your job number:	302021	Samples instructed on / Analysis started on:	27/09/2021
Your order number:	CL3137	Analysis completed by:	01/10/2021
Report Issue Number:	1	Report issued on:	01/10/2021
Samples Analysed:		3 10:1 WAC samples	

Signed: *Karolina Marek*

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results

Report No:	21-12349			Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2023922			Limits		
Sampling Date	22/09/2021	Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill		
Sample ID	TP304					
Depth (m)	0.20					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1		10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg			
Arsenic *	0.0053		0.0506	0.5	2	25
Barium *	0.0234		0.222	20	100	300
Cadmium *	< 0.0001		< 0.0008	0.04	1	5
Chromium *	0.0018		0.017	0.5	10	70
Copper *	0.0058		0.056	2	50	100
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004		< 0.0040	0.5	10	30
Nickel *	0.0050		0.047	0.4	10	40
Lead *	0.0063		0.060	0.5	10	50
Antimony *	< 0.0017		< 0.017	0.06	0.7	5
Selenium *	< 0.0040		< 0.040	0.1	0.5	7
Zinc *	0.0044		0.042	4	50	200
Chloride *	0.59		5.6	800	15000	25000
Fluoride	< 0.050		< 0.50	10	150	500
Sulphate *	4.0		38	1000	20000	50000
TDS*	29		270	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	4.95		47.1	500	800	1000
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



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Waste Acceptance Criteria Analytical Results

Report No:	21-12349					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2023923			Limits		
Sampling Date	23/09/2021			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP401					
Depth (m)	0.30					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0072			0.0653	0.5	25
Barium *	0.0147			0.133	20	300
Cadmium *	< 0.0001			< 0.0008	0.04	5
Chromium *	0.0007			0.0061	0.5	70
Copper *	0.0030			0.027	2	100
Mercury *	< 0.0005			< 0.0050	0.01	2
Molybdenum *	< 0.0004			< 0.0040	0.5	30
Nickel *	0.0021			0.019	0.4	40
Lead *	< 0.0010			< 0.010	0.5	50
Antimony *	< 0.0017			< 0.017	0.06	5
Selenium *	< 0.0040			< 0.040	0.1	7
Zinc *	0.0029			0.027	4	200
Chloride *	0.73			6.6	800	25000
Fluoride	< 0.050			< 0.50	10	500
Sulphate *	3.2			29	1000	20000
TDS*	34			310	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	9.19			83.2	500	1000
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

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Waste Acceptance Criteria Analytical Results

Report No:	21-12349			Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes			Landfill Waste Acceptance Criteria		
Lab Reference (Sample Number)	2023924			Limits		
Sampling Date	23/09/2021	Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill		
Sample ID	TP401					
Depth (m)	0.70					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis	10:1		10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l		mg/kg			
Arsenic *	< 0.010		< 0.0100	0.5	2	25
Barium *	0.0257		0.163	20	100	300
Cadmium *	< 0.0001		< 0.0008	0.04	1	5
Chromium *	0.0015		0.0093	0.5	10	70
Copper *	0.0047		0.030	2	50	100
Mercury *	< 0.0005		< 0.0050	0.01	0.2	2
Molybdenum *	< 0.0004		< 0.0040	0.5	10	30
Nickel *	0.0035		0.022	0.4	10	40
Lead *	0.0047		0.030	0.5	10	50
Antimony *	< 0.0017		< 0.017	0.06	0.7	5
Selenium *	< 0.0040		< 0.040	0.1	0.5	7
Zinc *	0.0053		0.033	4	50	200
Chloride *	2.1		13	800	15000	25000
Fluoride	0.17		1.1	10	150	500
Sulphate *	4.9		31	1000	20000	50000
TDS*	50		320	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	10.2		64.9	500	800	1000
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					

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Analytical Report Number : 21-12349

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-13418

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	29/09/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	29/09/2021
Your order number:	CL3145	Analysis completed by:	06/10/2021
Report Issue Number:	1	Report issued on:	06/10/2021
Samples Analysed:	2 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-13418

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3145

Lab Sample Number		2030177	2030178
Sample Reference		WS207C	WS207C
Sample Number		None Supplied	None Supplied
Depth (m)		1.50	3.30
Date Sampled		27/09/2021	27/09/2021
Time Taken		None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation
Stone Content	%	0.1	NONE
Moisture Content	%	0.01	NONE
Total mass of sample received	kg	0.001	NONE

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.3	0.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	11
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.2	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	1.3	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	39	42
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	14
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	40
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	60	75
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	56	76



Analytical Report Number: 21-13418

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3145

Lab Sample Number		2030177	2030178
Sample Reference		WS207C	WS207C
Sample Number		None Supplied	None Supplied
Depth (m)		1.50	3.30
Date Sampled		27/09/2021	27/09/2021
Time Taken		None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-13418

Project / Site name: Colt DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2030177	WS207C	None Supplied	1.5	Brown clay and sand.
2030178	WS207C	None Supplied	3.3	Brown clay.



Analytical Report Number : 21-13418

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-13420

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	29/09/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	29/09/2021
Your order number:	CL3145	Analysis completed by:	06/10/2021
Report Issue Number:	1	Report issued on:	06/10/2021
Samples Analysed:	1 leachate sample		

Izabela Wójcik
Signed:

Izabela Wójcik
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results						
Report No:	21-13420					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2030207			Landfill Waste Acceptance Criteria		
Sampling Date	27/09/2021			Limits		
Sample ID	WS207C			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	3.30					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	< 0.0010			< 0.0100	0.5	2
Barium *	0.0201			0.154	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	< 0.0004			< 0.0040	0.5	10
Copper *	0.0050			0.038	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	0.0014			0.0105	0.5	10
Nickel *	0.0034			0.026	0.4	10
Lead *	< 0.0010			< 0.010	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0074			0.057	4	50
Chloride *	5.8			44	800	15000
Fluoride	0.51			3.9	10	150
Sulphate *	66			510	1000	20000
TDS*	130			960	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	6.99			53.3	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
* = UKAS accredited (liquid eluate analysis only)						
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation						
** = MCERTS accredited						
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.						
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.						



Analytical Report Number : 21-13420
Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-14617

Project / Site name:	Cold DCS Data Centre, Hayes	Samples received on:	01/10/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	07/10/2021
Your order number:	CL3159	Analysis completed by:	14/10/2021
Report Issue Number:	1	Report issued on:	14/10/2021
Samples Analysed:	6 soil samples		

Wawrzeczk

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3159

Lab Sample Number		2037566	2037567	2037568	2037569	2037570
Sample Reference		WS203	WS203	WS205A	WS214	WS215
Sample Number		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)		0.30	1.00	2.00	1.50	2.00
Date Sampled		29/09/2021	29/09/2021	29/09/2021	30/09/2021	30/09/2021
Time Taken		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	9.7	20
Total mass of sample received	kg	0.001	NONE	1.2	1.2	1.2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.8	8.9	6.8	8.0	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.7	0.4	1.4	1.4	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.94	< 0.05	< 0.05	0.34	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.27	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.6	< 0.05	< 0.05	0.64	< 0.05
Pyrene	mg/kg	0.05	MCERTS	1.6	< 0.05	< 0.05	0.58	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.89	< 0.05	< 0.05	0.41	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.85	< 0.05	< 0.05	0.34	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.66	< 0.05	< 0.05	0.28	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.54	< 0.05	< 0.05	0.26	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.72	< 0.05	< 0.05	0.29	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.24	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.41	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	8.68	< 0.80	< 0.80	3.14	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	5.1	2.6	4.1	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	14	17	8.7	6.8
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.92	0.96	1.3	0.79	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.6	0.9	1.3	2.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	33	38	26	44
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	24	14	27	21
Lead (aqua regia extractable)	mg/kg	1	MCERTS	68	35	26	91	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	24	26	18	33
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	36	46	71	38	71
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	91	70	78	66



4041 MCERTS



Analytical Report Number: 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3159

Lab Sample Number	2037566	2037567	2037568	2037569	2037570
Sample Reference	WS203	WS203	WS205A	WS214	WS215
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	1.00	2.00	1.50	2.00
Date Sampled	29/09/2021	29/09/2021	29/09/2021	30/09/2021	30/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)					
	Units	Limit of detection	Accreditation Status		



4041



Environmental Science

Analytical Report Number: 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3159

Lab Sample Number	2037566	2037567	2037568	2037569	2037570
Sample Reference	WS203	WS203	WS205A	WS214	WS215
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	1.00	2.00	1.50	2.00
Date Sampled	29/09/2021	29/09/2021	29/09/2021	30/09/2021	30/09/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	6.8	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	20	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	26	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	53	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	53	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	6.4	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	13	< 10	< 10	10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	11	< 10	< 10	16	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	30	< 10	< 10	26	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	30	< 10	< 10	26	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3159

Lab Sample Number	2037571			
Sample Reference	WS215			
Sample Number	None Supplied			
Depth (m)	4.00			
Date Sampled	30/09/2021			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	7.3
Total mass of sample received	kg	0.001	NONE	1.2

Asbestos in Soil	Type	N/A	ISO 17025	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
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Speciated PAHs

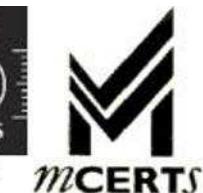
Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5.4
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.34
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	3.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	4.1
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	15
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	20



Analytical Report Number: 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3159

Lab Sample Number	2037571		
Sample Reference	WS215		
Sample Number	None Supplied		
Depth (m)	4.00		
Date Sampled	30/09/2021		
Time Taken	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status

Analytical Report Number: 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Your Order No: CL3159

Lab Sample Number	2037571			
Sample Reference	WS215			
Sample Number	None Supplied			
Depth (m)	4.00			
Date Sampled	30/09/2021			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Monoaromatics & Oxygenates				
Benzene	µg/kg	1	MCERTS	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



4041

**Analytical Report Number : 21-14617****Project / Site name: Cold DCS Data Centre, Hayes**

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2037566	WS203	None Supplied	0.3	Brown loam and clay with gravel and vegetation.
2037567	WS203	None Supplied	1	Brown clay and loam with gravel and vegetation.
2037568	WS205A	None Supplied	2	Brown clay and sand with gravel.
2037569	WS214	None Supplied	1.5	Brown clay and sand with gravel.
2037570	WS215	None Supplied	2	Brown clay and sand.
2037571	WS215	None Supplied	4	Brown sand with gravel.



Analytical Report Number : 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



4041 MCERTS



Analytical Report Number : 21-14617

Project / Site name: Cold DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report



Analytical Report Number : 21-14617
Project / Site name: Cold DCS Data Centre, Hayes

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS203	None Supplied	S	2037566	c	Total cyanide in soil	L080-PL	c
WS203	None Supplied	S	2037567	c	Total cyanide in soil	L080-PL	c
WS205A	None Supplied	S	2037568	c	Total cyanide in soil	L080-PL	c



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Analytical Report Number : 21-14620

Project / Site name:	Cold DCS Data Centre, Hayes	Samples received on:	01/10/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	07/10/2021
Your order number:	CL3159	Analysis completed by:	12/10/2021
Report Issue Number:	1	Report issued on:	13/10/2021
Samples Analysed:	2 10:1 WAC samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results												
Report No:	21-14620											
				Client: CONCEPT								
Location				Landfill Waste Acceptance Criteria								
Lab Reference (Sample Number)				Limits								
Sampling Date				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill						
Sample ID												
Depth (m)												
2.00												
Solid Waste Analysis												
TOC (%)**	-			3%	5%	6%						
Loss on Ignition (%) **	-			--	--	10%						
BTEX (µg/kg) **	-			6000	--	--						
Sum of PCBs (mg/kg) **	-			1	--	--						
Mineral Oil (mg/kg)	-			500	--	--						
Total PAH (WAC-17) (mg/kg)	-			100	--	--						
pH (units)**	-			--	>6	--						
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated						
Eluate Analysis												
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)				10:1	Limit values for compliance leaching test							
				mg/l	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)							
				mg/kg								
Arsenic *	< 0.0010			< 0.0100	0.5	2						
Barium *	0.0160			0.123	20	100						
Cadmium *	< 0.0001			< 0.0008	0.04	1						
Chromium *	0.0019			0.014	0.5	10						
Copper *	0.0039			0.030	2	50						
Mercury *	< 0.0005			< 0.0050	0.01	0.2						
Molybdenum *	< 0.0004			< 0.0040	0.5	10						
Nickel *	0.0067			0.052	0.4	10						
Lead *	0.0035			0.027	0.5	50						
Antimony *	< 0.0017			< 0.017	0.06	0.7						
Selenium *	< 0.0040			< 0.040	0.1	0.5						
Zinc *	0.010			0.078	4	50						
Chloride *	2.4			18	800	15000						
Fluoride	0.49			3.8	10	150						
Sulphate *	14			110	1000	20000						
TDS*	51			390	4000	60000						
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-						
DOC	13.1			100	500	800						
Leach Test Information												
Stone Content (%)	-											
Sample Mass (kg)	-											
Dry Matter (%)	-											
Moisture (%)	-											
Results are expressed on a dry weight basis, after correction for moisture content where applicable.	*= UKAS accredited (liquid eluate analysis only)											
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation	** = MCERTS accredited											
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.												
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.												

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Waste Acceptance Criteria Analytical Results									
Report No:	21-14620								
				Client: CONCEPT					
Location				Landfill Waste Acceptance Criteria					
Lab Reference (Sample Number)				Limits					
Sampling Date				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill			
Sample ID									
Depth (m)									
1.50									
Solid Waste Analysis									
TOC (%)**	-			3%	5%	6%			
Loss on Ignition (%) **	-			--	--	10%			
BTEX (µg/kg) **	-			6000	--	--			
Sum of PCBs (mg/kg) **	-			1	--	--			
Mineral Oil (mg/kg)	-			500	--	--			
Total PAH (WAC-17) (mg/kg)	-			100	--	--			
pH (units)**	-			--	>6	--			
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated			
Eluate Analysis									
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test				
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)				
Arsenic *	< 0.0010			< 0.0100	0.5	2			
Barium *	0.0426			0.353	20	100			
Cadmium *	< 0.0001			< 0.0008	0.04	1			
Chromium *	0.0008			0.0066	0.5	10			
Copper *	0.011			0.095	2	50			
Mercury *	< 0.0005			< 0.0050	0.01	0.2			
Molybdenum *	0.0008			0.0064	0.5	10			
Nickel *	0.0062			0.051	0.4	10			
Lead *	0.0014			0.012	0.5	10			
Antimony *	< 0.0017			< 0.017	0.06	0.7			
Selenium *	< 0.0040			< 0.040	0.1	0.5			
Zinc *	0.0046			0.038	4	50			
Chloride *	4.0			33	800	15000			
Fluoride	0.56			4.6	10	150			
Sulphate *	65			540	1000	20000			
TDS*	130			1000	4000	60000			
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-			
DOC	25.5			211	500	800			
Leach Test Information									
Stone Content (%)	-								
Sample Mass (kg)	-								
Dry Matter (%)	-								
Moisture (%)	-								
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)									
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited									
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.									
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.									



Analytical Report Number : 21-14620

Project / Site name: Cold DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-14995

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	04/10/2021
Your job number:	21-3600	Samples instructed on/ Analysis started on:	08/10/2021
Your order number:	CL3167	Analysis completed by:	15/10/2021
Report Issue Number:	1	Report issued on:	15/10/2021
Samples Analysed:	3 soil samples		

Signed: *Agnieszka Czerwińska*

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



4041

**Analytical Report Number: 21-14995****Project / Site name: Colt DCS Data Centre, Hayes****Your Order No: CL3167**

Lab Sample Number		2039474	2039475	2039476
Sample Reference		BH110	BH110	WS217
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.30	1.20	0.70
Date Sampled		01/10/2021	01/10/2021	01/10/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	10
Total mass of sample received	kg	0.001	NONE	2.0
				2.0
				-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	No Asbestos Detected
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.3	8.1	-
Total Cyanide	mg/kg	1	MCERTS	1.3	< 1.0	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.6	1.2	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	0.45	0.28	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	1.3	1.3	-
Pyrene	mg/kg	0.05	MCERTS	1.2	1.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.94	0.84	-
Chrysene	mg/kg	0.05	MCERTS	0.93	0.88	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.0	1.1	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.53	0.67	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.85	1.1	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.45	0.68	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.63	1.0	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	8.30	9.17	-
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4041



Analytical Report Number: 21-14995

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3167

Lab Sample Number		2039474	2039475	2039476
Sample Reference		BH110	BH110	WS217
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.30	1.20	0.70
Date Sampled		01/10/2021	01/10/2021	01/10/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	7.6	< 1.0	-
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	12	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	0.73	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	0.4	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	25	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	20	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	340	38	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.8	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	17	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	45	37	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	170	67	-

Monaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	13	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	30	23	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	42	28	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	42	28	-

U/S = Unsuitable Sample I/S = Insufficient Sample



4041 MCERTS



Analytical Report Number : 21-14995

Project / Site name: Colt DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2039474	BH110	None Supplied	0.3	Brown loam and clay with gravel.
2039475	BH110	None Supplied	1.2	Brown loam and clay with gravel.



4041 MCERTS

**Analytical Report Number : 21-14995****Project / Site name: Colt DCS Data Centre, Hayes****Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.****Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.****Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**



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Analytical Report Number : 21-14996

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	04/10/2021
Your job number:	21-3600	Samples instructed on/ Analysis started on:	08/10/2021
Your order number:	CL3167	Analysis completed by:	14/10/2021
Report Issue Number:	1	Report issued on:	14/10/2021
Samples Analysed:	1 leachate sample		

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results									
Report No:	21-14996								
				Client: CONCEPT					
Location				Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)				Landfill Waste Acceptance Criteria					
Sampling Date				Limits					
Sample ID				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill			
Depth (m)				0.30					
Solid Waste Analysis									
TOC (%)**	-			3%	5%	6%			
Loss on Ignition (%) **	-			--	--	10%			
BTEX (µg/kg) **	-			6000	--	--			
Sum of PCBs (mg/kg) **	-			1	--	--			
Mineral Oil (mg/kg)	-			500	--	--			
Total PAH (WAC-17) (mg/kg)	-			100	--	--			
pH (units)**	-			--	>6	--			
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated			
Eluate Analysis									
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test				
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)				
Arsenic *	0.0092			0.0832	0.5	2			
Barium *	0.0357			0.322	20	100			
Cadmium *	< 0.0001			< 0.0008	0.04	1			
Chromium *	0.027			0.25	0.5	10			
Copper *	0.053			0.48	2	50			
Mercury *	< 0.0005			< 0.0050	0.01	0.2			
Molybdenum *	< 0.0004			< 0.0040	0.5	10			
Nickel *	0.0073			0.065	0.4	10			
Lead *	0.0042			0.038	0.5	10			
Antimony *	0.015			0.14	0.06	0.7			
Selenium *	< 0.0040			< 0.040	0.1	0.5			
Zinc *	0.0039			0.036	4	50			
Chloride *	2.2			20	800	15000			
Fluoride	0.17			1.5	10	150			
Sulphate *	11			100	1000	20000			
TDS*	430			3900	4000	60000			
Phenol Index (Monohydric Phenols) *	0.015			0.13	1	-			
DOC	8.15			73.5	500	800			
Leach Test Information									
Stone Content (%)	-								
Sample Mass (kg)	-								
Dry Matter (%)	-								
Moisture (%)	-								

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

* = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-14996

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-15790

Replaces Analytical Report Number: 21-15790, issue no. 1
 Additional analysis undertaken.

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	08/10/2021
Your job number:	21-3600	Samples instructed on/ Analysis started on:	12/10/2021
Your order number:	CL3182	Analysis completed by:	18/10/2021
Report Issue Number:	2	Report issued on:	08/12/2021
Samples Analysed:	3 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
 Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
 leachates - 2 weeks from reporting
 waters - 2 weeks from reporting
 asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
 Application of uncertainty of measurement would provide a range within which the true result lies.
 An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-15790

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3182

Lab Sample Number		2043659	2043660	2043661
Sample Reference		BH107	BH107	BH108
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.30	0.60	0.30
Date Sampled		07/10/2021	07/10/2021	07/10/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Status	Accreditation
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	8.1
Total mass of sample received	kg	0.001	NONE	1.5
				1.5
				1.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite & Crocidolite	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.060	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.060	-	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	BPA	-	BPA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.2	8.5	9.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	2.8
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.5	0.4	1.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.46
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.77
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.22	11
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	3.4
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.36	26
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.30	24
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.23	17
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.18	11
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	15
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	7.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	14
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	6.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.0
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	7.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	1.29	147
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Analytical Report Number: 21-15790

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3182

Lab Sample Number		2043659	2043660	2043661
Sample Reference		BH107	BH107	BH108
Sample Number		None Supplied	None Supplied	None Supplied
Depth (m)		0.30	0.60	0.30
Date Sampled		07/10/2021	07/10/2021	07/10/2021
Time Taken		None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation	

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	21	19
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.53	1.3	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	0.9	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	36	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	50	46	55
Lead (aqua regia extractable)	mg/kg	1	MCERTS	490	140	140
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	36	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29	61	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	150	170

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 EH CU_ID_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH CU_ID_AL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH CU_ID_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH CU_ID_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44 EH CU_ID_AL	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35) EH CU+HS_ID_AL	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44) EH CU+HS_ID_AL	mg/kg	10	NONE	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 EH CU_ID_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH CU_ID_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	7.9
TPH-CWG - Aromatic >EC16 - EC21 EH CU_ID_AR	mg/kg	10	MCERTS	< 10	< 10	64
TPH-CWG - Aromatic >EC21 - EC35 EH CU_ID_AR	mg/kg	10	MCERTS	< 10	< 10	130
TPH-CWG - Aromatic > EC35 - EC44 EH CU_ID_AR	mg/kg	8.4	NONE	< 8.4	< 8.4	20
TPH-CWG - Aromatic (EC5 - EC35) EH CU+HS_ID_AR	mg/kg	10	MCERTS	< 10	< 10	200
TPH-CWG - Aromatic (EC5 - EC44) EH CU+HS_ID_AR	mg/kg	10	NONE	< 10	< 10	220

Analytical Report Number: 21-15790

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3182

Lab Sample Number	2043659	2043660	2043661
Sample Reference	BH107	BH107	BH108
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	0.60	0.30
Date Sampled	07/10/2021	07/10/2021	07/10/2021
Time Taken	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation	Status		

PCBs

PCB Congener 077	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 081	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 105	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 114	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 118	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 123	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 126	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 156	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 157	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 167	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 169	mg/kg	0.001	NONE	< 0.001	-	-
PCB Congener 189	mg/kg	0.001	NONE	< 0.001	-	-

Total PCBs – WHO12

Total PCBs	mg/kg	0.012	NONE	< 0.012	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 21-15790
Project / Site name: Colt DCS Data Centre, Hayes
Your Order No: CL3182

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2043659	BH107	0.30	157	Loose Fibres & Hard/Cement Type Material	Chrysotile & Amosite & Crocidolite	0.060	0.060
2043661	BH108	0.30	141	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.



Analytical Report Number : 21-15790

Project / Site name: Colt DCS Data Centre, Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2043659	BH107	None Supplied	0.3	Brown loam and clay with gravel and vegetation.
2043660	BH107	None Supplied	0.6	Brown clay with gravel.
2043661	BH108	None Supplied	0.3	Brown sandy clay with gravel.



Analytical Report Number : 21-15790

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS



Analytical Report Number : 21-15790

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total



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Analytical Report Number : 21-15791

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	08/10/2021
Your job number:	21-3600	Samples instructed on/ Analysis started on:	12/10/2021
Your order number:	CL3182	Analysis completed by:	19/10/2021
Report Issue Number:	1	Report issued on:	19/10/2021
Samples Analysed:	1 leachate sample		

Signed: *Karolina Marek*
Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results						
Report No:	21-15791					
				Client: CONCEPT		
Location	Colt DCS Data Centre, Hayes					
Lab Reference (Sample Number)	2043662			Landfill Waste Acceptance Criteria		
Sampling Date	07/10/2021			Limits		
Sample ID	BH107			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.30					
Solid Waste Analysis						
TOC (%)**	-			3%	5%	6%
Loss on Ignition (%) **	-			--	--	10%
BTEX (µg/kg) **	-			6000	--	--
Sum of PCBs (mg/kg) **	-			1	--	--
Mineral Oil (mg/kg)	-			500	--	--
Total PAH (WAC-17) (mg/kg)	-			100	--	--
pH (units)**	-			--	>6	--
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated
Eluate Analysis						
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test	
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)	
Arsenic *	0.0103			0.0855	0.5	2
Barium *	0.0223			0.184	20	100
Cadmium *	< 0.0001			< 0.0008	0.04	1
Chromium *	0.014			0.12	0.5	10
Copper *	0.017			0.14	2	50
Mercury *	< 0.0005			< 0.0050	0.01	0.2
Molybdenum *	< 0.0004			< 0.0040	0.5	10
Nickel *	0.0048			0.039	0.4	10
Lead *	0.010			0.086	0.5	50
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0074			0.061	4	50
Chloride *	4.9			41	800	15000
Fluoride	0.32			2.6	10	150
Sulphate *	14			110	1000	20000
TDS*	200			1700	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	4.70			38.8	500	800
Leach Test Information						
Stone Content (%)	-					
Sample Mass (kg)	-					
Dry Matter (%)	-					
Moisture (%)	-					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
* = UKAS accredited (liquid eluate analysis only)						
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation						
** = MCERTS accredited						
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.						
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.						



Analytical Report Number : 21-15791

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil***	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-17176

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	18/10/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	19/10/2021
Your order number:	CL3203	Analysis completed by:	25/10/2021
Report Issue Number:	1	Report issued on:	25/10/2021
Samples Analysed:	1 soil sample		

Signed: A. Czerwińska

Agnieszka Czerwińska
 Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
 leachates - 2 weeks from reporting
 waters - 2 weeks from reporting
 asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
 Application of uncertainty of measurement would provide a range within which the true result lies.
 An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-17176
Project / Site name: Colt DCS Data Centre Hayes
Your Order No: CL3203

Lab Sample Number	2051447		
Sample Reference	BH108		
Sample Number	None Supplied		
Depth (m)	1.50		
Date Sampled	15/10/2021		
Time Taken	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status
Stone Content	%	0.1	NONE
Moisture Content	%	0.01	NONE
Total mass of sample received	kg	0.001	NONE
			1.4

General Inorganics

pH - Automated	pH Units	N/A	NONE	8.7
Total Cyanide	mg/kg	1	NONE	< 1.0
Total Organic Carbon (TOC)	%	0.1	NONE	0.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05
Fluorene	mg/kg	0.05	NONE	< 0.05
Phenanthrene	mg/kg	0.05	NONE	< 0.05
Anthracene	mg/kg	0.05	NONE	< 0.05
Fluoranthene	mg/kg	0.05	NONE	< 0.05
Pyrene	mg/kg	0.05	NONE	< 0.05
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05
Chrysene	mg/kg	0.05	NONE	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	NONE	11
Beryllium (aqua regia extractable)	mg/kg	0.06	NONE	0.55
Boron (water soluble)	mg/kg	0.2	NONE	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	NONE	18
Copper (aqua regia extractable)	mg/kg	1	NONE	6.6
Lead (aqua regia extractable)	mg/kg	1	NONE	7.1
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	NONE	15
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	NONE	28
Zinc (aqua regia extractable)	mg/kg	1	NONE	23

Analytical Report Number: 21-17176
Project / Site name: Colt DCS Data Centre Hayes
Your Order No: CL3203

Lab Sample Number	2051447		
Sample Reference	BH108		
Sample Number	None Supplied		
Depth (m)	1.50		
Date Sampled	15/10/2021		
Time Taken	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status

Monoaromatics & Oxygenates

Benzene	µg/kg	1	NONE	< 1.0
Toluene	µg/kg	1	NONE	< 1.0
Ethylbenzene	µg/kg	1	NONE	< 1.0
p & m-xylene	µg/kg	1	NONE	< 1.0
o-xylene	µg/kg	1	NONE	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	NONE	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	NONE	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	NONE	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	NONE	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	NONE	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	NONE	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	NONE	< 8.0
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	NONE	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	NONE	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	NONE	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	NONE	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	NONE	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	NONE	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	NONE	< 10
TPH-CWG - Aromatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	NONE	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10

PCBs

PCB Congener 077	mg/kg	0.001	NONE	< 0.001
PCB Congener 081	mg/kg	0.001	NONE	< 0.001
PCB Congener 105	mg/kg	0.001	NONE	< 0.001
PCB Congener 114	mg/kg	0.001	NONE	< 0.001
PCB Congener 118	mg/kg	0.001	NONE	< 0.001
PCB Congener 123	mg/kg	0.001	NONE	< 0.001
PCB Congener 126	mg/kg	0.001	NONE	< 0.001
PCB Congener 156	mg/kg	0.001	NONE	< 0.001
PCB Congener 157	mg/kg	0.001	NONE	< 0.001
PCB Congener 167	mg/kg	0.001	NONE	< 0.001
PCB Congener 169	mg/kg	0.001	NONE	< 0.001
PCB Congener 189	mg/kg	0.001	NONE	< 0.001

Total PCBs - WHO12

Total PCBs	mg/kg	0.012	NONE	< 0.012
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-17176
Project / Site name: Colt DCS Data Centre Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2051447	BH108	None Supplied	1.5	Brown sandy gravel.**

** Non MCERTS Matrix

Analytical Report Number : 21-17176
Project / Site name: Colt DCS Data Centre Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	NONE
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	NONE
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-17177

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	18/10/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	19/10/2021
Your order number:	CL3203	Analysis completed by:	25/10/2021
Report Issue Number:	1	Report issued on:	25/10/2021
Samples Analysed:	1 leachate sample		

Signed:

Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results									
Report No:	21-17177								
				Client: CONCEPT					
Location				Colt DCS Data Centre Hayes					
Lab Reference (Sample Number)				Landfill Waste Acceptance Criteria					
Sampling Date				Limits					
Sample ID				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill			
Depth (m)				1.50					
Solid Waste Analysis									
TOC (%)**	-			3%	5%	6%			
Loss on Ignition (%) **	-			--	--	10%			
BTEX (µg/kg) **	-			6000	--	--			
Sum of PCBs (mg/kg) **	-			1	--	--			
Mineral Oil (mg/kg)	-			500	--	--			
Total PAH (WAC-17) (mg/kg)	-			100	--	--			
pH (units)**	-			--	>6	--			
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated			
Eluate Analysis									
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test				
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)				
Arsenic *	< 0.0010			< 0.0100	0.5	2			
Barium *	0.0121			0.111	20	100			
Cadmium *	< 0.0001			< 0.0008	0.04	1			
Chromium *	0.0020			0.018	0.5	10			
Copper *	0.0050			0.045	2	50			
Mercury *	< 0.0005			< 0.0050	0.01	0.2			
Molybdenum *	< 0.0004			< 0.0040	0.5	10			
Nickel *	0.0035			0.032	0.4	10			
Lead *	< 0.0010			< 0.010	0.5	10			
Antimony *	< 0.0017			< 0.017	0.06	0.7			
Selenium *	< 0.0040			< 0.040	0.1	0.5			
Zinc *	0.0067			0.061	4	50			
Chloride *	2.1			19	800	15000			
Fluoride	0.12			1.1	10	150			
Sulphate *	6.1			56	1000	20000			
TDS*	42			390	4000	60000			
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-			
DOC	7.96			72.9	500	800			
Leach Test Information									
Stone Content (%)	-								
Sample Mass (kg)	-								
Dry Matter (%)	-								
Moisture (%)	-								

Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 21-17177
Project / Site name: Colt DCS Data Centre Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1 ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 21-18918

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	22/10/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	27/10/2021
Your order number:	CL3237	Analysis completed by:	02/11/2021
Report Issue Number:	1	Report issued on:	02/11/2021
Samples Analysed:	2 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
 Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
 leachates - 2 weeks from reporting
 waters - 2 weeks from reporting
 asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
 Application of uncertainty of measurement would provide a range within which the true result lies.
 An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-18918

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3237

Lab Sample Number		2061594	2061595
Sample Reference		BH107	BH107
Sample Number		None Supplied	None Supplied
Depth (m)		2.50	5.50
Date Sampled		21/10/2021	21/10/2021
Time Taken		None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation
Stone Content	%	0.1	NONE
Moisture Content	%	0.01	NONE
Total mass of sample received	kg	0.001	NONE

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.7	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.3	0.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	23
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.39	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	36
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.5	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	8.1	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	20	53
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	25	70



Analytical Report Number: 21-18918

Project / Site name: Colt DCS Data Centre Hayes

Your Order No: CL3237

Lab Sample Number	2061594	2061595			
Sample Reference	BH107	BH107			
Sample Number	None Supplied	None Supplied			
Depth (m)	2.50	5.50			
Date Sampled	21/10/2021	21/10/2021			
Time Taken	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10

PCBs

PCB Congener 077	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 081	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 105	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 114	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 118	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 123	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 126	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 156	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 157	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 167	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 169	mg/kg	0.001	NONE	< 0.001	-
PCB Congener 189	mg/kg	0.001	NONE	< 0.001	-

Total PCBs - WHO12

Total PCBs	mg/kg	0.012	NONE	< 0.012	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-18918

Project / Site name: Colt DCS Data Centre Hayes

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2061594	BH107	None Supplied	2.5	Brown gravelly sand with stones.
2061595	BH107	None Supplied	5.5	Brown clay and sand with gravel.



Analytical Report Number : 21-18918

Project / Site name: Colt DCS Data Centre Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
PCBs WHO 12 in soil	Determination of PCBs (WHO-12 Congeners) by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 21-19072

Project / Site name:	Colt DCS Data Centre Hayes	Samples received on:	22/10/2021
Your job number:	21 3600	Samples instructed on/ Analysis started on:	27/10/2021
Your order number:	CL3237	Analysis completed by:	02/11/2021
Report Issue Number:	1	Report issued on:	02/11/2021
Samples Analysed:	1 leachate sample		

Signed:


Joanna Wawrzeczko
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
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Waste Acceptance Criteria Analytical Results												
Report No:	21-19072											
				Client: CONCEPT								
Location	Colt DCS Data Centre Hayes											
Lab Reference (Sample Number)	2062498			Landfill Waste Acceptance Criteria								
Sampling Date	21/10/2021			Limits								
Sample ID	BH107			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill						
Depth (m)	5.50											
Solid Waste Analysis												
TOC (%)**	-			3%	5%	6%						
Loss on Ignition (%) **	-			--	--	10%						
BTEX (µg/kg) **	-			6000	--	--						
Sum of PCBs (mg/kg) **	-			1	--	--						
Mineral Oil (mg/kg)	-			500	--	--						
Total PAH (WAC-17) (mg/kg)	-			100	--	--						
pH (units)**	-			--	>6	--						
Acid Neutralisation Capacity (mol / kg)	-			--	To be evaluated	To be evaluated						
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)							
Arsenic *	< 0.0010			< 0.0100	0.5	2						
Barium *	0.0122			0.0934	20	100						
Cadmium *	< 0.0001			< 0.0008	0.04	1						
Chromium *	< 0.0004			< 0.0040	0.5	10						
Copper *	0.0014			0.011	2	50						
Mercury *	< 0.0005			< 0.0050	0.01	0.2						
Molybdenum *	< 0.0004			< 0.0040	0.5	10						
Nickel *	0.0042			0.032	0.4	10						
Lead *	0.0064			0.049	0.5	50						
Antimony *	< 0.0017			< 0.017	0.06	0.7						
Selenium *	< 0.0040			< 0.040	0.1	0.5						
Zinc *	0.0024			0.019	4	50						
Chloride *	4.8			36	800	15000						
Fluoride	0.20			1.5	10	150						
Sulphate *	12			89	1000	20000						
TDS*	51			390	4000	60000						
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-						
DOC	6.61			50.4	500	800						
Leach Test Information												
Stone Content (%)	-											
Sample Mass (kg)	-											
Dry Matter (%)	-											
Moisture (%)	-											
Results are expressed on a dry weight basis, after correction for moisture content where applicable.	*= UKAS accredited (liquid eluate analysis only)											
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation	** = MCERTS accredited											
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.												
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.												



Analytical Report Number : 21-19072

Project / Site name: Colt DCS Data Centre Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 "Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Ana Gonzalez**

Concept Site Investigations

Unit 8

Warple Mews

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t: 01923 225404**f:** 01923 237404**e:** reception@i2analytical.com**Analytical Report Number : 21-20633**

Project / Site name:	Colt DCS Data Centre, Hayes	Samples received on:	03/11/2021
Your job number:	302021	Samples instructed on/ Analysis started on:	04/11/2021
Your order number:	CL3264	Analysis completed by:	10/11/2021
Report Issue Number:	1	Report issued on:	10/11/2021
Samples Analysed:	5 water samples		

Signed:Joanna Wawrzeczk
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3264

Lab Sample Number	2070858	2070859	2070860	2070861	2070862
Sample Reference	BH102B (50mm)	BH102B (19mm)	BH103A	WS205A	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	02/11/2021	02/11/2021	02/11/2021	02/11/2021	02/11/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

General Inorganics

pH	pH Units	N/A	ISO 17025	9.6	8.8	7.2	6.9	7.2
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO4	mg/l	0.045	ISO 17025	250	5.81	84.4	114	73.0
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloride	mg/l	0.15	ISO 17025	60	76	94	15	16
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	2700	410	170	97	1200
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	12.7	2.55	3.54	5.43	4.75
Nitrate as N	mg/l	0.01	ISO 17025	0.07	0.09	1.77	2.49	0.76
Nitrate as NO3	mg/l	0.05	ISO 17025	0.32	0.42	7.84	11.0	3.37
Nitrite as N	µg/l	1	ISO 17025	120	4.8	25	9.2	26
Nitrite as NO2	µg/l	5	ISO 17025	380	16	83	30	84
Alkalinity as CaCO3	mg/l	3	ISO 17025	120	270	330	270	130

Hardness - Total	mgCaCO3/l	1	ISO 17025	181	57.7	367	355	152
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Phenols by HPLC

Catechol	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Resorcinol	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Ethylphenol & Dimethylphenol	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Cresols	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Naphthols	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Isopropylphenol	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Phenol	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5
Trimethylphenol	µg/l	0.5	NONE	< 0.5	-	< 0.5	< 0.5	< 0.5

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Total Phenols (HPLC)	µg/l	3.5	NONE	< 3.5	-	< 3.5	< 3.5	< 3.5

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diben(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Analytical Report Number: 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3264

Lab Sample Number	2070858	2070859	2070860	2070861	2070862
Sample Reference	BH102B (50mm)	BH102B (19mm)	BH103A	WS205A	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	02/11/2021	02/11/2021	02/11/2021	02/11/2021	02/11/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Calcium (dissolved)	mg/l	0.012	ISO 17025	71	16	120	130	56
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Iron (dissolved)	mg/l	0.004	ISO 17025	0.007	0.014	< 0.004	0.009	0.015
Magnesium (dissolved)	mg/l	0.005	ISO 17025	1.1	4.5	15	8.3	3.1
Potassium (dissolved)	mg/l	0.025	ISO 17025	25	8.5	7.6	4.7	6.7
Sodium (dissolved)	mg/l	0.01	ISO 17025	150	150	89	22	27

Antimony (dissolved)	µg/l	0.4	ISO 17025	1.6	0.5	0.5	2.3	1.4
Arsenic (dissolved)	µg/l	0.15	ISO 17025	4.69	1.25	0.85	0.87	2.71
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	0.02	0.03	0.04
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	2.0	3.3	2.8	1.3
Copper (dissolved)	µg/l	0.5	ISO 17025	3.0	2.6	2.1	5.4	4.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	4.9	12	410	260	55
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.9	1.3	6.4	6.1	3.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	3.6	0.6	< 0.6	6.7	0.9
Vanadium (dissolved)	µg/l	0.2	ISO 17025	9.0	1.6	0.5	0.9	0.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.4	3.2	16	29	6.1

Monoaromatics & Oxygenates

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10



Analytical Report Number: 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3264

Lab Sample Number	2070858	2070859	2070860	2070861	2070862
Sample Reference	BH102B (50mm)	BH102B (19mm)	BH103A	WS205A	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	02/11/2021	02/11/2021	02/11/2021	02/11/2021	02/11/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

VOCs

Chloromethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	-	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	< 1.0



Analytical Report Number: 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3264

Lab Sample Number	2070858	2070859	2070860	2070861	2070862
Sample Reference	BH102B (50mm)	BH102B (19mm)	BH103A	WS205A	WS213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	02/11/2021	02/11/2021	02/11/2021	02/11/2021	02/11/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	-
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	-
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	-
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	-

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	-	< 0.05	< 0.05	< 0.05



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Analytical Report Number: 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Your Order No: CL3264

Lab Sample Number	2070858	2070859	2070860	2070861	2070862			
Sample Reference	BH102B (50mm)	BH102B (19mm)	BH103A	WS205A	WS213			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Date Sampled	02/11/2021	02/11/2021	02/11/2021	02/11/2021	02/11/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	-	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	-	< 0.10	< 0.10	< 0.10

PCBs – WHO12

PCB Congener 77	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 81	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 105	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 114	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 118	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 123	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 126	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 156	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 157	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 167	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 169	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020
PCB Congener 189	µg/l	0.02	NONE	< 0.020	-	< 0.020	< 0.020	< 0.020

Total PCBs – WHO12

Total PCBs	µg/l	0.3	NONE	< 0.300	-	< 0.300	< 0.300	< 0.300
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Phenols, speciated, in water, by HPLC	Determination of speciated phenols by HPLC.	In house method based on Blue Book Method.	L030-PL	W	NONE
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025



Analytical Report Number : 21-20633

Project / Site name: Colt DCS Data Centre, Hayes

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
PCBs WHO 12 in water	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L028-UK	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding.	L070-PL	W	NONE
Chloride in water	Determination of Chloride (dissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025
Alkalinity in Water (by discreet analyser)	Determination of Alkalinity by discreet analyser (colorimetry). Accredited matrices: SW, PW, GW.	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.