Appendix C: Gas and Groundwater Monitoring Results

Project Number	26822	**Install Depth (m)**	5
Project Name	Maresfield Gardens	**Plain (m)**	2
Borehole Number	BH03	**Slotted (m)**	3
Borehole Depth (m)	10		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	5.00	12.60	0.00	0.00	2.40	
Date	04/01/2023	60	0.00	0.00	0.00	5.00	12.60	0.00	0.00	2.40	
Atmospheric Pressure (mb)	1004.00	90	0.00	0.00	0.00	5.00	12.60	0.00	0.00	2.40	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	5.00	12.60	0.00	0.00	2.40	
Water Level (mbgl)	2.05	150	0.00	0.00	0.00	5.00	12.60	0.00	0.00	2.40	
Base of Well (mbgl)	4.93	180	0.00	0.00	0.00	5.00	12.60	0.00	0.00	2.40	
2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	4.60	15.70	0.00	0.00	1.10	
Date	19/01/2023	60	0.00	0.00	0.00	4.70	15.60	0.00	0.00	1.40	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	4.70	15.60	0.00	0.00	1.40	
Weather Conditions	Clear	120	0.00	0.00	0.00	4.70	15.60	0.00	0.00	1.40	
Water Level (mbgl)	1.69	150	0.00	0.00	0.00	4.70	15.60	0.00	0.00	1.40	
Base of Well (mbgl)	4.89	180	0.00	0.00	0.00	4.70	15.60	0.00	0.00	1.40	
3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	4.10	16.00	0.00	0.00	1.50	
Date	31/01/2023	60	0.00	0.00	0.00	4.10	16.00	0.00	0.00	1.50	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	4.10	16.00	0.00	0.00	1.50	
Weather Conditions	Clear	120	0.00	0.00	0.00	4.10	16.00	0.00	0.00	1.50	
Water Level (mbgl)	1.72	150	0.00	0.00	0.00	4.10	16.00	0.00	0.00	1.50	
Base of Well (mbgl)	4.89	180	0.00	0.00	0.00	4.10	16.00	0.00	0.00	1.50	
4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	4.80	15.00	0.00	0.00	1.10	
Date	06/02/2023	60	0.00	0.00	0.00	4.90	14.90	0.00	0.00	1.10	
Atmospheric Pressure (mb)	1031.00	90	0.00	0.00	0.00	4.90	14.80	0.00	0.00	1.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	4.90	14.80	0.00	0.00	1.10	
Water Level (mbgl)	1.26	150	0.00	0.00	0.00	4.90	14.80	0.00	0.00	1.10	
Base of Well (mbgl)	4.89	180	0.00	0.00	0.00	4.90	14.80	0.00	0.00	1.10	
5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	3.90	16.20	0.00	0.00	1.00	
Date	09/02/2023	60	0.00	0.00	0.00	3.90	16.20	0.00	0.00	1.00	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	3.90	16.20	0.00	0.00	1.00	
Weather Conditions	Clear	120	0.00	0.00	0.00	3.90	16.20	0.00	0.00	1.00	
Water Level (mbgl)	1.28	150	0.00	0.00	0.00	3.90	16.20	0.00	0.00	1.00	
Base of Well (mbgl)	4.89	180	0.00	0.00	0.00	3.90	16.20	0.00	0.00	1.00	
6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	3.50	19.00	0.00	0.00	0.70	
Date	13/02/2023	60	0.00	0.00	0.00	3.50	19.00	0.00	0.00	0.70	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	3.50	19.00	0.00	0.00	0.70	
Weather Conditions	Clear	120	0.00	0.00	0.00	3.50	19.00	0.00	0.00	0.70	
Water Level (mbgl)	1.30	150	0.00	0.00	0.00	3.50	19.00	0.00	0.00	0.70	
Base of Well (mbgl)	4.89	180	0.00	0.00	0.00	3.50	19.00	0.00	0.00	0.70	
7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	3.30	18.70	0.00	0.00	1.00	
Date	17/02/2023	60	0.00	0.00	0.00	3.30	18.70	0.00	0.00	1.00	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	3.30	18.70	0.00	0.00	1.00	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	3.30	18.70	0.00	0.00	1.00	
Water Level (mbgl)	1.31	150	0.00	0.00	0.00	3.30	18.70	0.00	0.00	1.00	
Base of Well (mbgl)	4.89	180	0.00	0.00	0.00	3.30	18.70	0.00	0.00	1.00	

Project Number	26822	**Install Depth (m)**	2
Project Name	Maresfield Gardens	**Plain (m)**	0.5
Borehole Number	WS01	**Slotted (m)**	1.5
Borehole Depth (m)	6		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.60	18.90	0.00	0.00	0.20	
Date	04/01/2023	60	0.00	0.00	0.00	1.60	18.90	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1004.00	90	0.00	0.00	0.00	1.60	18.90	0.00	0.00	0.20	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	1.60	18.90	0.00	0.00	0.20	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	1.60	18.90	0.00	0.00	0.20	
Base of Well (mbgl)	1.83	180	0.00	0.00	0.00	1.60	18.90	0.00	0.00	0.20	

2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	0.40	19.40	0.00	0.00	0.10	
Date	19/01/2023	60	0.00	0.00	0.00	0.40	19.40	0.00	0.00	0.10	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	0.40	19.40	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.40	19.40	0.00	0.00	0.10	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	0.40	19.40	0.00	0.00	0.10	
Base of Well (mbgl)	1.82	180	0.00	0.00	0.00	0.40	19.40	0.00	0.00	0.10	

3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.60	19.30	0.00	0.00	0.10	
Date	31/01/2023	60	0.00	0.00	0.00	0.60	19.30	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	0.60	19.30	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.60	19.30	0.00	0.00	0.10	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	0.60	19.30	0.00	0.00	0.10	
Base of Well (mbgl)	1.82	180	0.00	0.00	0.00	0.60	19.30	0.00	0.00	0.10	

4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	0.90	18.60	0.00	0.00	0.10	
Date	06/02/2023	60	0.00	0.00	0.00	0.90	18.50	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1031.00	90	0.00	0.00	0.00	0.90	18.50	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.90	18.50	0.00	0.00	0.10	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	0.90	18.50	0.00	0.00	0.10	
Base of Well (mbgl)	1.83	180	0.00	0.00	0.00	0.90	18.50	0.00	0.00	0.10	

5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.70	18.20	0.00	0.00	0.10	
Date	09/02/2023	60	0.00	0.00	0.00	0.70	18.20	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	0.70	18.20	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.70	18.20	0.00	0.00	0.10	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	0.70	18.20	0.00	0.00	0.10	
Base of Well (mbgl)	1.83	180	0.00	0.00	0.00	0.70	18.20	0.00	0.00	0.10	

6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.40	18.60	0.00	0.00	0.00	
Date	13/02/2023	60	0.00	0.00	0.00	0.40	18.60	0.00	0.00	0.00	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	0.40	18.60	0.00	0.00	0.00	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.40	18.60	0.00	0.00	0.00	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	0.40	18.60	0.00	0.00	0.00	
Base of Well (mbgl)	1.83	180	0.00	0.00	0.00	0.40	18.60	0.00	0.00	0.00	

7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.50	18.70	0.00	0.00	0.10	
Date	17/02/2023	60	0.00	0.00	0.00	0.50	18.70	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	0.50	18.70	0.00	0.00	0.10	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	0.50	18.70	0.00	0.00	0.10	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	0.50	18.70	0.00	0.00	0.10	
Base of Well (mbgl)	1.83	180	0.00	0.00	0.00	0.50	18.70	0.00	0.00	0.10	

Project Number	26822	**Install Depth (m)**	6
Project Name	Maresfield Gardens	**Plain (m)**	3
Borehole Number	WS02	**Slotted (m)**	3
Borehole Depth (m)	6		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.80	16.20	0.00	0.00	3.70	silted bottom
Date	04/01/2023	60	0.00	0.00	0.00	1.80	16.20	0.00	0.00	3.70	
Atmospheric Pressure (mb)	1004.00	90	0.00	0.00	0.00	1.80	16.20	0.00	0.00	3.70	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	1.80	16.20	0.00	0.00	3.70	
Water Level (mbgl)	1.38	150	0.00	0.00	0.00	1.80	16.20	0.00	0.00	3.70	
Base of Well (mbgl)	4.90	180	0.00	0.00	0.00	1.80	16.20	0.00	0.00	3.70	

2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	0.10	20.00	0.00	0.00	0.60	silted bottom
Date	19/01/2023	60	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.60	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.60	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.60	
Water Level (mbgl)	1.26	150	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.60	
Base of Well (mbgl)	5.11	180	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.60	

3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.50	16.80	0.00	0.00	0.80	silted bottom
Date	31/01/2023	60	0.00	0.00	0.00	1.50	16.80	0.00	0.00	0.80	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	1.50	16.80	0.00	0.00	0.80	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.50	16.80	0.00	0.00	0.80	
Water Level (mbgl)	1.28	150	0.00	0.00	0.00	1.50	16.80	0.00	0.00	0.80	
Base of Well (mbgl)	5.11	180	0.00	0.00	0.00	1.50	16.80	0.00	0.00	0.80	

4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	0.30	19.60	0.00	0.00	0.30	silted bottom
Date	06/02/2023	60	0.00	0.00	0.00	0.20	19.80	0.00	0.00	0.30	
Atmospheric Pressure (mb)	1031.00	90	0.00	0.00	0.00	0.20	19.90	0.00	0.00	0.30	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.10	19.90	0.00	0.00	0.30	
Water Level (mbgl)	2.40	150	0.00	0.00	0.00	0.10	20.00	0.00	0.00	0.30	
Base of Well (mbgl)	5.06	180	0.00	0.00	0.00	0.10	20.00	0.00	0.00	0.30	

5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.60	17.00	0.00	0.00	0.50	silted bottom
Date	09/02/2023	60	0.00	0.00	0.00	0.60	17.00	0.00	0.00	0.50	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	0.60	17.00	0.00	0.00	0.50	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.60	17.00	0.00	0.00	0.50	
Water Level (mbgl)	2.42	150	0.00	0.00	0.00	0.60	17.00	0.00	0.00	0.50	
Base of Well (mbgl)	5.06	180	0.00	0.00	0.00	0.60	17.00	0.00	0.00	0.50	

6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.40	17.40	0.00	0.00	0.60	silted bottom
Date	13/02/2023	60	0.00	0.00	0.00	0.40	17.40	0.00	0.00	0.60	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	0.40	17.40	0.00	0.00	0.60	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.40	17.40	0.00	0.00	0.60	
Water Level (mbgl)	2.44	150	0.00	0.00	0.00	0.40	17.40	0.00	0.00	0.60	
Base of Well (mbgl)	5.07	180	0.00	0.00	0.00	0.40	17.40	0.00	0.00	0.60	

7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.30	17.50	0.00	0.00	0.40	silted bottom
Date	17/02/2023	60	0.00	0.00	0.00	0.30	17.50	0.00	0.00	0.40	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	0.30	17.50	0.00	0.00	0.40	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	0.30	17.50	0.00	0.00	0.40	
Water Level (mbgl)	2.45	150	0.00	0.00	0.00	0.30	17.50	0.00	0.00	0.40	
Base of Well (mbgl)	5.06	180	0.00	0.00	0.00	0.30	17.50	0.00	0.00	0.40	

Project Number	26822	**Install Depth (m)**	6
Project Name	Maresfield Gardens	**Plain (m)**	4
Borehole Number	WS03	**Slotted (m)**	2
Borehole Depth (m)	6		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA	30	0.00	0.00	0.00	1.10	18.50	0.00	0.00	0.20	
Date	04/01/2023	60	0.00	0.00	0.00	1.10	18.50	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1004.00	90	0.00	0.00	0.00	1.10	18.50	0.00	0.00	0.20	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	1.10	18.50	0.00	0.00	0.20	
Water Level (mbgl)	3.43	150	0.00	0.00	0.00	1.10	18.50	0.00	0.00	0.20	
Base of Well (mbgl)	5.71	180	0.00	0.00	0.00	1.10	18.50	0.00	0.00	0.20	
2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA/MG	30	0.00	0.00	0.00	3.90	14.00	0.00	0.00	0.20	
Date	19/01/2023	60	0.00	0.00	0.00	3.90	13.80	0.00	0.00	0.20	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	3.90	13.80	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	3.90	13.80	0.00	0.00	0.20	
Water Level (mbgl)	3.20	150	0.00	0.00	0.00	3.90	13.80	0.00	0.00	0.20	
Base of Well (mbgl)	5.70	180	0.00	0.00	0.00	3.90	13.80	0.00	0.00	0.20	
3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA	30	0.00	0.00	0.00	2.60	14.80	0.00	0.00	0.30	
Date	31/01/2023	60	0.00	0.00	0.00	2.60	14.80	0.00	0.00	0.30	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	2.60	14.80	0.00	0.00	0.30	
Weather Conditions	Clear	120	0.00	0.00	0.00	2.60	14.80	0.00	0.00	0.30	
Water Level (mbgl)	3.22	150	0.00	0.00	0.00	2.60	14.80	0.00	0.00	0.30	
Base of Well (mbgl)	5.70	180	0.00	0.00	0.00	2.60	14.80	0.00	0.00	0.30	
4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA/MG	30	0.00	0.00	0.00	3.90	14.70	0.00	0.00	0.40	
Date	06/02/2023	60	0.00	0.00	0.00	3.90	14.70	0.00	0.00	0.40	
Atmospheric Pressure (mb)	1031.00	90	0.00	0.00	0.00	3.90	14.60	0.00	0.00	0.40	
Weather Conditions	Clear	120	0.00	0.00	0.00	3.90	14.60	0.00	0.00	0.40	
Water Level (mbgl)	3.66	150	0.00	0.00	0.00	3.90	14.60	0.00	0.00	0.40	
Base of Well (mbgl)	5.70	180	0.00	0.00	0.00	3.90	14.60	0.00	0.00	0.40	
5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA	30	0.00	0.00	0.00	2.50	15.00	0.00	0.00	0.20	
Date	09/02/2023	60	0.00	0.00	0.00	2.50	15.00	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	2.50	15.00	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	2.50	15.00	0.00	0.00	0.20	
Water Level (mbgl)	3.67	150	0.00	0.00	0.00	2.50	15.00	0.00	0.00	0.20	
Base of Well (mbgl)	5.70	180	0.00	0.00	0.00	2.50	15.00	0.00	0.00	0.20	
6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA	30	0.00	0.00	0.00	2.30	14.80	0.00	0.00	0.20	
Date	13/02/2023	60	0.00	0.00	0.00	2.30	14.80	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	2.30	14.80	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	2.30	14.80	0.00	0.00	0.20	
Water Level (mbgl)	3.69	150	0.00	0.00	0.00	2.30	14.80	0.00	0.00	0.20	
Base of Well (mbgl)	5.70	180	0.00	0.00	0.00	2.30	14.80	0.00	0.00	0.20	
7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	**Comments**
Engineer	FA	30	0.00	0.00	0.00	1.90	15.10	0.00	0.00	0.10	
Date	17/02/2023	60	0.00	0.00	0.00	1.90	15.10	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	1.90	15.10	0.00	0.00	0.10	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	1.90	15.10	0.00	0.00	0.10	
Water Level (mbgl)	3.71	150	0.00	0.00	0.00	1.90	15.10	0.00	0.00	0.10	
Base of Well (mbgl)	5.69	180	0.00	0.00	0.00	1.90	15.10	0.00	0.00	0.10	

Project Number	26822	**Install Depth (m)**	3.5
Project Name	Maresfield Gardens	**Plain (m)**	0.5
Borehole Number	WS04	**Slotted (m)**	3
Borehole Depth (m)	5		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA										
Date	04/01/2023										
Atmospheric Pressure (mb)	1004.00										
Weather Conditions	Cloudy										
Water Level (mbgl)	-										
Base of Well (mbgl)	-										

2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	1.10	19.20	0.00	0.00	0.20	
Date	19/01/2023	60	0.00	0.00	0.00	1.10	19.30	0.00	0.00	0.20	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	1.10	19.30	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.10	19.30	0.00	0.00	0.20	
Water Level (mbgl)	3.40	150	0.00	0.00	0.00	1.10	19.30	0.00	0.00	0.20	
Base of Well (mbgl)	3.60	180	0.00	0.00	0.00	1.10	19.30	0.00	0.00	0.20	

3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.30	
Date	31/01/2023	60	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.30	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.30	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.30	
Water Level (mbgl)	3.43	150	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.30	
Base of Well (mbgl)	3.60	180	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.30	

4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	1.30	19.20	0.00	0.00	0.30	
Date	06/02/2023	60	0.00	0.00	0.00	1.30	19.20	0.00	0.00	0.30	
Atmospheric Pressure (mb)	1032.00	90	0.00	0.00	0.00	1.30	19.10	0.00	0.00	0.30	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.40	19.10	0.00	0.00	0.30	
Water Level (mbgl)	3.50	150	0.00	0.00	0.00	1.40	19.10	0.00	0.00	0.30	
Base of Well (mbgl)	3.61	180	0.00	0.00	0.00	1.40	19.10	0.00	0.00	0.30	

5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.90	19.30	0.00	0.00	0.20	
Date	09/02/2023	60	0.00	0.00	0.00	0.90	19.30	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	0.90	19.30	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.90	19.30	0.00	0.00	0.20	
Water Level (mbgl)	3.52	150	0.00	0.00	0.00	0.90	19.30	0.00	0.00	0.20	
Base of Well (mbgl)	3.61	180	0.00	0.00	0.00	0.90	19.30	0.00	0.00	0.20	

6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.10	
Date	13/02/2023	60	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.10	
Water Level (mbgl)	3.55	150	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.10	
Base of Well (mbgl)	3.61	180	0.00	0.00	0.00	1.00	19.30	0.00	0.00	0.10	

7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.70	19.60	0.00	0.00	0.10	
Date	17/02/2023	60	0.00	0.00	0.00	0.70	19.60	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	0.70	19.60	0.00	0.00	0.10	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	0.70	19.60	0.00	0.00	0.10	
Water Level (mbgl)	3.56	150	0.00	0.00	0.00	0.70	19.60	0.00	0.00	0.10	
Base of Well (mbgl)	3.61	180	0.00	0.00	0.00	0.70	19.60	0.00	0.00	0.10	

Project Number	26822	**Install Depth (m)**	4.5
Project Name	Maresfield Gardens	**Plain (m)**	0.5
Borehole Number	WS05	**Slotted (m)**	4
Borehole Depth (m)	5		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA										
Date	04/01/2023										
Atmospheric Pressure (mb)	1004.00										
Weather Conditions	Cloudy										
Water Level (mbgl)	-										
Base of Well (mbgl)	-										

2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	1.50	18.60	0.00	0.00	0.20	
Date	19/01/2023	60	0.00	0.00	0.00	1.50	18.60	0.00	0.00	0.20	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	1.40	18.60	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.40	18.60	0.00	0.00	0.20	
Water Level (mbgl)	3.51	150	0.00	0.00	0.00	1.40	18.60	0.00	0.00	0.20	
Base of Well (mbgl)	4.34	180	0.00	0.00	0.00	1.40	18.60	0.00	0.00	0.20	

3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.10	18.80	0.00	0.00	0.00	
Date	31/01/2023	60	0.00	0.00	0.00	1.10	18.80	0.00	0.00	0.00	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	1.10	18.80	0.00	0.00	0.00	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.10	18.80	0.00	0.00	0.00	
Water Level (mbgl)	3.53	150	0.00	0.00	0.00	1.10	18.80	0.00	0.00	0.00	
Base of Well (mbgl)	4.34	180	0.00	0.00	0.00	1.10	18.80	0.00	0.00	0.00	

4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	2.30	17.90	0.00	0.00	0.40	
Date	06/02/2023	60	0.00	0.00	0.00	2.30	17.90	0.00	0.00	0.40	
Atmospheric Pressure (mb)	1030.00	90	0.00	0.00	0.00	2.40	17.80	0.00	0.00	0.40	
Weather Conditions	Clear	120	0.00	0.00	0.00	2.40	17.80	0.00	0.00	0.40	
Water Level (mbgl)	3.63	150	0.00	0.00	0.00	2.40	17.80	0.00	0.00	0.40	
Base of Well (mbgl)	4.35	180	0.00	0.00	0.00	2.40	17.80	0.00	0.00	0.40	

5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.40	
Date	09/02/2023	60	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.40	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.40	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.40	
Water Level (mbgl)	3.64	150	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.40	
Base of Well (mbgl)	4.35	180	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.40	

6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.60	18.20	0.00	0.00	0.20	
Date	13/02/2023	60	0.00	0.00	0.00	1.60	18.20	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	1.60	18.20	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.60	18.20	0.00	0.00	0.20	
Water Level (mbgl)	3.66	150	0.00	0.00	0.00	1.60	18.20	0.00	0.00	0.20	
Base of Well (mbgl)	4.35	180	0.00	0.00	0.00	1.60	18.20	0.00	0.00	0.20	

7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.30	18.40	0.00	0.00	0.30	
Date	17/02/2023	60	0.00	0.00	0.00	1.30	18.40	0.00	0.00	0.30	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	1.30	18.40	0.00	0.00	0.30	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	1.30	18.40	0.00	0.00	0.30	
Water Level (mbgl)	3.66	150	0.00	0.00	0.00	1.30	18.40	0.00	0.00	0.30	
Base of Well (mbgl)	4.35	180	0.00	0.00	0.00	1.30	18.40	0.00	0.00	0.30	

Project Number	26822	**Install Depth (m)**	5
Project Name	Maresfield Gardens	**Plain (m)**	1
Borehole Number	WS06	**Slotted (m)**	4
Borehole Depth (m)	5		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA										
Date	04/01/2023										
Atmospheric Pressure (mb)	1004.00										
Weather Conditions	Cloudy										
Water Level (mbgl)	-										
Base of Well (mbgl)	-										

2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	0.80	19.00	0.00	0.00	0.10	
Date	19/01/2023	60	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.00	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.00	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.00	
Water Level (mbgl)	3.53	150	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.00	
Base of Well (mbgl)	4.44	180	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.00	

3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.20	
Date	31/01/2023	60	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.20	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.20	
Water Level (mbgl)	3.55	150	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.20	
Base of Well (mbgl)	4.44	180	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.20	

4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	1.00	19.00	0.00	0.00	0.10	
Date	06/02/2023	60	0.00	0.00	0.00	1.00	19.00	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1031.00	90	0.00	0.00	0.00	1.00	19.00	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.00	19.00	0.00	0.00	0.10	
Water Level (mbgl)	3.68	150	0.00	0.00	0.00	1.00	19.00	0.00	0.00	0.10	
Base of Well (mbgl)	4.44	180	0.00	0.00	0.00	1.00	19.00	0.00	0.00	0.10	

5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.10	
Date	09/02/2023	60	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.10	
Water Level (mbgl)	3.69	150	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.10	
Base of Well (mbgl)	4.44	180	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.10	

6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.10	
Date	13/02/2023	60	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.10	
Water Level (mbgl)	3.72	150	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.10	
Base of Well (mbgl)	4.44	180	0.00	0.00	0.00	0.60	19.10	0.00	0.00	0.10	

7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.20	
Date	17/02/2023	60	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.20	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.20	
Water Level (mbgl)	3.73	150	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.20	
Base of Well (mbgl)	4.44	180	0.00	0.00	0.00	0.80	18.90	0.00	0.00	0.20	

Project Number	26822	**Install Depth (m)**	5
Project Name	Maresfield Gardens	**Plain (m)**	1
Borehole Number	WS07	**Slotted (m)**	4
Borehole Depth (m)	5		

1st Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA										
Date	04/01/2023										
Atmospheric Pressure (mb)	1004.00										
Weather Conditions	Cloudy										
Water Level (mbgl)	-										
Base of Well (mbgl)	-										

2nd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	1.50	18.00	0.00	0.00	0.10	
Date	19/01/2023	60	0.00	0.00	0.00	1.50	18.20	0.00	0.00	0.00	
Atmospheric Pressure (mb)	997.00	90	0.00	0.00	0.00	1.50	18.20	0.00	0.00	0.00	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.50	18.20	0.00	0.00	0.00	
Water Level (mbgl)	3.58	150	0.00	0.00	0.00	1.50	18.20	0.00	0.00	0.00	
Base of Well (mbgl)	4.86	180	0.00	0.00	0.00	1.50	18.20	0.00	0.00	0.00	

3rd Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.20	18.50	0.00	0.00	0.10	
Date	31/01/2023	60	0.00	0.00	0.00	1.20	18.50	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1020.00	90	0.00	0.00	0.00	1.20	18.50	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.20	18.50	0.00	0.00	0.10	
Water Level (mbgl)	3.59	150	0.00	0.00	0.00	1.20	18.50	0.00	0.00	0.10	
Base of Well (mbgl)	4.86	180	0.00	0.00	0.00	1.20	18.50	0.00	0.00	0.10	

4th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA/MG	30	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.10	
Date	06/02/2023	60	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1031.00	90	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.10	
Water Level (mbgl)	3.75	150	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.10	
Base of Well (mbgl)	4.87	180	0.00	0.00	0.00	1.50	18.40	0.00	0.00	0.10	

5th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.10	18.60	0.00	0.00	0.10	
Date	09/02/2023	60	0.00	0.00	0.00	1.10	18.60	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1034.00	90	0.00	0.00	0.00	1.10	18.60	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	1.10	18.60	0.00	0.00	0.10	
Water Level (mbgl)	3.76	150	0.00	0.00	0.00	1.10	18.60	0.00	0.00	0.10	
Base of Well (mbgl)	4.87	180	0.00	0.00	0.00	1.10	18.60	0.00	0.00	0.10	

6th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	0.90	18.90	0.00	0.00	0.10	
Date	13/02/2023	60	0.00	0.00	0.00	0.90	18.90	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1036.00	90	0.00	0.00	0.00	0.90	18.90	0.00	0.00	0.10	
Weather Conditions	Clear	120	0.00	0.00	0.00	0.90	18.90	0.00	0.00	0.10	
Water Level (mbgl)	3.79	150	0.00	0.00	0.00	0.90	18.90	0.00	0.00	0.10	
Base of Well (mbgl)	4.87	180	0.00	0.00	0.00	0.90	18.90	0.00	0.00	0.10	

7th Visit		Time (s)	Flow (l/h)	Methane Content (% v/v)	Methane Content (% LEL)	Carbon Dioxide (% v/v)	Oxygen (% v/v)	H S (ppm)	CO (ppm)	VOC (ppm)	Comments
Engineer	FA	30	0.00	0.00	0.00	1.20	18.40	0.00	0.00	0.10	
Date	17/02/2023	60	0.00	0.00	0.00	1.20	18.40	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1013.00	90	0.00	0.00	0.00	1.20	18.40	0.00	0.00	0.10	
Weather Conditions	Cloudy	120	0.00	0.00	0.00	1.20	18.40	0.00	0.00	0.10	
Water Level (mbgl)	3.80	150	0.00	0.00	0.00	1.20	18.40	0.00	0.00	0.10	
Base of Well (mbgl)	4.86	180	0.00	0.00	0.00	1.20	18.40	0.00	0.00	0.10	

Project Name:	**Maresfield Gardens**
Project Number:	**26822**
Date of Sampling:	**30-Jan**
Engineer Name:	**FA**
Weather:	**Clear**
Atmospheric Pressure:	**1020**

A2 Site Investigation

BH03							
Water Level (m)	**Well Depth (m)**	**Water Collum (m)**	**Free Phase**	**Sampling Depth (m)**	**Start sampling**	**12:15**	**Comments**
1.72	4.89	3.17	No	**4.5**	**End sampling**	**12:41**	
Purging time	**Temp (°C)**	**Pressure (mmHg)**	**Dissolved Oxygen (mg/L)**	**Conductivity (µs/cm)**	**ORP (mV)**	**pH (pH Units)**	
01:00	9.9	761.3	10.15	1766	54	7.65	
02:00	9.9	761.3	7.54	1768	39.6	7.65	
03:00	9.9	761.3	6.04	1771	27.9	7.65	
04:00	9.9	761.3	5.68	1772	26.1	7.65	
05:00	9.9	761.3	5.48	1773	24.3	7.65	
06:00	9.9	761.3	5.35	1774	22.9	7.65	
07:00	9.9	761.3	5.12	1775	22.2	7.65	

WS02							
Water Level (m)	**Well Depth (m)**	**Water Collum (m)**	**Free Phase**	**Sampling Depth (m)**	**Start sampling**	**12:46**	**Comments**
1.28	5.11	3.83	No	**5**	**End sampling**	**13:10**	
Purging time	**Temp (°C)**	**Pressure (mmHg)**	**Dissolved Oxygen (mg/L)**	**Conductivity (µs/cm)**	**ORP (mV)**	**pH (pH Units)**	
01:00	9.7	761.3	4.8	1300	9.5	7.86	
02:00	9.7	761.3	4.69	1300	8.4	7.86	
03:00	9.7	761.3	4.57	1300	7.6	7.86	
04:00	9.7	761.3	4.49	1300	6.8	7.86	
05:00	9.7	761.3	4.42	1300	6.2	7.86	
06:00	9.7	761.3	4.4	1300	6	7.86	

WS03							
Water Level (m)	**Well Depth (m)**	**Water Collum (m)**	**Free Phase**	**Sampling Depth (m)**	**Start sampling**	**13:20**	**Comments**
3.22	5.7	2.48	No	**5.5**	**End sampling**	**13:42**	
Purging time	**Temp (°C)**	**Pressure (mmHg)**	**Dissolved Oxygen (mg/L)**	**Conductivity (µs/cm)**	**ORP (mV)**	**pH (pH Units)**	
01:00	10.3	761.3	3.33	1357	0.3	7.98	
02:00	10.3	761.3	3.16	1357	-1.1	7.98	
03:00	10.3	761.3	3.05	1357	-2.4	7.98	
04:00	10.3	761.3	3	1357	-3.4	7.98	
05:00	10.3	761.3	2.9	1357	-4.6	7.98	
06:00	10.3	761.3	2.7	1357	-4.9	7.98	
07:00	10.3	761.3	2.5	1357	-5.1	7.98	

WS07							
Water Level (m)	**Well Depth (m)**	**Water Collum (m)**	**Free Phase**	**Sampling Depth (m)**	**Start sampling**	**13:49**	**Comments**
3.59	4.86	1.27	No	**4.5**	**End sampling**	**14:17**	
Purging time	**Temp (°C)**	**Pressure (mmHg)**	**Dissolved Oxygen (mg/L)**	**Conductivity (µs/cm)**	**ORP (mV)**	**pH (pH Units)**	
01:00	10.6	761.3	2.89	903	-5.7	7.74	
02:00	10.6	761.3	2.86	902	-6.5	7.74	
03:00	10.6	761.3	2.76	902	-6.8	7.74	
04:00	10.6	761.3	2.72	902	-7	7.74	
05:00	10.6	761.3	2.69	901	-7.2	7.74	

WS06							
Water Level (m)	**Well Depth (m)**	**Water Collum (m)**	**Free Phase**	**Sampling Depth (m)**	**Start sampling**	**14:21**	**Comments**
3.55	4.44	0.89	No	**4**	**End sampling**	**14:45**	
Purging time	**Temp (°C)**	**Pressure (mmHg)**	**Dissolved Oxygen (mg/L)**	**Conductivity (µs/cm)**	**ORP (mV)**	**pH (pH Units)**	
01:00	10.9	761.4	4.39	905	-1.5	7.64	
02:00	10.9	761.4	4.34	905	-1.4	7.64	
03:00	10.9	761.4	4.3	904	-1.2	7.64	
04:00	10.9	761.4	4.25	906	-0.9	7.64	
05:00	10.9	761.4	4.24	905	-0.7	7.64	
06:00	10.9	761.4	4.21	902	-0.6	7.64	
07:00	10.9	761.4	4.18	904	-0.5	7.64	

WS05							
Water Level (m)	**Well Depth (m)**	**Water Collum (m)**	**Free Phase**	**Sampling Depth (m)**	**Start sampling**	**14:49**	**Comments**
3.53	4.34	0.81	No	**4**	**End sampling**	**15:10**	
Purging time	**Temp (°C)**	**Pressure (mmHg)**	**Dissolved Oxygen (mg/L)**	**Conductivity (µs/cm)**	**ORP (mV)**	**pH (pH Units)**	
01:00	10.5	761.4	4.88	881	0.2	7.81	
02:00	10.5	761.4	4.81	881	-0.1	7.81	
03:00	10.5	761.4	4.68	881	-0.3	7.81	
04:00	10.5	761.4	4.6	881	-0.4	7.81	
05:00	10.5	761.4	4.53	881	-0.5	7.81	
06:00	10.5	761.4	4.48	88	-0.6	7.81	

Project Name:	**Maresfield Gardens**
Project Number:	**26822**
Date of Sampling:	**30-Jan**
Engineer Name:	**FA**
Weather:	**Clear**
Atmospheric Pressure:	**1020**

A2 Site Investigation

Hole ID	Canister Number	Regulator Number	Preassure Start	Preassure End	Time Start	Time End	Sampling time	PID Reading	Coments
WS01	1551	1357	-27.5	-1	12:26	13:10	44:00	0.1	
WS05	1571	1525	-28	-1	12:29	13:13	44:00	0	
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		

Project Name:	**Maresfield Gardens**
Project Number:	**26822**
Date of Sampling:	**06-Feb**
Engineer Name:	**FA**
Weather:	**Clear**
Atmospheric Pressure:	**1031**

A2 Site Investigation

Hole ID	Canister Number	Regulator Number	Preassure Start	Preassure End	Time Start	Time End	Sampling time	PID Reading	Coments
WS01	1490	1532	-29	-1	11:58	12:32	34:00	0.1	Caniester not analysed
WS05	1566	1518	-28	-1	11:56	12:27	31:00	0.4	
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		
							00:00		

Project Name:	**Maresfield Gardens**
Project Number:	**26822**
Date of Sampling:	**17-Feb**
Engineer Name:	**FA**
Weather:	**Clear**
Atmospheric Pressure:	**1013**

A2 Site Investigation

Hole ID	Canister Number	Regulator Number	Preassure Start	Preassure End	Time Start	Time End	Sampling time	PID Reading	Coments
WS01	1339	1537	-29	-1	16:18	16:58	40:00	0.1	

Appendix D: Geo-environmental Laboratory Testing

Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone: (01424) 718618

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info@elab-uk.co.uk

2683

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	22-45594
Issue:	1
Date of Issue:	06/01/2023
Contact:	ELAB Results
Customer Details:	A2 Site Investigation Limited One Westminster Bridge Road South Bank London SE1 7XW
Quotation No:	Q22-03547
Order No:	PO1476-ELAB-01
Customer Reference:	26922
Date Received:	20/12/2022
Date Approved:	06/01/2023
Details:	50 Maresfield Gardens
Approved by:	

Tim Reeve, Quality Officer

Sample Summary

Report No.: 22-45594, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
306561	BH03 0.30	16/12/2022	20/12/2022		
306562	BH03 (BRE) 0.30	16/12/2022	20/12/2022		
306563	BH03 (BRE) 4.00	16/12/2022	20/12/2022		
306564	BH03 (BRE) 7.00	16/12/2022	20/12/2022	Sandy clayey loam	
306565	BH03 (BRE) 9.00	16/12/2022	20/12/2022		
306566	WS01 0.10	16/12/2022	20/12/2022		
306567	WS01 0.80	16/12/2022	20/12/2022	Silty loam	g
306568	WS01 1.50	16/12/2022	20/12/2022		
306569	WS01 2.80	16/12/2022	20/12/2022	Sandy clayey loam	g
306570	WS02 0.30	16/12/2022	20/12/2022		
306571	WS02 1.00	16/12/2022	20/12/2022	Clayey loam	g
306572	WS03 0.50	16/12/2022	20/12/2022		
306573	WS03 1.50	16/12/2022	20/12/2022	Sandy clayey loam	g
306574	WS03 2.50	16/12/2022	20/12/2022		
306575	WS03 5.50	16/12/2022	20/12/2022		

Results Summary

Report No.: 22-45594, issue number 1

			ELAB Reference	306564	306567	306569	306571	306573
			Customer Reference					
			Sample ID					
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	BH03 (BRE)	WS01	WS01	WS02	WS03
			Sample Depth (m)	7.00	0.80	2.80	1.00	1.50
			Sampling Date	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022
Determinand	**Codes**	**Units**	**LOD**					
Soil sample preparation parameters								
Moisture Content	N	%	0.1	16.0	12.9	13.7	14.3	14.9
Material removed	N	%	0.1	< 0.1	13.4	n/t	8.2	8.8
Description of Inert material removed	N		0	None	Stones/Brick	n/t	Stones	Stones
Metals								
Arsenic	M	mg/kg	1	n/t	20.0	n/t	29.6	16.7
Barium	U	mg/kg	10	n/t	87.4	n/t	92.0	28.7
Beryllium	U	mg/kg	1	n/t	< 1.0	n/t	1.3	< 1.0
Cadmium	M	mg/kg	0.5	n/t	< 0.5	n/t	< 0.5	< 0.5
Chromium	M	mg/kg	5	n/t	41.7	n/t	69.8	43.9
Chromium (III)	N	mg/kg	5	n/t	41.7	n/t	69.8	43.9
Copper	M	mg/kg	5	n/t	32.8	n/t	35.5	15.4
Lead	M	mg/kg	5	n/t	91.1	n/t	47.7	22.3
Mercury	M	mg/kg	0.5	n/t	< 0.5	n/t	< 0.5	< 0.5
Molybdenum	N	mg/kg	0.5	n/t	1.1	n/t	1.4	< 0.5
Nickel	M	mg/kg	5	n/t	21.5	n/t	47.9	12.5
Selenium	M	mg/kg	1	n/t	< 1.0	n/t	< 1.0	< 1.0
Vanadium	M	mg/kg	5	n/t	59.4	n/t	105	59.2
Zinc	M	mg/kg	5	n/t	97.4	n/t	103	63.6
Anions								
Water Soluble Sulphate	M	g/l	0.02	0.07	n/t	n/t	n/t	n/t
Water Soluble Sulphate	M	mg/kg	40	n/t	103	n/t	145	73

Results Summary

Report No.: 22-45594, issue number 1

			ELAB Reference	306564	306567	306569	306571	306573
			Customer Reference					
			Sample ID					
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	BH03 (BRE)	WS01	WS01	WS02	WS03
			Sample Depth (m)	7.00	0.80	2.80	1.00	1.50
			Sampling Date	16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022
Determinand	**Codes**	**Units**	**LOD**					
Inorganics								
Hexavalent Chromium	N	mg/kg	0.8	n/t	< 0.8	n/t	< 0.8	< 0.8
Total Sulphur	N	%	0.01	0.05	n/t	n/t	n/t	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.04	n/t	n/t	n/t	n/t
Water Soluble Boron	N	mg/kg	0.5	n/t	< 0.5	n/t	1.4	< 0.5
Miscellaneous								
Fraction of Organic Carbon	N		0.0001	n/t	0.0077	n/t	0.0046	0.0028
pH	M	pH units	0.1	8.5	8.2	n/t	8.1	8.2
Soil Organic Matter	U	%	0.1	n/t	0.9	n/t	0.7	0.3
Total Organic Carbon	N	%	0.01	n/t	0.77	n/t	0.46	0.28
Polyaromatic hydrocarbons								
Naphthalene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	M	mg/kg	0.1	n/t	0.2	< 0.1	< 0.1	< 0.1
Pyrene	M	mg/kg	0.1	n/t	0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzo(a,h)anthracene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[g,h,i]perylene	M	mg/kg	0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1
Total PAH(16)	M	mg/kg	0.4	n/t	0.4	< 0.4	< 0.4	< 0.4

Results Summary

Report No.: 22-45594, issue number 1

ELAB Reference				306564	306567	306569	306571	306573
Customer Reference								
Sample ID								
Sample Type				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location				BH03 (BRE)	WS01	WS01	WS02	WS03
Sample Depth (m)				7.00	0.80	2.80	1.00	1.50
Sampling Date				16/12/2022	16/12/2022	16/12/2022	16/12/2022	16/12/2022
Determinand	**Codes**	**Units**	**LOD**					
BTEX								
Benzene	M	ug/kg	10	n/t	g < 10.0	g < 10.0	g < 10.0	g < 10.0
Toluene	M	ug/kg	10	n/t	g < 10.0	g < 10.0	g < 10.0	g < 10.0
Ethylbenzene	M	ug/kg	10	n/t	g < 10.0	g < 10.0	g < 10.0	g < 10.0
Xylenes	M	ug/kg	10	n/t	g < 10.0	g < 10.0	g < 10.0	g < 10.0
MTBE	U	ug/kg	10	n/t	g < 10.0	g < 10.0	g < 10.0	g < 10.0
TPH CWG								
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0	< 1.0	< 1.0	< 1.0
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	1.2	< 1.0	1.6	< 1.0
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t	1.7	< 1.0	2.3	< 1.0

Results Summary

Report No.: 22-45594, issue number 1

ELAB Reference	306567	306569
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	WS01	WS01
Sample Depth (m)	0.80	2.80
Sampling Date	16/12/2022	16/12/2022

Determinand	Codes	Units	LOD		
VOC					
Heptane	N	ug/kg	10	< 10.0	< 10.0
Octane	N	ug/kg	10	< 10.0	< 10.0
Nonane	N	ug/kg	10	< 10.0	< 10.0
Benzene	M	ug/kg	10	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0
m+p-xylene	M	ug/kg	10	< 10.0	< 10.0
o-xylene	M	ug/kg	10	< 10.0	< 10.0
cis-1,2-dichloroethene	N	ug/kg	10	< 10.0	< 10.0
1,1-Dichloroethane	M	ug/kg	10	< 10.0	< 10.0
Chloroform	M	ug/kg	10	< 10.0	< 10.0
Tetrachloromethane	M	ug/kg	10	< 10.0	< 10.0
1,1,1-Trichloroethane	M	ug/kg	10	< 10.0	< 10.0
Trichloroethylene	M	ug/kg	10	< 10.0	< 10.0
Tetrachloroethylene	M	ug/kg	10	< 10.0	< 10.0
1,1,1,2-Tetrachloroethane	M	ug/kg	10	< 10.0	< 10.0
1,1,2,2-Tetrachloroetha	M	ug/kg	10	< 10.0	< 10.0
Chlorobenzene	M	ug/kg	10	< 10.0	< 10.0
Bromobenzene	M	ug/kg	10	< 10.0	< 10.0
Bromodichloromethane	M	ug/kg	10	< 10.0	< 10.0
Methylethylbenzene	M	ug/kg	10	< 10.0	< 10.0
1,1-Dichloro-1-propene	M	ug/kg	10	< 10.0	< 10.0
Trans - 1-2 -dichloroethylene	N	ug/kg	10	< 10.0	< 10.0
2,2-Dichloropropane	N	ug/kg	10	< 10.0	< 10.0
Bromochloromethane	N	ug/kg	10	< 10.0	< 10.0
1,2-Dichloroethane	M	ug/kg	10	< 10.0	< 10.0
Dibromomethane	M	ug/kg	10	< 10.0	< 10.0
1,2-Dichloropropane	M	ug/kg	10	< 10.0	< 10.0
cis-1,3-Dichloro-1-propene	M	ug/kg	10	< 10.0	< 10.0
trans-1,3-Dichloro-1-propene	M	ug/kg	10	< 10.0	< 10.0
1,1,2-Trichloroethane	N	ug/kg	10	< 10.0	< 10.0
Dibromochloromethane	N	ug/kg	10	< 10.0	< 10.0
1,3-Dichloropropane	N	ug/kg	10	< 10.0	< 10.0
1,2-dibromoethane	N	ug/kg	10	< 10.0	< 10.0
Styrene	N	ug/kg	10	< 10.0	< 10.0
Propylbenzene	N	ug/kg	10	< 10.0	< 10.0

Results Summary

Report No.: 22-45594, issue number 1

ELAB Reference	306567	306569
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	WS01	WS01
Sample Depth (m)	0.80	2.80
Sampling Date	16/12/2022	16/12/2022

Determinand	Codes	Units	LOD		
VOC					
2-Chlorotoluene	N	ug/kg	10	< 10.0	< 10.0
1,2,4-Trimethylbenzene	N	ug/kg	10	< 10.0	< 10.0
4-Chlorotoluene	N	ug/kg	10	< 10.0	< 10.0
t-butylbenzene	N	ug/kg	10	< 10.0	< 10.0
1,3,5-Trimethylbenzene	N	ug/kg	10	< 10.0	< 10.0
1-methylpropylbenzene	N	ug/kg	10	< 10.0	< 10.0
p-cymene	N	ug/kg	10	< 10.0	< 10.0
1,3-Dichlorobenzene	N	ug/kg	10	< 10.0	< 10.0
Butylbenzene	N	ug/kg	10	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	N	ug/kg	10	< 10.0	< 10.0
Hexachlorobutadiene	N	ug/kg	10	< 10.0	< 10.0
1-2-3 - Trichlorobenzene	N	ug/kg	10	< 10.0	< 10.0
Naphthalene	N	ug/kg	10	< 10.0	< 10.0
1-2-4 - Trichlorobenzene	N	ug/kg	10	< 10.0	< 10.0
1,4-Dichlorobenzene	N	ug/kg	10	< 10.0	< 10.0
1,2-Dichlorobenzene	N	ug/kg	10	< 10.0	< 10.0
Bromoform	N	ug/kg	10	< 10.0	< 10.0

Results Summary

Report No.: 22-45594, issue number 1

ELAB Reference	306567	306569
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	WS01	WS01
Sample Depth (m)	0.80	2.80
Sampling Date	16/12/2022	16/12/2022

Determinand	Codes	Units	LOD		
SVOC					
Phenol	N	mg/kg	0.01	< 0.01	< 0.01
Aniline	N	mg/kg	0.01	< 0.01	< 0.01
Bis(2-chloroethyl)ether	N	mg/kg	0.01	< 0.01	< 0.01
2-Chlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
1,3-Dichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01
1,4-Dichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01
Benzyl Alcohol	N	mg/kg	0.01	< 0.01	< 0.01
1,2-Dichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01
2-Methylphenol	N	mg/kg	0.01	< 0.01	< 0.01
Bis(2-chloroisopropyl)ether	N	mg/kg	0.01	< 0.01	< 0.01
3 and 4-methylphenol	N	mg/kg	0.01	< 0.01	< 0.01
N-Nitrosodi-n-propylamine	N	mg/kg	0.01	< 0.01	< 0.01
Hexachloroethane	N	mg/kg	0.01	< 0.01	< 0.01
Nitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01
Isophorone	N	mg/kg	0.01	< 0.01	< 0.01
2-Nitrophenol	N	mg/kg	0.01	< 0.01	< 0.01
2,4-Dimethylphenol	N	mg/kg	0.01	< 0.01	< 0.01
Bis(2-chloroethoxy)methane	N	mg/kg	0.01	< 0.01	< 0.01
2,4-Dichlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
1,3,5-Trichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01
Naphthalene	N	mg/kg	0.01	0.01	< 0.01
3-Chloroaniline	N	mg/kg	0.01	< 0.01	< 0.01
Hexachloro-1,3-butadiene	N	mg/kg	0.01	< 0.01	< 0.01
4-Chloro-3-methylphenol	N	mg/kg	0.01	< 0.01	< 0.01
2-Methylnaphthalene	N	mg/kg	0.01	0.01	< 0.01
1-Methylnaphthalene	N	mg/kg	0.01	0.02	< 0.01
Hexachlorocyclopentadiene	N	mg/kg	0.01	< 0.01	< 0.01
2,4,6-Trichlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
2,4,5-Trichlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
1-Chloronaphthalene	N	mg/kg	0.01	< 0.01	< 0.01
2-Nitroaniline	N	mg/kg	0.01	< 0.01	< 0.01
1,4-Dinitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01
Dimethyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01
1-3-dinitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01
2-6-dinitrotoluene	N	mg/kg	0.01	< 0.01	< 0.01
Acenaphthylene	N	mg/kg	0.01	0.03	0.01

Results Summary

Report No.: 22-45594, issue number 1

ELAB Reference	306567	306569
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	WS01	WS01
Sample Depth (m)	0.80	2.80
Sampling Date	16/12/2022	16/12/2022

Determinand	Codes	Units	LOD		
SVOC					
1,2-Dinitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01
3-Nitroaniline	N	mg/kg	0.01	< 0.01	< 0.01
Acenaphthene	N	mg/kg	0.01	< 0.01	< 0.01
4-nitrophenol	N	mg/kg	0.01	< 0.01	< 0.01
Dibenzofuran	N	mg/kg	0.01	< 0.01	< 0.01
2,3,5,6-Tetrachlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
2,3,4,6-Tetrachlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
Diethyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01
1-chloro-4-phenoxybenzene	N	mg/kg	0.01	< 0.01	< 0.01
Fluorene	N	mg/kg	0.01	< 0.01	< 0.01
4-Nitroaniline	N	mg/kg	0.01	< 0.01	< 0.01
Dinitro-o-cresol	N	mg/kg	0.01	< 0.01	< 0.01
Diphenylamine	N	mg/kg	0.01	< 0.01	< 0.01
Azobenzene	N	mg/kg	0.01	< 0.01	< 0.01
1-bromo-4-phenoxybenzene	N	mg/kg	0.01	< 0.01	< 0.01
Hexachlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01
Pentachlorophenol	N	mg/kg	0.01	< 0.01	< 0.01
Phenanthrene	N	mg/kg	0.01	0.10	< 0.01
Anthracene	N	mg/kg	0.01	0.03	< 0.01
Carbazole	N	mg/kg	0.01	0.01	< 0.01
Dibutyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01
Fluoranthene	N	mg/kg	0.01	0.27	< 0.01
Pyrene	N	mg/kg	0.01	0.24	< 0.01
Butyl benzyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01
Bis-2-ethylhexyladipate	N	mg/kg	0.01	< 0.01	< 0.01
Diisooctyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01
Benzo(a)anthracene	N	mg/kg	0.01	0.13	< 0.01
Chrysene	N	mg/kg	0.01	0.16	< 0.01
Bis(2-ethylhexyl)phthalate	N	mg/kg	0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	N	mg/kg	0.01	0.14	< 0.01
Benzo(k)fluoranthene	N	mg/kg	0.01	0.17	< 0.01
Benzo(a)pyrene	N	mg/kg	0.01	0.14	< 0.01
Indeno(1,2,3-cd)pyrene	N	mg/kg	0.01	0.10	< 0.01
Dibenzo(a,h)anthracene	N	mg/kg	0.01	0.05	< 0.01
Benzo[g,h,i]perylene	N	mg/kg	0.01	0.11	< 0.01

2683

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Results Summary

Report No.: 22-45594, issue number 1

Asbestos Results

Analytical result only applies to the sample as submitted by the client. Any comments, opinions or interpretations (marked #)
in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client.

Elab No	Depth (m)	Clients Reference	Description of Sample Matrix #	Asbestos Identification	Gravimetric Analysis Total (%)	Gravimetric Analysis by ACM Type (%)	Free Fibre Analysis (%)	Total Asbestos (%)
306567	0.80	WS01	Brown sandy soil, stones, brick, clinker	No asbestos detected	n/t	n/t	n/t	n/t
306571	1.00	WS02	Brown soil, stones	No asbestos detected	n/t	n/t	n/t	n/t
306573	1.50	WS03	Brown/Grey sandy soil, stones	No asbestos detected	n/t	n/t	n/t	n/t

Method Summary

Report No.: 22-45594, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Hexavalent chromium	N	As submitted sample	22/12/2022	110	Colorimetry
pH	M	Air dried sample	05/01/2023	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	23/12/2022	115	Ion Chromatography
Aqua regia extractable metals	M	Air dried sample	03/01/2023	300	ICPMS
PAH (GC-FID)	M	As submitted sample	22/12/2022	133	GC-FID
SVOC in solids	N	As submitted sample	22/12/2022	167	GC-MS
Water soluble anions	M	Air dried sample	22/12/2022	172	Ion Chromatography
Low range Aliphatic hydrocarbons soil	N	As submitted sample	03/01/2023	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	03/01/2023	181	GC-MS
VOC in solids	M	As submitted sample	03/01/2023	181	GC-MS
BTEX in solids	M	As submitted sample	03/01/2023	181A	GC-MS
Water soluble boron	N	Air dried sample	22/12/2022	202	Colorimetry
Total organic carbon/Total sulphur	N	Air dried sample	02/01/2023	210	IR
TPH CWG soil by gc-gc	M	As submitted sample	22/12/2022	271	
Asbestos identification	U	Air dried sample	04/01/2023	280	Microscopy
Soil organic matter	U	Air dried sample	04/01/2023	BS1377:P3	Titrimetry

Tests marked N are not UKAS accredited

Report Information

Report No.: 22-45594, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"
LOD	LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.

ELAB are unable to provide an interpretation or opinion on the content of this report.

The results relate only to the sample received.

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_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
MS	Mass Spectrometry

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2683

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	23-45673
Issue:	1
Date of Issue:	11/01/2023
Contact:	Charlotte Mason
Customer Details:	A2 Site Investigation Limited One Westminster Bridge Road South Bank London SE1 7XW
Quotation No:	Q22-02795
Order No:	PO1476-ELAB-02
Customer Reference:	26922
Date Received:	22/12/2022
Date Approved:	11/01/2023
Details:	50 Maresfield Gardens
Approved by:	

Tim Reeve, Quality Officer

Sample Summary

Report No.: 23-45673, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
306939	BH01 0.30	20/12/2022	03/01/2023		
306940	BH01 1.00	20/12/2022	03/01/2023		
306941	BH01 5.50	20/12/2022	03/01/2023		
306942	BH01 (BRE) 1.00	20/12/2022	03/01/2023		
306943	BH01 (BRE) 3.00	21/12/2022	03/01/2023	Sandy clayey loam	
306944	BH01 (BRE) 6.00	21/12/2022	03/01/2023		
306945	BH01 (BRE) 9.00	21/12/2022	03/01/2023		
306946	BH01 (BRE) 12.00	21/12/2022	03/01/2023	Clay	
306947	BH01 (BRE) 15.00	21/12/2022	03/01/2023		
306948	BH01 (BRE) 18.00	21/12/2022	03/01/2023		
306949	BH01 (BRE) 21.00	21/12/2022	03/01/2023		
306950	BH01 (BRE) 24.00	21/12/2022	03/01/2023		
306951	BH02 0.50	20/12/2022	03/01/2023	Sandy silty loam	g

Results Summary

Report No.: 23-45673, issue number 1

			ELAB Reference	306943	306946	306951
			Customer Reference			
			Sample ID			
			Sample Type	SOIL	SOIL	SOIL
			Sample Location	BH01 (BRE)	BH01 (BRE)	BH02
			Sample Depth (m)	3.00	12.00	0.50
			Sampling Date	21/12/2022	21/12/2022	20/12/2022
Determinand	**Codes**	**Units**	**LOD**			
Soil sample preparation parameters						
Moisture Content	N	%	0.1	17.5	18.5	12.9
Material removed	N	%	0.1	< 0.1	< 0.1	8.0
Description of Inert material removed	N		0	None	None	Stones/Clinker
Metals						
Arsenic	M	mg/kg	1	n/t	n/t	20.4
Barium	U	mg/kg	10	n/t	n/t	212
Beryllium	U	mg/kg	1	n/t	n/t	< 1.0
Cadmium	M	mg/kg	0.5	n/t	n/t	< 0.5
Chromium	M	mg/kg	5	n/t	n/t	47.1
Chromium (III)	N	mg/kg	5	n/t	n/t	47.1
Copper	M	mg/kg	5	n/t	n/t	54.4
Lead	M	mg/kg	5	n/t	n/t	292
Mercury	M	mg/kg	0.5	n/t	n/t	< 0.5
Molybdenum	N	mg/kg	0.5	n/t	n/t	1.1
Nickel	M	mg/kg	5	n/t	n/t	23.1
Selenium	M	mg/kg	1	n/t	n/t	< 1.0
Vanadium	M	mg/kg	5	n/t	n/t	68.3
Zinc	M	mg/kg	5	n/t	n/t	208
Anions						
Water Soluble Sulphate	M	g/l	0.02	0.12	0.12	n/t
Water Soluble Sulphate	M	mg/kg	40	n/t	n/t	495
Inorganics						
Hexavalent Chromium	N	mg/kg	0.8	n/t	n/t	< 0.8
Total Sulphur	N	%	0.01	0.01	0.65	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.03	0.05	n/t
Water Soluble Boron	N	mg/kg	0.5	n/t	n/t	1.2
Miscellaneous						
Fraction of Organic Carbon	N		0.0001	n/t	n/t	0.0207
pH	M	pH units	0.1	7.7	8.8	9.6
Soil Organic Matter	U	%	0.1	n/t	n/t	2.1
Total Organic Carbon	N	%	0.01	n/t	n/t	2.1

Results Summary

Report No.: 23-45673, issue number 1

			ELAB Reference	306943	306946	306951
			Customer Reference			
			Sample ID			
			Sample Type	SOIL	SOIL	SOIL
			Sample Location	BH01 (BRE)	BH01 (BRE)	BH02
			Sample Depth (m)	3.00	12.00	0.50
			Sampling Date	21/12/2022	21/12/2022	20/12/2022
Determinand	**Codes**	**Units**	**LOD**			
Polyaromatic hydrocarbons						
Naphthalene GCMS	N	mg/kg	0.01	n/t	n/t	0.07
Acenaphthylene GCMS	N	mg/kg	0.01	n/t	n/t	0.07
Acenaphthene GCMS	N	mg/kg	0.01	n/t	n/t	0.04
Fluorene GCMS	N	mg/kg	0.01	n/t	n/t	0.04
Phenanthrene GCMS	N	mg/kg	0.01	n/t	n/t	0.42
Anthracene GCMS	N	mg/kg	0.01	n/t	n/t	0.13
Fluoranthene GCMS	N	mg/kg	0.01	n/t	n/t	1.37
Pyrene GCMS	N	mg/kg	0.01	n/t	n/t	1.26
Benzo(a)anthracene GCMS	N	mg/kg	0.01	n/t	n/t	0.86
Chrysene GCMS	N	mg/kg	0.01	n/t	n/t	0.94
Benzo(b)fluoranthene GCMS	N	mg/kg	0.01	n/t	n/t	0.95
Benzo(k)fluoranthene GCMS	N	mg/kg	0.01	n/t	n/t	1.27
Benzo(a)pyrene GCMS	N	mg/kg	0.01	n/t	n/t	1.24
Indeno(1,2,3-cd)pyrene GCMS	N	mg/kg	0.01	n/t	n/t	0.62
Dibenzo(a,h)anthracene GCMS	N	mg/kg	0.01	n/t	n/t	0.35
Benzo(g,h,i)perylene GCMS	N	mg/kg	0.01	n/t	n/t	0.69
Total PAH(16) GCMS	N	mg/kg	0.04	n/t	n/t	10.3
BTEX						
Benzene	M	ug/kg	10	n/t	n/t	g < 10.0
Toluene	M	ug/kg	10	n/t	n/t	g < 10.0
Ethylbenzene	M	ug/kg	10	n/t	n/t	g < 10.0
Xylenes	M	ug/kg	10	n/t	n/t	g < 10.0
MTBE	U	ug/kg	10	n/t	n/t	g < 10.0
TPH CWG						
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t	g < 0.01
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t	g < 0.01
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	n/t	< 1.0
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t	< 1.0
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t	< 1.0
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t	< 1.0
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t	< 1.0
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	n/t	< 1.0
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t	g < 0.01
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t	g < 0.01
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	n/t	< 1.0
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t	< 1.0
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t	< 1.0
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t	< 1.0
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t	< 1.0
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	n/t	< 1.0
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t	n/t	< 1.0

2683

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Results Summary

Report No.: 23-45673, issue number 1

Asbestos Results

Analytical result only applies to the sample as submitted by the client. Any comments, opinions or interpretations (marked #)
in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client.

Elab No	Depth (m)	Clients Reference	Description of Sample Matrix #	Asbestos Identification	Gravimetric Analysis Total (%)	Gravimetric Analysis by ACM Type (%)	Free Fibre Analysis (%)	Total Asbestos (%)
306951	0.50	BH02	Brown sandy soil, stones, concrete, brick, clinker, organics	No asbestos detected	n/t	n/t	n/t	n/t

Method Summary

Report No.: 23-45673, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
PAH (GC-MS)	N	As submitted sample	10/01/2023		GC-MS
Hexavalent chromium	N	As submitted sample	04/01/2023	110	Colorimetry
pH	M	Air dried sample	06/01/2023	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	06/01/2023	115	Ion Chromatography
Aqua regia extractable metals	M	Air dried sample	05/01/2023	300	ICPMS
Water soluble anions	M	Air dried sample	05/01/2023	172	Ion Chromatography
Low range Aliphatic hydrocarbons soil	N	As submitted sample	05/01/2023	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	05/01/2023	181	GC-MS
BTEX in solids	M	As submitted sample	05/01/2023	181A	GC-MS
Water soluble boron	N	Air dried sample	05/01/2023	202	Colorimetry
Total organic carbon/Total sulphur	N	Air dried sample	04/01/2023	210	IR
TPH CWG soil by gc-gc	M	As submitted sample	04/01/2023	271	
Asbestos identification	U	Air dried sample	06/01/2023	280	Microscopy
Soil organic matter	U	Air dried sample	05/01/2023	BS1377:P3	Titrimetry

Tests marked N are not UKAS accredited

Report Information

Report No.: 23-45673, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"
LOD	LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.
	Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.
	ELAB are unable to provide an interpretation or opinion on the content of this report.
	The results relate only to the sample received.
	PCB congener results may include any coeluting PCBs
	Uncertainty of measurement for the determinands tested are available upon request
	Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month
All water samples will be retained for 7 days following the date of the test report
Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_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
MS	Mass Spectrometry

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2683

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	23-45932
Issue:	1
Date of Issue:	27/01/2023
Contact:	Charlotte Mason
Customer Details:	A2 Site Investigation Limited One Westminster Bridge Road South Bank London SE1 7XW
Quotation No:	Q22-03547
Order No:	PO1476-ELAB-03
Customer Reference:	26822
Date Received:	16/01/2023
Date Approved:	27/01/2023
Details:	50 Maresfield Gardens
Approved by:	

Tim Reeve, Quality Officer

Sample Summary

Report No.: 23-45932, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
308088	WS04 0.30	13/01/2023	16/01/2023		
308089	WS04 0.80	13/01/2023	16/01/2023	Silty clayey loam	
308090	WS04 1.50	13/01/2023	16/01/2023		
308091	WS04 2.50	13/01/2023	16/01/2023		
308092	WS04 4.00	13/01/2023	16/01/2023		
308093	WS05 0.10	13/01/2023	16/01/2023		
308094	WS05 0.80	13/01/2023	16/01/2023	Silty loam	
308095	WS05 1.50	13/01/2023	16/01/2023		
308096	WS05 2.50	13/01/2023	16/01/2023	Silty loam	
308097	WS05 3.50	13/01/2023	16/01/2023		
308098	WS06 0.20	13/01/2023	16/01/2023		
308099	WS06 1.00	13/01/2023	16/01/2023	Silty loam	
308100	WS06 3.00	13/01/2023	16/01/2023	Sandy silty loam	
308101	WS07 1.00	13/01/2023	16/01/2023		
308102	WS07 2.00	13/01/2023	16/01/2023	Silty loam	
308103	WS07 3.00	13/01/2023	16/01/2023		

Results Summary

Report No.: 23-45932, issue number 1

			ELAB Reference	308089	308094	308096	308099	308100	308102
			Customer Reference						
			Sample ID						
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	WS04	WS05	WS05	WS06	WS06	WS07
			Sample Depth (m)	0.80	0.80	2.50	1.00	3.00	2.00
			Sampling Date	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Determinand	**Codes**	**Units**	**LOD**						
Soil sample preparation parameters									
Moisture Content	N	%	0.1	19.8	16.4	15.7	15.0	16.1	12.5
BTEX									
Benzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Xylenes	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MTBE	U	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
TPH CWG									
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	< 1.0	2.6	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	< 1.0	110	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	< 1.0	391	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	< 1.0	254	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	3.9	< 1.0	31.2	< 1.0	< 1.0	< 1.0
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	4.6	< 1.0	788	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	< 1.0	< 1.0	1.6	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	< 1.0	83.8	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	< 1.0	429	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	< 1.0	137	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	2.6	1.6	26.8	< 1.0	< 1.0	< 1.0
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	3.0	2.4	678	1.1	< 1.0	< 1.0
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	7.6	2.6	1470	1.3	< 1.0	< 1.0

Results Summary

Report No.: 23-45932, issue number 1

			ELAB Reference	308089	308094	308096	308099	308100	308102
			Customer Reference						
			Sample ID						
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	WS04	WS05	WS05	WS06	WS06	WS07
			Sample Depth (m)	0.80	0.80	2.50	1.00	3.00	2.00
			Sampling Date	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Determinand	**Codes**	**Units**	**LOD**						
VOC									
Heptane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Octane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Nonane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
m+p-xylene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
o-xylene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
cis-1,2-dichloroethene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1-Dichloroethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chloroform	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Tetrachloromethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,1-Trichloroethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Trichloroethylene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Tetrachloroethylene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,1,2-Tetrachloroethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,2,2-Tetrachloroetha	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chlorobenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromobenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromodichloromethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Methylethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1-Dichloro-1-propene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Trans - 1-2 -dichloroethylene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,2-Dichloropropane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromochloromethane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dichloroethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dibromomethane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dichloropropane	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
cis-1,3-Dichloro-1-propene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,3-Dichloro-1-propene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,2-Trichloroethane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dibromochloromethane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3-Dichloropropane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-dibromoethane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Styrene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Propylbenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Chlorotoluene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2,4-Trimethylbenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Chlorotoluene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
t-butylbenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3,5-Trimethylbenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1-methylpropylbenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
p-cymene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3-Dichlorobenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Butylbenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachlorobutadiene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

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Results Summary

Report No.: 23-45932, issue number 1

			ELAB Reference	308089	308094	308096	308099	308100	308102
			Customer Reference						
			Sample ID						
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	WS04	WS05	WS05	WS06	WS06	WS07
			Sample Depth (m)	0.80	0.80	2.50	1.00	3.00	2.00
			Sampling Date	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Determinand	**Codes**	**Units**	**LOD**						
VOC									
1-2-3 - Trichlorobenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Naphthalene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1-2-4 - Trichlorobenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,4-Dichlorobenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dichlorobenzene	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromoform	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

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Results Summary

Report No.: 23-45932, issue number 1

			ELAB Reference	308089	308094	308096	308099	308100	308102
			Customer Reference						
			Sample ID						
			Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sample Location	WS04	WS05	WS05	WS06	WS06	WS07
			Sample Depth (m)	0.80	0.80	2.50	1.00	3.00	2.00
			Sampling Date	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Determinand	**Codes**	**Units**	**LOD**						
SVOC									
Phenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aniline	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis(2-chloroethyl)ether	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Chlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-Dichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-Dichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzyl Alcohol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-Dichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Methylphenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis(2-chloroisopropyl)ether	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3 and 4-methylphenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
N-Nitrosodi-n-propylamine	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachloroethane	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isophorone	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Nitrophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dimethylphenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis(2-chloroethoxy)methane	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-Trichlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	N	mg/kg	0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01
3-Chloroaniline	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachloro-1,3-butadiene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-Chloro-3-methylphenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Methylnaphthalene	N	mg/kg	0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01
1-Methylnaphthalene	N	mg/kg	0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorocyclopentadiene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4,6-Trichlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4,5-Trichlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-Chloronaphthalene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Nitroaniline	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-Dinitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dimethyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-3-dinitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-6-dinitrotoluene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	N	mg/kg	0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-Dinitrobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3-Nitroaniline	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	N	mg/kg	0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-nitrophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzofuran	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,3,5,6-Tetrachlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,3,4,6-Tetrachlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diethyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-chloro-4-phenoxybenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitroaniline	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Results Summary

Report No.: 23-45932, issue number 1

ELAB Reference				308089	308094	308096	308099	308100	308102
Customer Reference									
Sample ID									
Sample Type				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location				WS04	WS05	WS05	WS06	WS06	WS07
Sample Depth (m)				0.80	0.80	2.50	1.00	3.00	2.00
Sampling Date				13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Determinand	**Codes**	**Units**	**LOD**						
SVOC									
Dinitro-o-cresol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diphenylamine	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-bromo-4-phenoxybenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobenzene	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pentachlorophenol	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	N	mg/kg	0.01	0.05	0.17	< 0.01	0.03	< 0.01	< 0.01
Anthracene	N	mg/kg	0.01	0.03	0.08	< 0.01	0.01	< 0.01	< 0.01
Carbazole	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibutyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	N	mg/kg	0.01	0.19	0.49	< 0.01	0.04	< 0.01	< 0.01
Pyrene	N	mg/kg	0.01	0.16	0.43	< 0.01	0.03	< 0.01	< 0.01
Butyl benzyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis-2-ethylhexyladipate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diisooctyl phthalate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	N	mg/kg	0.01	0.11	0.19	< 0.01	0.02	< 0.01	< 0.01
Chrysene	N	mg/kg	0.01	0.10	0.31	< 0.01	0.03	< 0.01	< 0.01
Bis(2-ethylhexyl)phthalate	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	N	mg/kg	0.01	0.11	0.26	< 0.01	0.02	< 0.01	< 0.01
Benzo(k)fluoranthene	N	mg/kg	0.01	0.13	0.31	< 0.01	0.01	< 0.01	< 0.01
Benzo(a)pyrene	N	mg/kg	0.01	0.07	0.27	< 0.01	0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	N	mg/kg	0.01	0.04	0.09	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	N	mg/kg	0.01	0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01
Benzo[g,h,i]perylene	N	mg/kg	0.01	0.04	0.12	< 0.01	< 0.01	< 0.01	< 0.01

Method Summary

Report No.: 23-45932, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
SVOC in solids	N	As submitted sample	19/01/2023	167	GC-MS
Low range Aliphatic hydrocarbons soil	N	As submitted sample	21/01/2023	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	21/01/2023	181	GC-MS
VOC in solids	M	As submitted sample	21/01/2023	181	GC-MS
BTEX in solids	M	As submitted sample	21/01/2023	181A	GC-MS
TPH CWG soil by gc-gc	M	As submitted sample	19/01/2023	271	

Tests marked N are not UKAS accredited

Report Information

Report No.: 23-45932, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"
LOD	LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.

ELAB are unable to provide an interpretation or opinion on the content of this report.

The results relate only to the sample received.

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_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
MS	Mass Spectrometry

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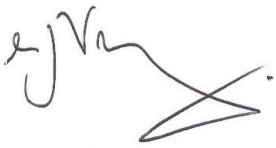
UKAS TESTING
2683

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	23-46432
Issue:	1
Date of Issue:	09/02/2023
Contact:	Fernando Afonso
Customer Details:	A2 Site Investigation Limited One Westminster Bridge Road South Bank London SE1 7XW
Quotation No:	Q22-03547
Order No:	PO1583-ELAB-04
Customer Reference:	Standard Quote 2022-23
Date Received:	31/01/2023
Date Approved:	09/02/2023
Details:	50 Maresfield Gardens
Approved by:	

Mike Varley, General Manager

Sample Summary

Report No.: 23-46432, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
310403	BH03 4.50	30/01/2023	01/02/2023		
310404	WS02 5.00	30/01/2023	01/02/2023		
310405	WS03 5.50	30/01/2023	01/02/2023		
310406	WS07 4.50	30/01/2023	01/02/2023		
310407	WS06 4.00	30/01/2023	01/02/2023		
310408	WS05 4.00	30/01/2023	01/02/2023		

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Results Summary

Report No.: 23-46432, issue number 1

ELAB Reference				310403	310404	310405	310408
Customer Reference							
Sample ID							
Sample Type				WATER	WATER	WATER	WATER
Sample Location				BH03	WS02	WS03	WS05
Sample Depth (m)				4.50	5.00	5.50	4.00
Sampling Date				30/01/2023	30/01/2023	30/01/2023	30/01/2023
Determinand	**Codes**	**Units**	**LOD**				
BTEX							
Benzene	U	ug/l	1	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	U	ug/l	1	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	U	ug/l	1	< 1.00	< 1.00	< 1.00	< 1.00
Xylenes	U	ug/l	1	< 1.00	< 1.00	< 1.00	< 1.00
MTBE	U	ug/l	1	< 1.00	< 1.00	< 1.00	< 1.00
TPH CWG							
>C5-C6 Aliphatic (HS_1D_MS)	N	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0
>C6-C8 Aliphatic (HS_1D_MS)	N	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0
>C8-C10 Aliphatic (EH_CU_1D_AL)	N	ug/l	5	< 5.0	12.4	< 5.0	< 5.0
>C10-C12 Aliphatic (EH_CU_1D_AL)	N	ug/l	5	8.0	47.4	< 5.0	< 5.0
>C12-C16 Aliphatic (EH_CU_1D_AL)	N	ug/l	5	17.2	454	< 5.0	< 5.0
>C16-C21 Aliphatic (EH_CU_1D_AL)	N	ug/l	5	22.4	178	< 5.0	< 5.0
>C21-C35 Aliphatic (EH_CU_1D_AL)	N	ug/l	5	68.3	60.0	12.4	9.3
>C35-C40 Aliphatic (EH_CU_1D_AL)	N	ug/l	5	< 5.0	< 5.0	< 5.0	< 5.0
Total (>C5-C40) Aliphatic (HS_1D_MS+EH_CU_1D_AL)	N	ug/l	5	116	752	12.4	9.3
>C5-C7 Aromatic (HS_1D_MS)	N	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0
>C7-C8 Aromatic (HS_1D_MS)	N	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0
>C8-C10 Aromatic (EH_CU_1D_AR)	N	ug/l	5	< 5.0	< 5.0	< 5.0	< 5.0
>C10-C12 Aromatic (EH_CU_1D_AR)	N	ug/l	5	8.5	5.5	< 5.0	< 5.0
>C12-C16 Aromatic (EH_CU_1D_AR)	N	ug/l	5	7.5	32.6	< 5.0	< 5.0
>C16-C21 Aromatic (EH_CU_1D_AR)	N	ug/l	5	11.3	33.4	< 5.0	< 5.0
>C21-C35 Aromatic (EH_CU_1D_AR)	N	ug/l	5	22.5	< 5.0	< 5.0	< 5.0
>C35-C40 Aromatic (EH_CU_1D_AR)	N	ug/l	5	< 5.0	< 5.0	< 5.0	< 5.0
Total (>C5-C40) Aromatic (HS_1D_MS+EH_CU_1D_AR)	N	ug/l	5	49.8	71.5	< 5.0	< 5.0
Total (>C5-C40) Ali/Aro (HS_1D_MS+EH_CU_1D_Total)	N	ug/l	5	166	823	12.4	9.3

Tests marked N are not UKAS accredited.

Results Summary

Report No.: 23-46432, issue number 1

ELAB Reference				310403	310404	310405	310408
Customer Reference							
Sample ID							
Sample Type				WATER	WATER	WATER	WATER
Sample Location				BH03	WS02	WS03	WS05
Sample Depth (m)				4.50	5.00	5.50	4.00
Sampling Date				30/01/2023	30/01/2023	30/01/2023	30/01/2023
Determinand	**Codes**	**Units**	**LOD**				
VOC							
MTBE	U	ug/l	1	< 1	< 1	< 1	< 1
Heptane	N	ug/l	1	< 1	< 1	< 1	< 1
Octane	N	ug/l	1	< 1	< 1	< 1	< 1
Nonane	N	ug/l	1	< 1	< 1	< 1	< 1
Benzene	U	ug/l	1	< 1	< 1	< 1	< 1
Toluene	U	ug/l	1	< 1	< 1	< 1	< 1
Ethylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
m+p-xylene	U	ug/l	1	< 1	< 1	< 1	< 1
o-xylene	U	ug/l	1	< 1	< 1	< 1	< 1
cis-1,2-dichloroethene	U	ug/l	1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	U	ug/l	1	< 1	< 1	< 1	< 1
Chloroform	U	ug/l	1	< 1	< 1	< 1	< 1
Tetrachloromethane	U	ug/l	1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	U	ug/l	1	< 1	< 1	< 1	< 1
Trichloroethylene	N	ug/l	1	< 1	< 1	< 1	< 1
Tetrachloroethylene	U	ug/l	1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	U	ug/l	1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroetha	N	ug/l	1	< 1	< 1	< 1	< 1
Chlorobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
Bromobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
Bromodichloromethane	U	ug/l	1	< 1	< 1	< 1	< 1
Methylethylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
1,1-Dichloro-1-propene	U	ug/l	1	< 1	< 1	< 1	< 1
Trans - 1-2 -dichloroethylene	U	ug/l	1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	U	ug/l	1	< 1	< 1	< 1	< 1
Bromochloromethane	U	ug/l	1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	U	ug/l	1	< 1	< 1	< 1	< 1
Dibromomethane	U	ug/l	1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	U	ug/l	1	< 1	< 1	< 1	< 1
cis-1,3-Dichloro-1-propene	U	ug/l	1	< 1	< 1	< 1	< 1
trans-1,3-Dichloro-1-propene	U	ug/l	1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	U	ug/l	1	< 1	< 1	< 1	< 1
Dibromochloromethane	U	ug/l	1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	U	ug/l	1	< 1	< 1	< 1	< 1
Dibromoethane	U	ug/l	1	< 1	< 1	< 1	< 1
Styrene	U	ug/l	1	< 1	< 1	< 1	< 1

Results Summary

Report No.: 23-46432, issue number 1

			ELAB Reference	310403	310404	310405	310408
			Customer Reference				
			Sample ID				
			Sample Type	WATER	WATER	WATER	WATER
			Sample Location	BH03	WS02	WS03	WS05
			Sample Depth (m)	4.50	5.00	5.50	4.00
			Sampling Date	30/01/2023	30/01/2023	30/01/2023	30/01/2023
Determinand	**Codes**	**Units**	**LOD**				
VOC							
Propylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
2-Chlorotoluene	U	ug/l	1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
4-Chlorotoluene	U	ug/l	1	< 1	< 1	< 1	< 1
t-butylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
1-methylpropylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
p-cymene	N	ug/l	1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
Butylbenzene	U	ug/l	1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	U	ug/l	1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	U	ug/l	1	< 1	< 1	< 1	< 1
1-2-3 - Trichlorobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
Naphthalene	U	ug/l	1	2	< 1	< 1	< 1
1-2-4 - Trichlorobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	U	ug/l	1	< 1	< 1	< 1	< 1
Bromoform	U	ug/l	1	< 1	< 1	< 1	< 1

Results Summary

Report No.: 23-46432, issue number 1

ELAB Reference	310403	310404
Customer Reference		
Sample ID		
Sample Type	WATER	WATER
Sample Location	BH03	WS02
Sample Depth (m)	4.50	5.00
Sampling Date	30/01/2023	30/01/2023

Determinand	Codes	Units	LOD		
SVOC					
Phenol	N	ug/l	1	< 1.00	< 1.00
Aniline	N	ug/l	1	< 1.00	< 1.00
Bis(2-chloroethyl)ether	N	ug/l	1	< 1.00	< 1.00
2-Chlorophenol	N	ug/l	1	< 1.00	< 1.00
1,3-Dichlorobenzene	N	ug/l	1	< 1.00	< 1.00
1,4-Dichlorobenzene	N	ug/l	1	< 1.00	< 1.00
Benzyl Alcohol	N	ug/l	1	< 1.00	< 1.00
1,2-Dichlorobenzene	N	ug/l	1	< 1.00	< 1.00
2-Methylphenol	N	ug/l	1	< 1.00	< 1.00
Bis(2-chloroisopropyl)ether	N	ug/l	1	< 1.00	< 1.00
3 and 4-methylphenol	N	ug/l	1	< 1.00	< 1.00
N-Nitrosodi-n-propylamine	N	ug/l	1	< 1.00	< 1.00
Hexachloroethane	N	ug/l	1	< 1.00	< 1.00
Nitrobenzene	N	ug/l	1	< 1.00	< 1.00
Isophorone	N	ug/l	1	< 1.00	< 1.00
2-Nitrophenol	N	ug/l	1	< 1.00	< 1.00
2,4-Dimethylphenol	N	ug/l	1	< 1.00	< 1.00
Bis(2-chloroethoxy)methane	N	ug/l	1	< 1.00	< 1.00
2,4-Dichlorophenol	N	ug/l	1	< 1.00	< 1.00
1,3,5-Trichlorobenzene	N	ug/l	1	< 1.00	< 1.00
Naphthalene	N	ug/l	0.01	< 0.01	< 0.01
3-Chloroaniline	N	ug/l	1	< 1.00	< 1.00
Hexachloro-1,3-butadiene	N	ug/l	1	< 1.00	< 1.00
4-Chloro-3-methylphenol	N	ug/l	1	< 1.00	< 1.00
2-Methynaphthalene	N	ug/l	1	< 1.00	< 1.00
1-Methylnaphthalene	N	ug/l	1	< 1.00	< 1.00
Hexachlorocyclopentadiene	N	ug/l	1	< 1.00	< 1.00
2,4,6-Trichlorophenol	N	ug/l	1	< 1.00	< 1.00
2,4,5-Trichlorophenol	N	ug/l	1	< 1.00	< 1.00
1-Chloronaphthalene	N	ug/l	1	< 1.00	< 1.00
2-Nitroaniline	N	ug/l	1	< 1.00	< 1.00
1,4-Dinitrobenzene	N	ug/l	1	< 1.00	< 1.00
Dimethyl phthalate	N	ug/l	1	< 1.00	< 1.00
1-3-dinitrobenzene	N	ug/l	1	< 1.00	< 1.00
2-6-dinitrotoluene	N	ug/l	1	< 1.00	< 1.00
Acenaphthylene	N	ug/l	0.01	< 0.01	< 0.01

Results Summary

Report No.: 23-46432, issue number 1

ELAB Reference	310403	310404
Customer Reference		
Sample ID		
Sample Type	WATER	WATER
Sample Location	BH03	WS02
Sample Depth (m)	4.50	5.00
Sampling Date	30/01/2023	30/01/2023

Determinand	Codes	Units	LOD		
SVOC					
1,2-Dinitrobenzene	N	ug/l	1	< 1.00	< 1.00
3-Nitroaniline	N	ug/l	1	< 1.00	< 1.00
Acenaphthene	N	ug/l	0.01	< 0.01	< 0.01
4-nitrophenol	N	ug/l	1	< 1.00	< 1.00
Dibenzofuran	N	ug/l	1	< 1.00	< 1.00
2,3,5,6-Tetrachlorophenol	N	ug/l	1	< 1.00	< 1.00
2,3,4,6-Tetrachlorophenol	N	ug/l	1	< 1.00	< 1.00
Diethyl phthalate	N	ug/l	1	< 1.00	< 1.00
1-chloro-4-phenoxybenzene	N	ug/l	1	< 1.00	< 1.00
Fluorene	N	ug/l	0.01	< 0.01	< 0.01
4-Nitroaniline	N	ug/l	1	< 1.00	< 1.00
Dinitro-o-cresol	N	ug/l	1	< 1.00	< 1.00
Diphenylamine	N	ug/l	1	< 1.00	< 1.00
Azobenzene	N	ug/l	1	< 1.00	< 1.00
1-bromo-4-phenoxybenzene	N	ug/l	1	< 1.00	< 1.00
Hexachlorobenzene	N	ug/l	1	< 1.00	< 1.00
Pentachlorophenol	N	ug/l	1	< 1.00	< 1.00
Phenanthrene	N	ug/l	0.01	< 0.01	< 0.01
Anthracene	N	ug/l	0.01	< 0.01	< 0.01
Carbazole	N	ug/l	1	< 1.00	< 1.00
Dibutyl phthalate	N	ug/l	1	< 1.00	< 1.00
Fluoranthene	N	ug/l	0.01	< 0.01	0.02
Pyrene	N	ug/l	0.01	< 0.01	0.02
Butyl benzyl phthalate	N	ug/l	1	< 1.00	< 1.00
Bis-2-ethylhexyladipate	N	ug/l	1	< 1.00	< 1.00
Diisooctyl phthalate	N	ug/l	1	< 1.00	< 1.00
Benzo(a)anthracene	N	ug/l	0.01	< 0.01	< 0.01
Chrysene	N	ug/l	0.01	< 0.01	0.01
Bis(2-ethylhexyl)phthalate	N	ug/l	1	< 1.00	< 1.00
Benzo(b)fluoranthene	N	ug/l	0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	N	ug/l	0.01	< 0.01	0.01
Benzo(a)pyrene	N	ug/l	0.01	< 0.01	< 0.01
Indeno(1,2,3-CD)pyrene	N	ug/l	0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	N	ug/l	0.01	< 0.01	< 0.01
Benzo(ghi)perylene	N	ug/l	0.01	< 0.01	< 0.01

Method Summary

Report No.: 23-46432, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Water					
Aliphatic/Aromatic hydrocarbons in water	N		08/02/2023		GC-FID
SVOC in waters	N		07/02/2023	167	GC-MS
BTEX in waters	U		05/02/2023	200	GC-MS
Low range Aliphatic hydrocarbons water	N		05/02/2023	200	GC-MS
Low range Aromatic hydrocarbons water	N		05/02/2023	200	GC-MS
VOC in waters	U		02/02/2023	200	GC-MS
Aliphatic hydrocarbons in water	N		06/02/2023	215	GC-FID
Aromatic hydrocarbons in water	N		06/02/2023	215	GC-FID

Tests marked N are not UKAS accredited

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Report Information

Report No.: 23-46432, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"
LOD	LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.
	Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.
	ELAB are unable to provide an interpretation or opinion on the content of this report.
	The results relate only to the sample received.
	PCB congener results may include any coeluting PCBs
	Uncertainty of measurement for the determinands tested are available upon request
	Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month
All water samples will be retained for 7 days following the date of the test report
Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_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
MS	Mass Spectrometry

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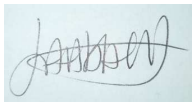
Analytical Report Number : 23-15198 / 6254

Project / Site name:	Maresfield Gardens	**Samples received on:**	02/02/2023
Your job number:	26822	**Samples instructed on/ Analysis started on:**	02/02/2023
Your order number:	PO1586-i2-02	**Analysis completed by:**	08/02/2023
Report Issue Number:	1	**Report issued on:**	08/02/2023
Samples Analysed:	2 gas samples		



Signed:

Jeanette Abbot
Technical Reviewer
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.

UKAS TESTING
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Analytical i2 Environmental Science

Report Number	23-15198 /6254		
Order number			
Sample Number	2571806	Sample date	30/01/2023
Sample ID	WS01 / 525111	Sample Start Time	12:26
Depth		Sample Stop Time	13:10
Canister Number	1551	Initial Pressure (PSI)	-13.85
Sample Volume	5700	Final Pressure (PSI)	0.00
		Dilution	3.00

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	< 9.7	µg/m3	4	< 4.0	ppbv
107-02-8	Acrolein	ISO 17025	1.2	< 1.2	µg/m3	0.5	< 0.5	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	< 1.0	µg/m3	0.3	< 0.3	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	21	µg/m3	3	6.8	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	< 25	µg/m3	7	< 7.0	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	< 5.8	µg/m3	3	< 3.0	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	< 11	µg/m3	3	< 3.0	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	< 5.0	µg/m3	2	< 2.0	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
78-93-3	MEK	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
115-07-1	Propene	ISO 17025	0.9	1.9	µg/m3	0.5	1.1	ppbv
100-42-5	Styrene	ISO 17025	2.2	< 2.2	µg/m3	0.5	< 0.5	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	< 1.2	µg/m3	0.3	< 0.3	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	36	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	31	µg/m3			

Report Number	23-15198 /6254		
Order number			
Sample Number	2571806	Sample date	30/01/2023
Sample ID	WS01 / 525111	Sample Start Time	12:26
Depth		Sample Stop Time	13:10
Canister Number	1551	Initial Pressure (PSI)	-13.85
Sample Volume	5700	Final Pressure (PSI)	0.00
		Dilution	3.00

75-34-3	TPH Aliphatic C8-C10	NONE	30	84	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	160	ug/m3			
	PRO C5-C12	ISO 17025	30	104	ug/m3			
	TPH >C5-C6	ISO 17025	30	36	ug/m3			
	TPH >C6-C8	ISO 17025	30	33	ug/m3			
	TPH >C8-C10	ISO 17025	30	84	ug/m3			

			VOC TICS		
CAS #	Compound Name	Accreditation	Compound Name	% Match	Amount (ppbv)
	VOC TIC Match 1	None	** (Z)-5-Methyl-2-decene	86	5.5
	VOC TIC Match 2	None	3-Carene	91	3.6
	VOC TIC Match 3	None	4,6,8-Trimethyl-1-nonene	88	2.7
	VOC TIC Match 4	None	2-Butyl-1-octanol	83	2.2
	VOC TIC Match 5	None	** 1,1'-Oxybisoctane	80	1.8
	VOC TIC Match 6	None	Unidentified compound	0	2.9
	VOC TIC Match 7	None	p-Mentha-1,8-dien-7-ol	85	1.3
	VOC TIC Match 8	None	** trans-beta-Ocimene	85	1.3
	VOC TIC Match 9	None	4-Ethyl-1-octyn-3-ol	76	1.2
	VOC TIC Match 10	None	Unidentified compound	0	2.1

** Additional compounds identified within 1% of library best fit

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Analytical i2 Environmental Science

Report Number	23-15198 /6254		
Order number			
Sample Number	2571807	Sample date	30/01/2023
Sample ID	WS05 / 525112	Sample Start Time	12:29
Depth		Sample Stop Time	13:13
Canister Number	1571	Initial Pressure (PSI)	-14.24
Sample Volume	5800	Final Pressure (PSI)	0.00
		Dilution	3.05

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	12	µg/m3	4	5	ppbv
107-02-8	Acrolein	ISO 17025	1.2	< 1.2	µg/m3	0.5	< 0.5	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	2.6	µg/m3	0.3	0.8	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	70	µg/m3	3	22	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	9.1	µg/m3	0.5	2.6	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	< 25	µg/m3	7	< 7.0	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	< 5.8	µg/m3	3	< 3.0	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	< 11	µg/m3	3	< 3.0	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	< 5.0	µg/m3	2	< 2.0	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
78-93-3	MEK	ISO 17025	1.5	2.1	µg/m3	0.5	0.7	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	1.6	µg/m3	0.3	0.4	ppbv
115-07-1	Propene	ISO 17025	0.9	11	µg/m3	0.5	6.5	ppbv
100-42-5	Styrene	ISO 17025	2.2	3.7	µg/m3	0.5	0.9	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	6.8	µg/m3	0.5	1	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	2.4	µg/m3	0.3	0.6	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	93	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	210	µg/m3			

Report Number	23-15198 /6254		
Order number			
Sample Number	2571807	Sample date	30/01/2023
Sample ID	WS05 / 525112	Sample Start Time	12:29
Depth		Sample Stop Time	13:13
Canister Number	1571	Initial Pressure (PSI)	-14.24
Sample Volume	5800	Final Pressure (PSI)	0.00
		Dilution	3.05

75-34-3	TPH Aliphatic C8-C10	NONE	30	160	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	110	ug/m3			
	PRO C5-C12	ISO 17025	30	193	ug/m3			
	TPH >C5-C6	ISO 17025	30	93	ug/m3			
	TPH >C6-C8	ISO 17025	30	210	ug/m3			
	TPH >C8-C10	ISO 17025	30	160	ug/m3			

			VOC TICS		
CAS #	Compound Name	Accreditation	Compound Name	% Match	Amount (ppbv)
	VOC TIC Match 1	None	** 2-Methyl-1-propene	87	54
	VOC TIC Match 2	None	** 2-Butyl-1-octanol	89	7.3
	VOC TIC Match 3	None	** 3-Carene	90	5.2
	VOC TIC Match 4	None	Methylcyclopentane	86	8.9
	VOC TIC Match 5	None	** 2,3,4-Trimethylhexane	81	2.8
	VOC TIC Match 6	None	Methylcyclohexane	87	4
	VOC TIC Match 7	None	trans-beta-Ocimene	87	2.2
	VOC TIC Match 8	None	2-Cyanoacetamide	73	4.3
	VOC TIC Match 9	None	** D-Limonene	85	1.5
	VOC TIC Match 10	None	Unidentified compound	0	2.9

** Additional compounds identified within 1% of library best fit

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Analytical Report Number : 23-15198 / 6254
Project / Site name: Maresfield Gardens

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
PRO in air samples	Determination of Petroleum Range Organics in air by GC-MS	TO-15 Summa gas canister methodology	L107B-PL		ISO 17025
Tentatively identified compounds (VOC) in air	Determination of volatile organic compounds total ion count in air by GC-MS.	In-house method based on T0-15	L106B-PL		NONE
VOC in air samples	Determination of Volatile Organics Compunds in air by GC-MS	TO-15 Summa gas canister methodology	L106B-PL		ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' 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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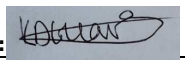
Analytical Report Number : 6316 / 23-16536

Project / Site name:	Maresfield Gardens	**Samples received on:**	09/02/2023
Your job number:	26822	**Samples instructed on/ Analysis started on:**	09/02/2023
Your order number:	PO1592-i2-02	**Analysis completed by:**	14/02/2023
Report Issue Number:	1	**Report issued on:**	15/02/2023
Samples Analysed:	2 gas samples		

Signed: 

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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Environmental Science

Report Number	6316 / 23-16536		
Order number	PO1592-i2-02		
Sample Number	2578904	Sample date	06/02/2023
Sample ID	WS01 (528527)	Sample Start Time	11:58
Depth	-	Sample Stop Time	12:32
Canister Number	1490	Initial Pressure (PSI)	-13.85
Sample Volume	5700	Final Pressure (PSI)	0.00
		Dilution	2.97

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	U/S	µg/m3	0.5	U/S	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	U/S	µg/m3	0.5	U/S	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	U/S	µg/m3	0.5	U/S	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	U/S	µg/m3	0.5	U/S	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	U/S	µg/m3	0.5	U/S	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	U/S	µg/m3	0.5	U/S	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	U/S	µg/m3	0.5	U/S	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	U/S	µg/m3	0.5	U/S	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	U/S	µg/m3	0.5	U/S	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	U/S	µg/m3	0.5	U/S	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	U/S	µg/m3	0.5	U/S	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	U/S	µg/m3	0.5	U/S	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	U/S	µg/m3	0.5	U/S	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	U/S	µg/m3	0.5	U/S	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	U/S	µg/m3	0.5	U/S	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	U/S	µg/m3	0.5	U/S	ppbv
67-64-1	Acetone	ISO 17025	9.7	U/S	µg/m3	4	U/S	ppbv
107-02-8	Acrolein	ISO 17025	1.2	U/S	µg/m3	0.5	U/S	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	U/S	µg/m3	0.5	U/S	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	U/S	µg/m3	0.5	U/S	ppbv
71-43-2	Benzene	ISO 17025	1	U/S	µg/m3	0.3	U/S	ppbv
74-83-9	Bromomethane	ISO 17025	2	U/S	µg/m3	0.5	U/S	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	U/S	µg/m3	0.5	U/S	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	U/S	µg/m3	0.5	U/S	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	U/S	µg/m3	0.5	U/S	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	U/S	µg/m3	0.5	U/S	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	U/S	µg/m3	3	U/S	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	U/S	µg/m3	0.5	U/S	ppbv
67-66-3	Chloroform	ISO 17025	2.5	U/S	µg/m3	0.5	U/S	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	U/S	µg/m3	5	U/S	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	U/S	µg/m3	0.5	U/S	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	U/S	µg/m3	0.5	U/S	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	U/S	µg/m3	0.5	U/S	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	U/S	µg/m3	7	U/S	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	U/S	µg/m3	0.5	U/S	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	U/S	µg/m3	0.5	U/S	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	U/S	µg/m3	0.3	U/S	ppbv
64-17-5	Ethanol	ISO 17025	5.8	U/S	µg/m3	3	U/S	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	U/S	µg/m3	0.5	U/S	ppbv
142-82-5	Heptane	ISO 17025	2.1	U/S	µg/m3	0.5	U/S	ppbv
110-54-3	Hexane	ISO 17025	10.8	U/S	µg/m3	3	U/S	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	U/S	µg/m3	2	U/S	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	U/S	µg/m3	0.5	U/S	ppbv
78-93-3	MEK	ISO 17025	1.5	U/S	µg/m3	0.5	U/S	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	U/S	µg/m3	0.5	U/S	ppbv
108-10-1	MIBK	ISO 17025	2.1	U/S	µg/m3	0.5	U/S	ppbv
1634-04-4	MTBE	ISO 17025	1.8	U/S	µg/m3	0.5	U/S	ppbv
95-47-6	O-xylene	ISO 17025	1.3	U/S	µg/m3	0.3	U/S	ppbv
	M/p-xylene	ISO 17025	1.3	U/S	µg/m3	0.3	U/S	ppbv
115-07-1	Propene	ISO 17025	0.9	U/S	µg/m3	0.5	U/S	ppbv
100-42-5	Styrene	ISO 17025	2.2	U/S	µg/m3	0.5	U/S	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	U/S	µg/m3	0.5	U/S	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	U/S	µg/m3	0.5	U/S	ppbv
75-25-2	Bromoform	ISO 17025	5.3	U/S	µg/m3	0.5	U/S	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	U/S	µg/m3	0.5	U/S	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	U/S	µg/m3	0.5	U/S	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	U/S	µg/m3	0.5	U/S	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	U/S	µg/m3	0.5	U/S	ppbv
109-99-9	THF	ISO 17025	1.5	U/S	µg/m3	0.5	U/S	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	U/S	µg/m3	0.5	U/S	ppbv
108-88-3	Toluene	ISO 17025	1.2	U/S	µg/m3	0.3	U/S	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	U/S	µg/m3	0.5	U/S	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	U/S	µg/m3	0.5	U/S	ppbv

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Report Number	6316 / 23-16536		
Order number	PO1592-i2-02		
Sample Number	2578904	Sample date	06/02/2023
Sample ID	WS01 (528527)	Sample Start Time	11:58
Depth	-	Sample Stop Time	12:32
Canister Number	1490	Initial Pressure (PSI)	-13.85
Sample Volume	5700	Final Pressure (PSI)	0.00
		Dilution	2.97

91-20-3	Naphthalene	ISO 17025	2.7	U/S	µg/m3	0.5	U/S	ppbv

- results in ug/m3 outside the scope of accreditation

U/S- Canister received with valve open and therefore sampling during transit. Analysis cancelled by client.

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Report Number	6316 / 23-16536		
Order number	PO1592-i2-02		
Sample Number	2578904	Sample date	06/02/2023
Sample ID	WS01 (528527)	Sample Start Time	11:58
Depth	-	Sample Stop Time	12:32
Canister Number	1490	Initial Pressure (PSI)	-13.85
Sample Volume	5700	Final Pressure (PSI)	0.00
		Dilution	2.97

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	U/S	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	U/S	µg/m3			
75-34-3	TPH Aliphatic C8-C10	NONE	30	U/S	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	U/S	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	U/S	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	U/S	µg/m3			
	TPH >C10-C12	ISO 17025	30	U/S	ug/m3			
	PRO C5-C12	ISO 17025	30	U/S	ug/m3	5	U/S	ppbv
	TPH >C5-C6	ISO 17025	30	U/S	ug/m3			
	TPH >C6-C8	ISO 17025	30	U/S	ug/m3			
	TPH >C8-C10	ISO 17025	30	U/S	ug/m3			

U/S- Canister received with valve open and therefore sampling during transit. Analysis cancelled by client.

			VOC TICS		
CAS #	**Compound Name**	**Accreditation**	**Compound Name**	**% Match**	**Amount (ppbv)**
	VOC TIC Match 1	None	U/S	-	-
	VOC TIC Match 2	None	U/S	-	-
	VOC TIC Match 3	None	U/S	-	-
	VOC TIC Match 4	None	U/S	-	-
	VOC TIC Match 5	None	U/S	-	-
	VOC TIC Match 6	None	U/S	-	-
	VOC TIC Match 7	None	U/S	-	-
	VOC TIC Match 8	None	U/S	-	-
	VOC TIC Match 9	None	U/S	-	-
	VOC TIC Match 10	None	U/S	-	-

U/S- Canister received with valve open and therefore sampling during transit. Analysis cancelled by client.

UKAS TESTING
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Environmental Science

Report Number	6316 / 23-16536		
Order number	PO1592-i2-02		
Sample Number	2578905	Sample date	06/02/2023
Sample ID	WS05 (528528)	Sample Start Time	11:56
Depth		Sample Stop Time	12:27
Canister Number	1566	Initial Pressure (PSI)	-13.80
Sample Volume	5600	Final Pressure (PSI)	0.00
		Dilution	2.92

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	12	µg/m3	4	4.9	ppbv
107-02-8	Acrolein	ISO 17025	1.2	< 1.2	µg/m3	0.5	< 0.5	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	1.5	µg/m3	0.3	0.5	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	59	µg/m3	3	19	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	15	µg/m3	0.5	4.4	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	< 25	µg/m3	7	< 7.0	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	< 5.8	µg/m3	3	< 3.0	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	< 11	µg/m3	3	< 3.0	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	< 5.0	µg/m3	2	< 2.0	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
78-93-3	MEK	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
115-07-1	Propene	ISO 17025	0.9	11	µg/m3	0.5	6.5	ppbv
100-42-5	Styrene	ISO 17025	2.2	4.4	µg/m3	0.5	1	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	8.8	µg/m3	0.5	1.3	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	1.8	µg/m3	0.3	0.5	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv

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Report Number	6316 / 23-16536		
Order number	PO1592-i2-02		
Sample Number	2578905	Sample date	06/02/2023
Sample ID	WS05 (528528)	Sample Start Time	11:56
Depth		Sample Stop Time	12:27
Canister Number	1566	Initial Pressure (PSI)	-13.80
Sample Volume	5600	Final Pressure (PSI)	0.00
		Dilution	2.92

91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

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Environmental Science

Report Number	6316 / 23-16536		
Order number	PO1592-i2-02		
Sample Number	2578905	Sample date	06/02/2023
Sample ID	WS05 (528528)	Sample Start Time	11:56
Depth		Sample Stop Time	12:27
Canister Number	1566	Initial Pressure (PSI)	-13.80
Sample Volume	5600	Final Pressure (PSI)	0.00
		Dilution	2.92

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	90	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	190	µg/m3			
75-34-3	TPH Aliphatic C8-C10	NONE	30	120	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	96	ug/m3			
	PRO C5-C12	ISO 17025	30	175	ug/m3			
	TPH >C5-C6	ISO 17025	30	90	ug/m3			
	TPH >C6-C8	ISO 17025	30	190	ug/m3			
	TPH >C8-C10	ISO 17025	30	130	ug/m3			

			VOC TICS		
CAS #	**Compound Name**	**Accreditation**	**Compound Name**	**% Match**	**Amount (ppbv)**
	VOC TIC Match 1	None	** 2-Methyl-1-propene	88	60
	VOC TIC Match 2	None	** Decane	88	11
	VOC TIC Match 3	None	Methylcyclopentane	87	12
	VOC TIC Match 4	None	Methylcyclohexane	87	6.3
	VOC TIC Match 5	None	** 2,2,3-Trimethylhexane	90	3.7
	VOC TIC Match 6	None	** Alanine	73	3.4
	VOC TIC Match 7	None	(2-Aziridinylethyl)amine	71	3.2
	VOC TIC Match 8	None	** 2,3,4-Trimethylhexane	84	1.5
	VOC TIC Match 9	None	Cycloheptane	84	1.9
	VOC TIC Match 10	None	** 2-Butyl-1-octanol	83	1.3

** Additional compounds identified within 1% of the library best match

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Analytical Report Number : 6316 / 23-16536
Project / Site name: Maresfield Gardens

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
PRO in air samples	Determination of Petroleum Range Organics in air by GC-MS	TO-15 Summa gas canister methodology	L107B-PL		ISO 17025
Tentatively identified compounds (VOC) in air	Determination of volatile organic compounds total ion count in air by GC-MS.	In-house method based on T0-15	L106B-PL		NONE
VOC in air samples	Determination of Volatile Organics Compunds in air by GC-MS	TO-15 Summa gas canister methodology	L106B-PL		ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' 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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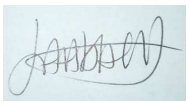
Analytical Report Number : 23-18631 /6403

Project / Site name:	Maresfield Gardens	**Samples received on:**	21/02/2023
Your job number:	26822	**Samples instructed on/ Analysis started on:**	21/02/2023
Your order number:	PO 1619	**Analysis completed by:**	27/02/2023
Report Issue Number:	1	**Report issued on:**	28/02/2023
Samples Analysed:	1 gas sample		



Signed:

Jeanette Abbot
Technical Reviewer
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 i2 Environmental Science

Report Number	23-18631 / 6403		
Order number			
Sample Number	2591927	Sample date	17/02/2023
Sample ID	534326 / WS01	Sample Start Time	16:18
Depth		Sample Stop Time	16:58
Canister Number	1339	Initial Pressure (PSI)	-14.10
Sample Volume	5800	Final Pressure (PSI)	0.00
		Dilution	3.05

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	26	µg/m3	4	11	ppbv
107-02-8	Acrolein	ISO 17025	1.2	< 1.2	µg/m3	0.5	< 0.5	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	< 1.0	µg/m3	0.3	< 0.3	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	32	µg/m3	3	10	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	< 25	µg/m3	7	< 7.0	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	< 5.8	µg/m3	3	< 3.0	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	< 11	µg/m3	3	< 3.0	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	< 5.0	µg/m3	2	< 2.0	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
78-93-3	MEK	ISO 17025	1.5	3.7	µg/m3	0.5	1.2	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	1.7	µg/m3	0.3	0.4	ppbv
115-07-1	Propene	ISO 17025	0.9	< 0.9	µg/m3	0.5	< 0.5	ppbv
100-42-5	Styrene	ISO 17025	2.2	3	µg/m3	0.5	0.7	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	1.8	µg/m3	0.3	0.5	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	< 30	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	48	µg/m3			

4041

Environmental Science

Report Number	23-18631 / 6403		
Order number			
Sample Number	2591927	Sample date	17/02/2023
Sample ID	534326 / WS01	Sample Start Time	16:18
Depth		Sample Stop Time	16:58
Canister Number	1339	Initial Pressure (PSI)	-14.10
Sample Volume	5800	Final Pressure (PSI)	0.00
		Dilution	3.05

75-34-3	TPH Aliphatic C8-C10	NONE	30	190	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	180	ug/m3			
	PRO C5-C12	ISO 17025	30	450	ug/m3	5	74	ppbv
	TPH >C5-C6	ISO 17025	30	< 30	ug/m3			
	TPH >C6-C8	ISO 17025	30	51	ug/m3			
	TPH >C8-C10	ISO 17025	30	200	ug/m3			

			VOC TICS		
CAS #	Compound Name	Accreditation	Compound Name	% Match	Amount (ppbv)
	VOC TIC Match 1	None	Decane	91	22
	VOC TIC Match 2	None	3-Carene	90	8.4
	VOC TIC Match 3	None	4,6,8-Trimethyl-1-nonene	89	3.9
	VOC TIC Match 4	None	Hexanal	87	3.7
	VOC TIC Match 5	None	2,3,4-Trimethylhexane	84	3.6
	VOC TIC Match 6	None	C12 alkohol compound	85	2.9
	VOC TIC Match 7	None	(E)-beta-ocimene	85	2.5
	VOC TIC Match 8	None	C12 alkohol compound	85	2.3
	VOC TIC Match 9	None	1-Chlorododecane	70	2.1
	VOC TIC Match 10	None	p-Mentha-1,8-dien-7-ol	84	1.8

4041

Analytical Report Number : 23-18631 / 6403
Project / Site name: Maresfield Gardens

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
PRO in air samples	Determination of Petroleum Range Organics in air by GC-MS	TO-15 Summa gas canister methodology	L107B-PL		ISO 17025
Tentatively identified compounds (VOC) in air	Determination of volatile organic compounds total ion count in air by GC-MS.	In-house method based on T0-15	L106B-PL		NONE
VOC in air samples	Determination of Volatile Organics Compunds in air by GC-MS	TO-15 Summa gas canister methodology	L106B-PL		ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' 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.

Appendix E: Geotechnical Laboratory Testing

Laboratory Report

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES A PHENNA GROUP COMPANY

Contract Number: 63499

Client Ref: **26822**
Client PO:

Date Received: **20-12-2022**
Date Completed: **12-01-2023**
Report Date: **12-01-2023**

Client: **A2 Site Investigation Limited**
Broom House, 39/43 London Road,
Hadleigh, Benfleet,
Essex
SS7 2QL

Contract Title: **50 Maresfield Gardens**
For the attention of: **Joe Peeler**

This report has been checked and approved by:

B. Evans

Brendan Evans
Office Administrator

Test Description	Qty
Samples Received - @ Non Accredited Test	25
Moisture Content BS 1377:1990 - Part 2 : 3.2 - * UKAS	1
4 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.3 & 5.3 - * UKAS	1
Quick Undrained Triaxial Compression test - single specimen at one confining pressure (100mm or 38mm diameter) BS 1377:1990 - Part 7 : 8 - * UKAS	2
Disposal of samples for job	1

Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

Approved Signatories:
Brendan Evans (Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)
Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)
Wayne Honey (Human Resources/ Health and Safety Coordinator)

GEO Site & Testing Services Ltd
Units 3-4, Heol Aur, Dafen, Llanelli, Carmarthenshire, Wales SA14 8QN
Tel: 01554 784040 Fax: 01554 784041 info@gstl.co.uk gstl.co.uk

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.3 & 5.3)**	
Contract Number	63499	
Project Name	50 Maresfield Gardens	
Date Tested	11/01/2023	
	DESCRIPTIONS	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
BH03	13	UT	5.50	-	5.95	Brown CLAY
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
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				-		
				-		
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				-		
				-		
				-		
				-		
				-		

Operator
Clayton Jenkins

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.3 & 5.3)	
Contract Number	63499	
Project Name	50 Maresfield Gardens	
Date Tested	11/01/2023	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing 0.425mm %	Remarks
BH03	13	UT	5.50	-	5.95	28	49	22	27	100	CI Intermediate Plasticity
				-							
				-							
				-							
				-							
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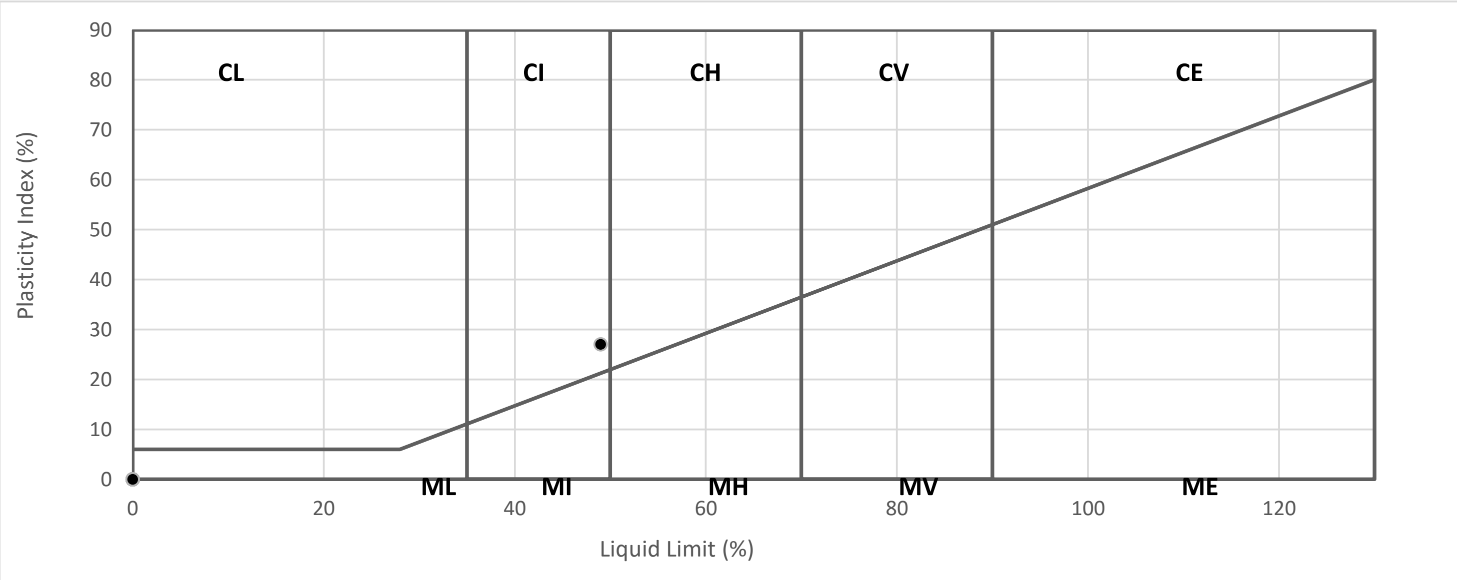
				-							
				-							
				-							

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

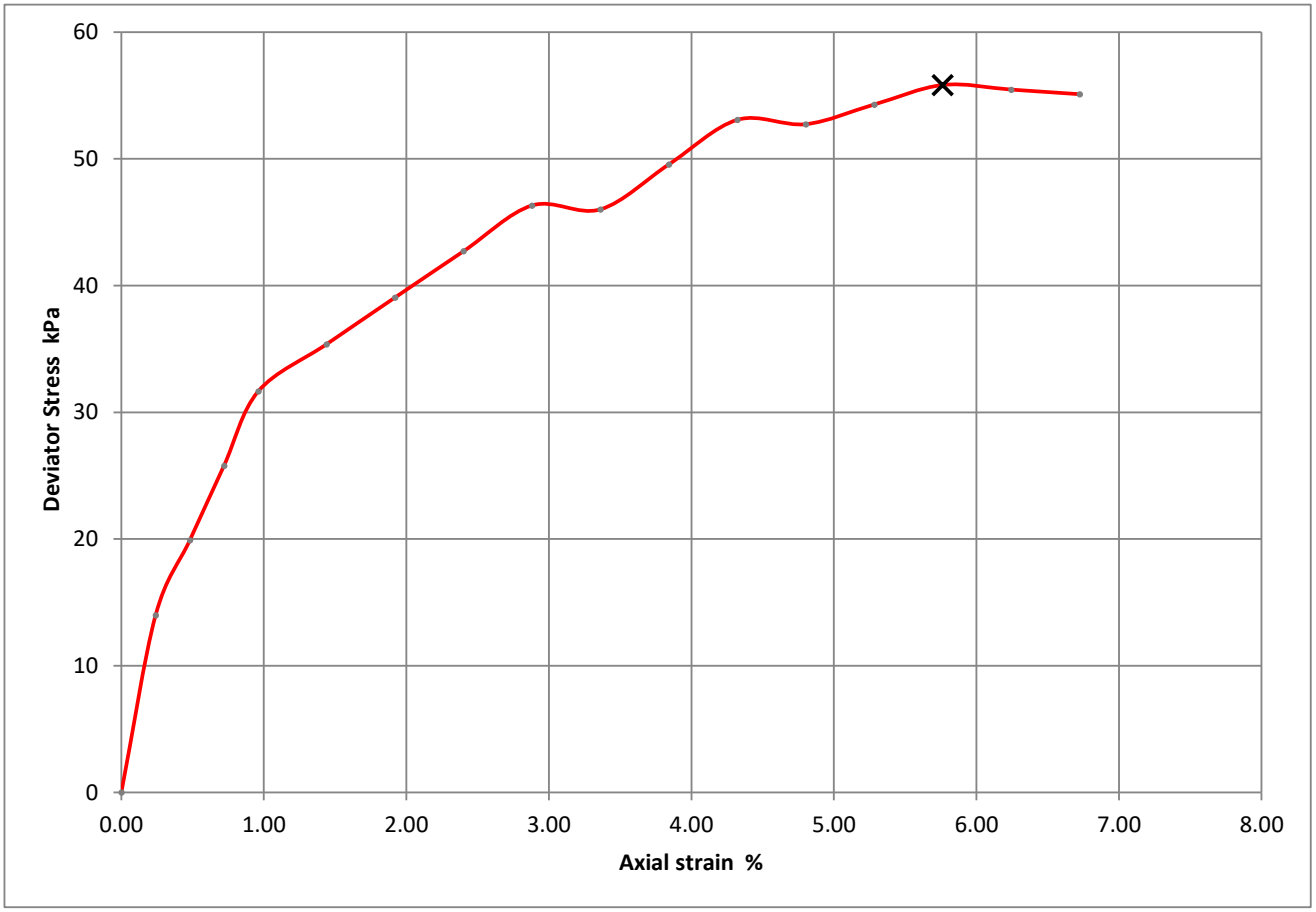
PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:2015+A1:2020



Operator
Clayton Jenkins

UKAS TESTING 2788

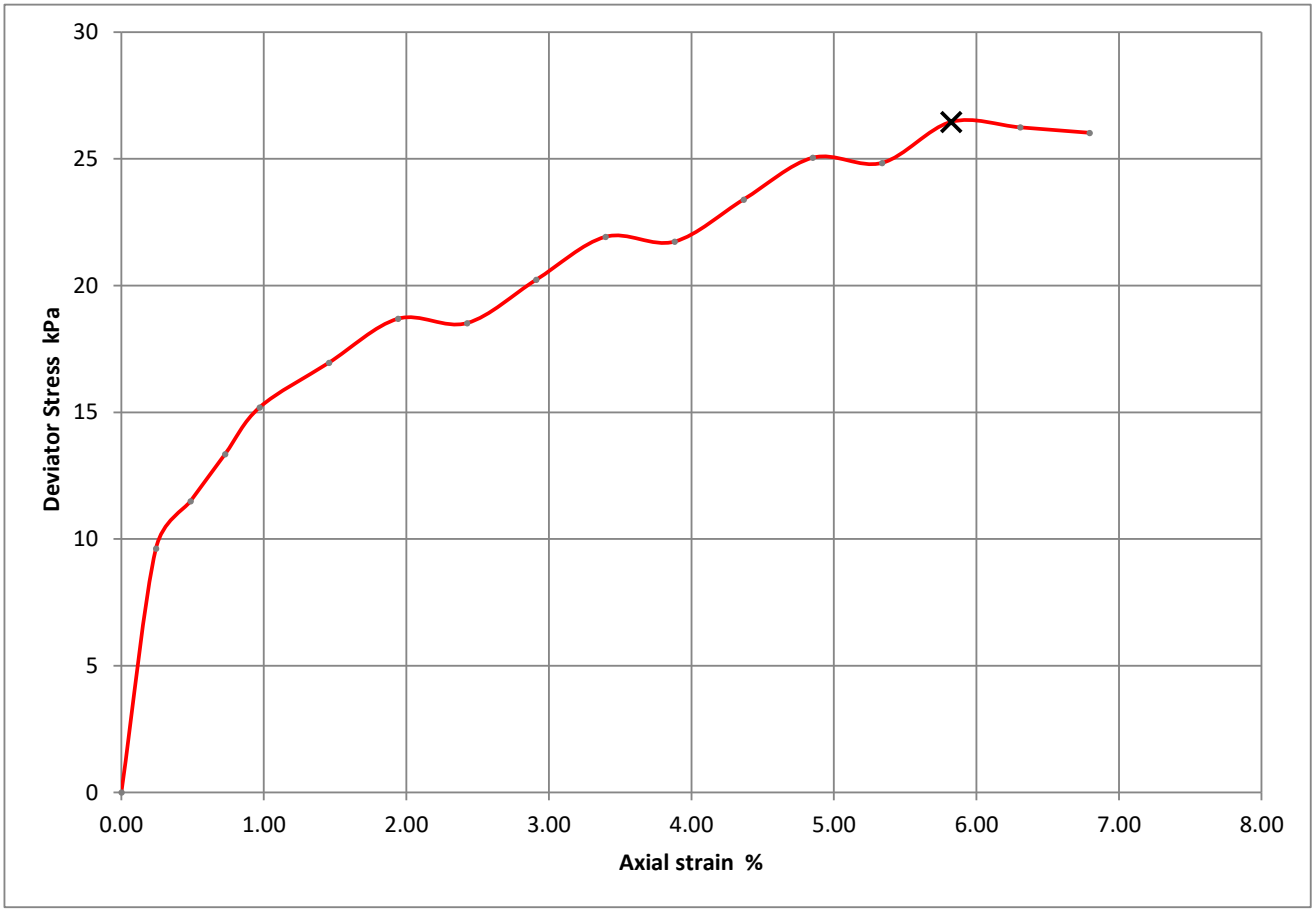
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	63499
		Borehole/Pit No.	BH03
Project Name	50 Maresfield Gardens	Sample No.	16
Soil Description	Brown silty CLAY	Depth Top (m)	6.50
		Depth Base (m)	6.95
Date Tested	10/01/2023	Sample Type	UT
		Operator	Jordan



Moisture Content (%)	50
Bulk Density (Mg/m^3)	1.91
Dry Density (Mg/m^3)	1.27
Specimen Length (mm)	208.2
Specimen Diamteter (mm)	101.3
Cell Pressure (kPa)	130
Deviator Stress (kPa)	56
Undrained Shear Strength (kPa)	28
Failure Strain (%)	6
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.3mm
Rate of Strain (%/min)	1.44

UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	63499
		Borehole/Pit No.	BH03
Project Name	50 Maresfield Gardens	Sample No.	19
Soil Description	Brown silty CLAY	Depth Top (m)	7.50
		Depth Base (m)	7.95
Date Tested	10/01/2023	Sample Type	UT
		Operator	Jordan



Moisture Content (%)	31
Bulk Density (Mg/m^3)	1.91
Dry Density (Mg/m^3)	1.45
Specimen Length (mm)	206.1
Specimen Diamteter (mm)	103.1
Cell Pressure (kPa)	150
Deviator Stress (kPa)	26
Undrained Shear Strength (kPa)	13
Failure Strain (%)	6
Mode Of Failure	Compound
Membrane Used/Thickness	Rubber/0.3mm
Rate of Strain (%/min)	1.46

UKAS TESTING
2788

Laboratory Report

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES A PHENNA GROUP COMPANY

Contract Number: 64090

Client Ref: **26822**
Client PO: **PO1477-GSTL-02**

Date Received: **24-01-2023**
Date Completed: **31-01-2023**
Report Date: **31-01-2023**

Client: **A2 Site Investigation Limited**
Broom House, 39/43 London Road,
Hadleigh, Benfleet,
Essex
SS7 2QL

Contract Title: **50 Maresfield Gardens**
For the attention of: **ALL JOBS**

This report has been checked and approved by:

B. Evans

Brendan Evans
Office Administrator

Test Description	Qty
Moisture Content BS 1377:1990 - Part 2 : 3.2 - * UKAS	1
4 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.3 & 5.3 - * UKAS	1
Quick Undrained Triaxial Compression test - single specimen at one confining pressure (100mm or 38mm diameter) BS 1377:1990 - Part 7 : 8 - * UKAS	4
Disposal of samples for job	1

Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

Approved Signatories:
Brendan Evans (Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)
Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)
Wayne Honey (Human Resources/ Health and Safety Manager)

GEO Site & Testing Services Ltd
Units 3-4, Heol Aur, Dafen, Llanelli, Carmarthenshire, Wales SA14 8QN
Tel: 01554 784040 Fax: 01554 784041 info@gstl.co.uk gstl.co.uk

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377:1990 - Part 2 : 4.3 & 5.3)

Contract Number	64090
Project Name	50 Maresfield Gardens
Date Tested	17/01/2023

DESCRIPTIONS

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
BH01	18	S	7.00	-	7.45	Brown silty CLAY
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
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				-		
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				-		
				-		
				-		
				-		

Operator
Clayton Jenkins

NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377:1990 - Part 2 : 4.3 & 5.3)

GEOTECHNICAL SITE & TESTING LABORATORIES

Contract Number	64090
Project Name	50 Maresfield Gardens
Date Tested	17/01/2023

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing 0.425mm %	Remarks
BH01	18	S	7.00	-	7.45	30	60	28	32	100	CH High Plasticity
				-							
				-							
				-							
				-							
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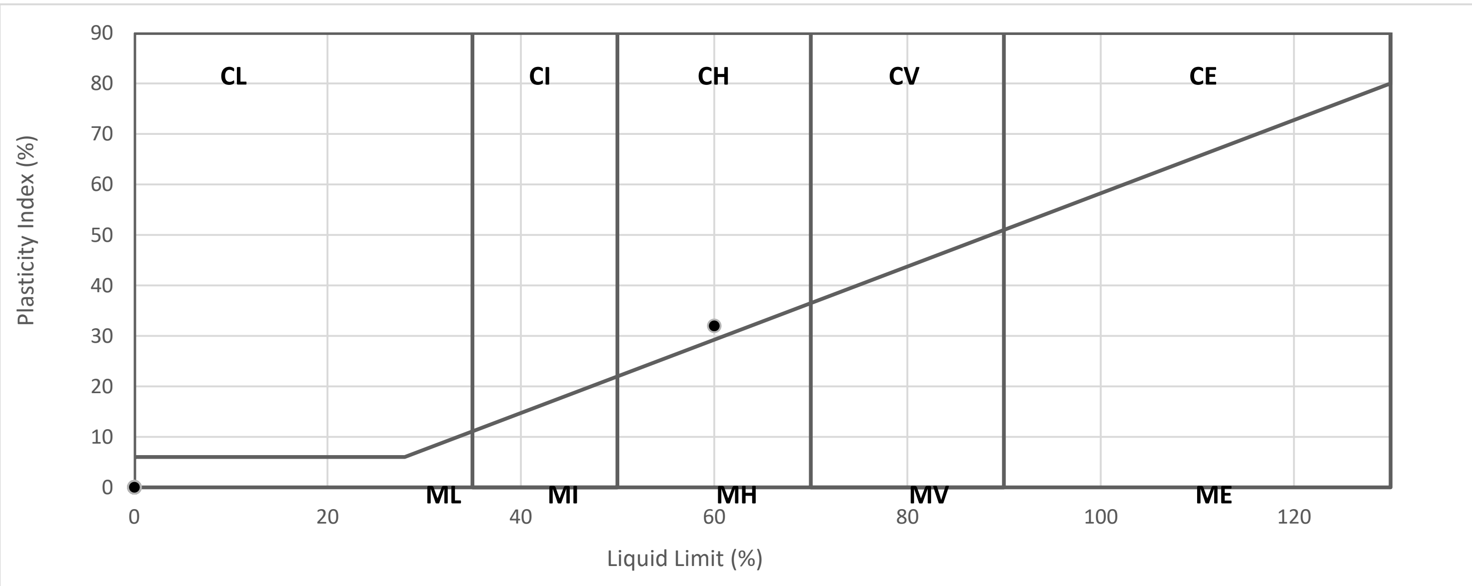
				-							
				-							

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

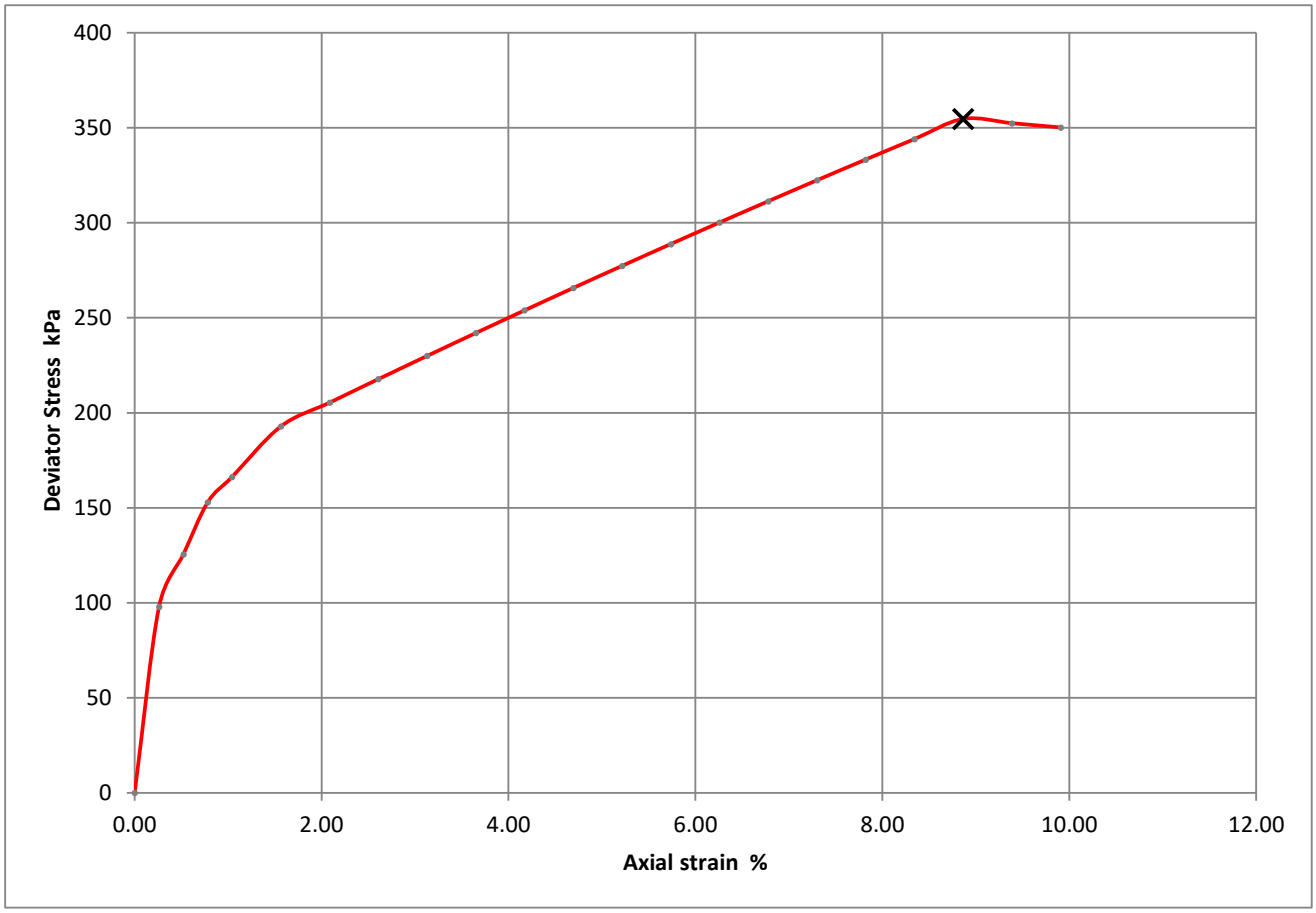
PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:2015+A1:2020



Operator
Clayton Jenkins

UKAS TESTING 2788

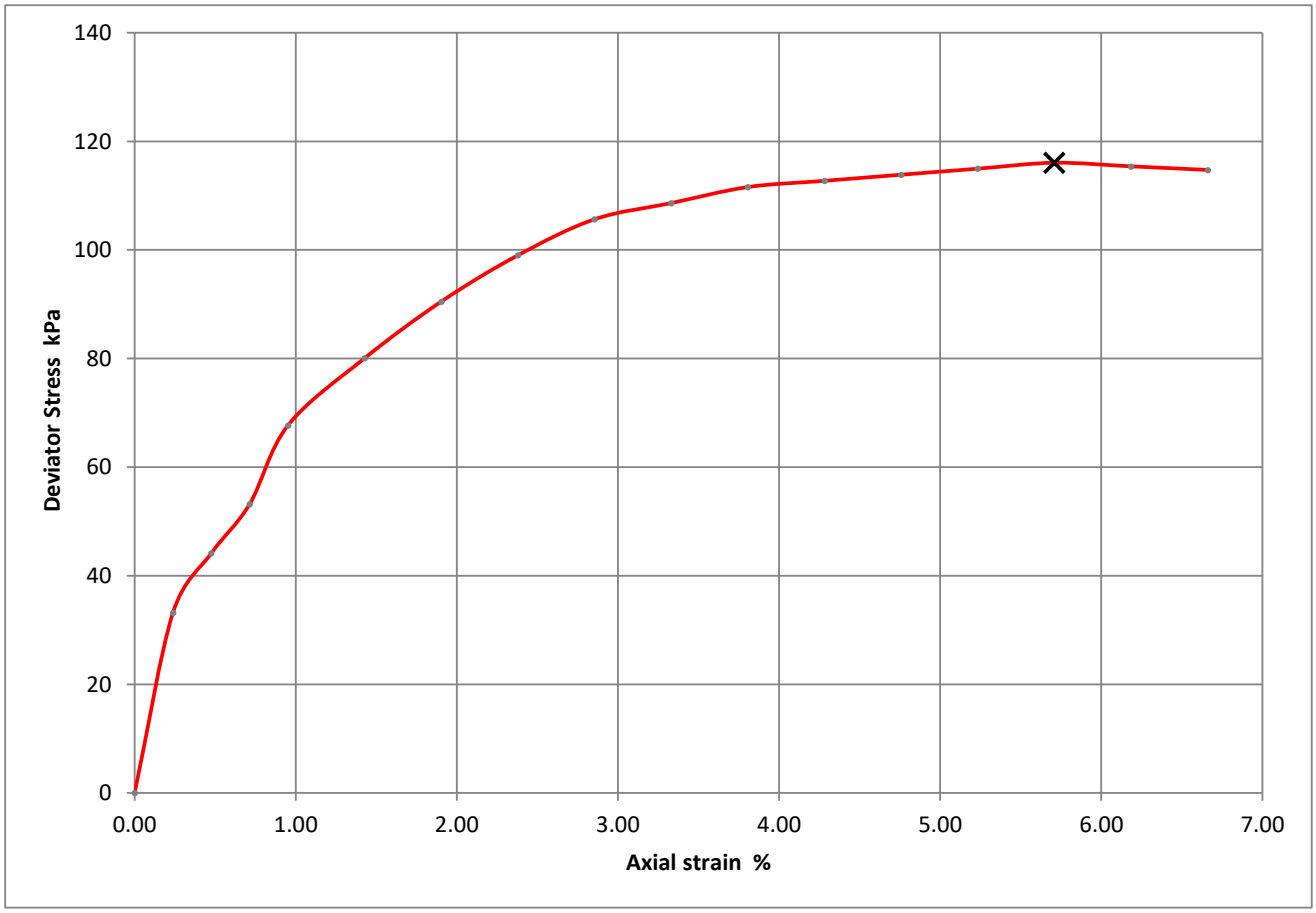
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	64090
		Borehole/Pit No.	BH01
Project Name	50 Maresfield Gardens	Sample No.	4
Soil Description	Brown sandy silty CLAY	Depth Top (m)	3.00
		Depth Base (m)	3.45
Date Tested	27/01/2023	Sample Type	U
		Operator	Christopher



Moisture Content (%)	19
Bulk Density (Mg/m^3)	1.92
Dry Density (Mg/m^3)	1.60
Specimen Length (mm)	76.7
Specimen Diamteter (mm)	38.3
Cell Pressure (kPa)	30
Deviator Stress (kPa)	355
Undrained Shear Strength (kPa)	177
Failure Strain (%)	9
Mode Of Failure	Compound
Membrane Used/Thickness	Rubber/0.3mm
Rate of Strain (%/min)	3.91

UKAS TESTING
2788

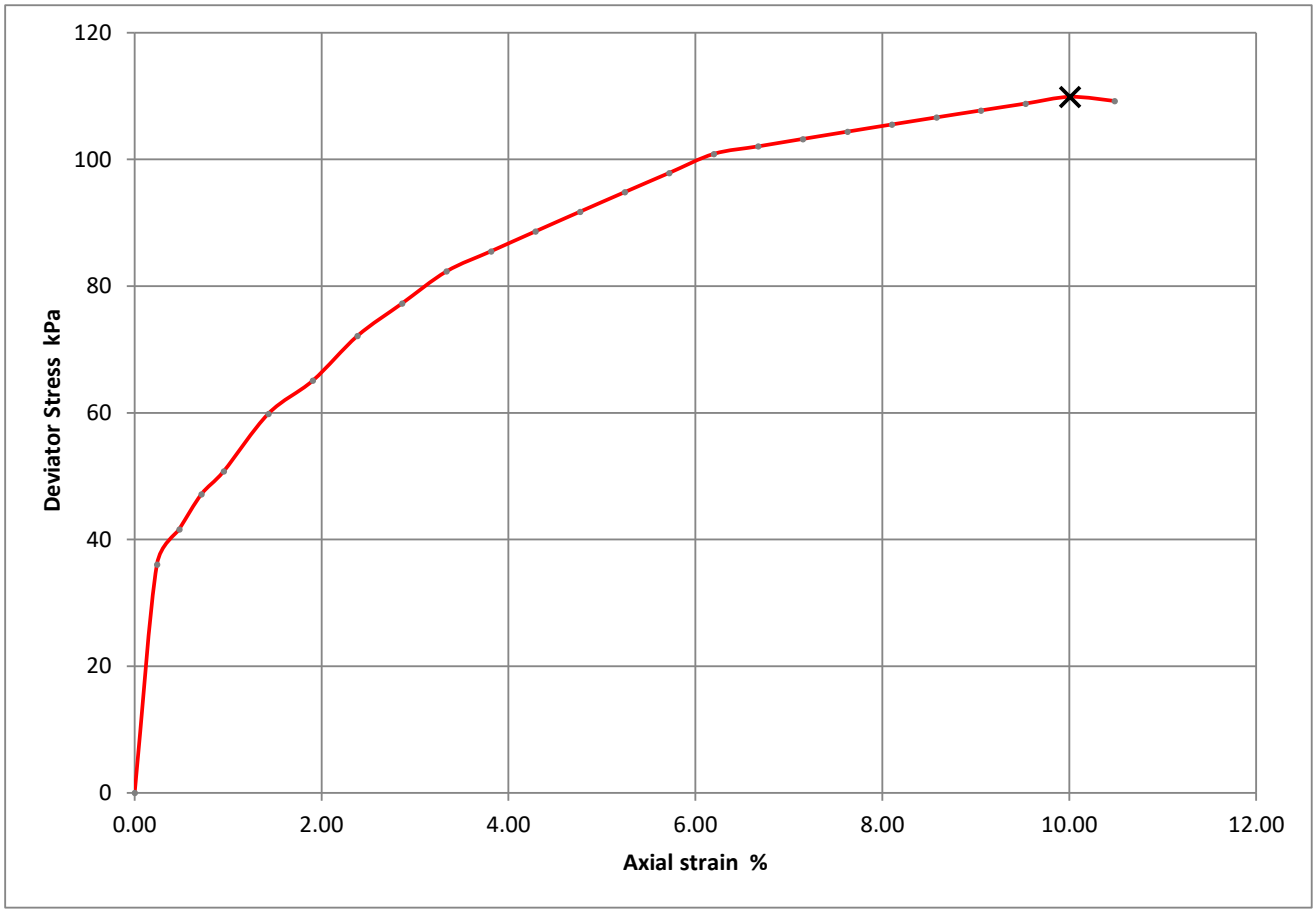
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	64090
		Borehole/Pit No.	BH01
Project Name	50 Maresfield Gardens	Sample No.	7
Soil Description	Brown sandy silty CLAY	Depth Top (m)	5.00
		Depth Base (m)	5.45
Date Tested	26/01/2023	Sample Type	U
		Operator	Christopher



Moisture Content (%)	29
Bulk Density (Mg/m^3)	1.91
Dry Density (Mg/m^3)	1.48
Specimen Length (mm)	210.2
Specimen Diamteter (mm)	105.5
Cell Pressure (kPa)	100
Deviator Stress (kPa)	116
Undrained Shear Strength (kPa)	58
Failure Strain (%)	6
Mode Of Failure	Compound
Membrane Used/Thickness	Rubber/0.3mm
Rate of Strain (%/min)	1.43

UKAS TESTING
2788

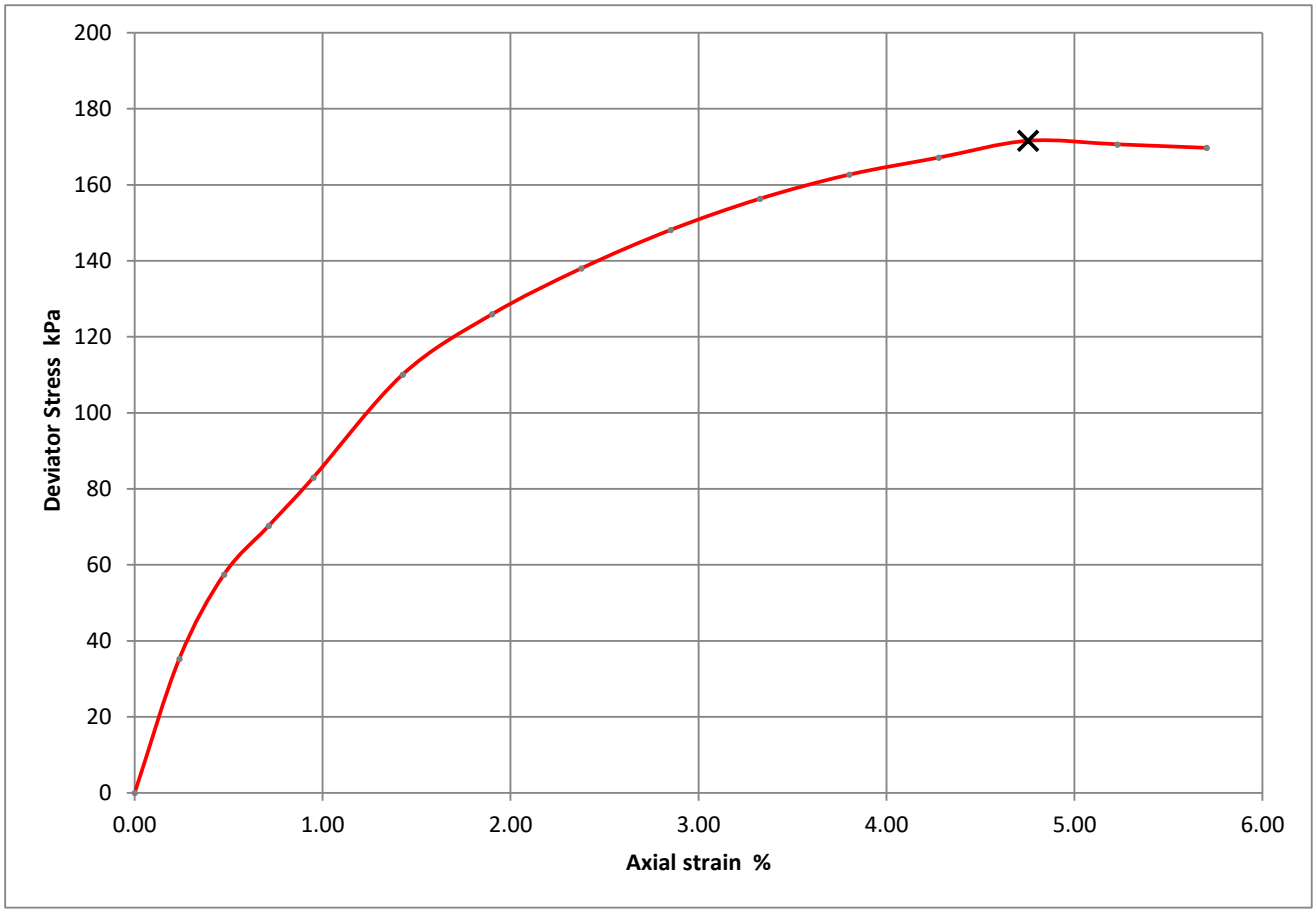
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	64090
		Borehole/Pit No.	BH01
Project Name	50 Maresfield Gardens	Sample No.	10
Soil Description	Brown silty CLAY	Depth Top (m)	7.00
		Depth Base (m)	7.45
Date Tested	26/01/2023	Sample Type	U
		Operator	Christopher



Moisture Content (%)	23
Bulk Density (Mg/m^3)	1.91
Dry Density (Mg/m^3)	1.55
Specimen Length (mm)	209.8
Specimen Diamteter (mm)	104
Cell Pressure (kPa)	140
Deviator Stress (kPa)	110
Undrained Shear Strength (kPa)	55
Failure Strain (%)	10
Mode Of Failure	Compound
Membrane Used/Thickness	Rubber/0.3mm
Rate of Strain (%/min)	1.43

UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	64090
		Borehole/Pit No.	BH01
Project Name	50 Maresfield Gardens	Sample No.	17
Soil Description	Brown silty CLAY	Depth Top (m)	10.50
		Depth Base (m)	10.95
Date Tested	27/01/2023	Sample Type	U
		Operator	Christopher



Moisture Content (%)	28
Bulk Density (Mg/m^3)	1.89
Dry Density (Mg/m^3)	1.48
Specimen Length (mm)	210.4
Specimen Diamteter (mm)	105.1
Cell Pressure (kPa)	210
Deviator Stress (kPa)	172
Undrained Shear Strength (kPa)	86
Failure Strain (%)	5
Mode Of Failure	Compound
Membrane Used/Thickness	Rubber/0.3mm
Rate of Strain (%/min)	1.43

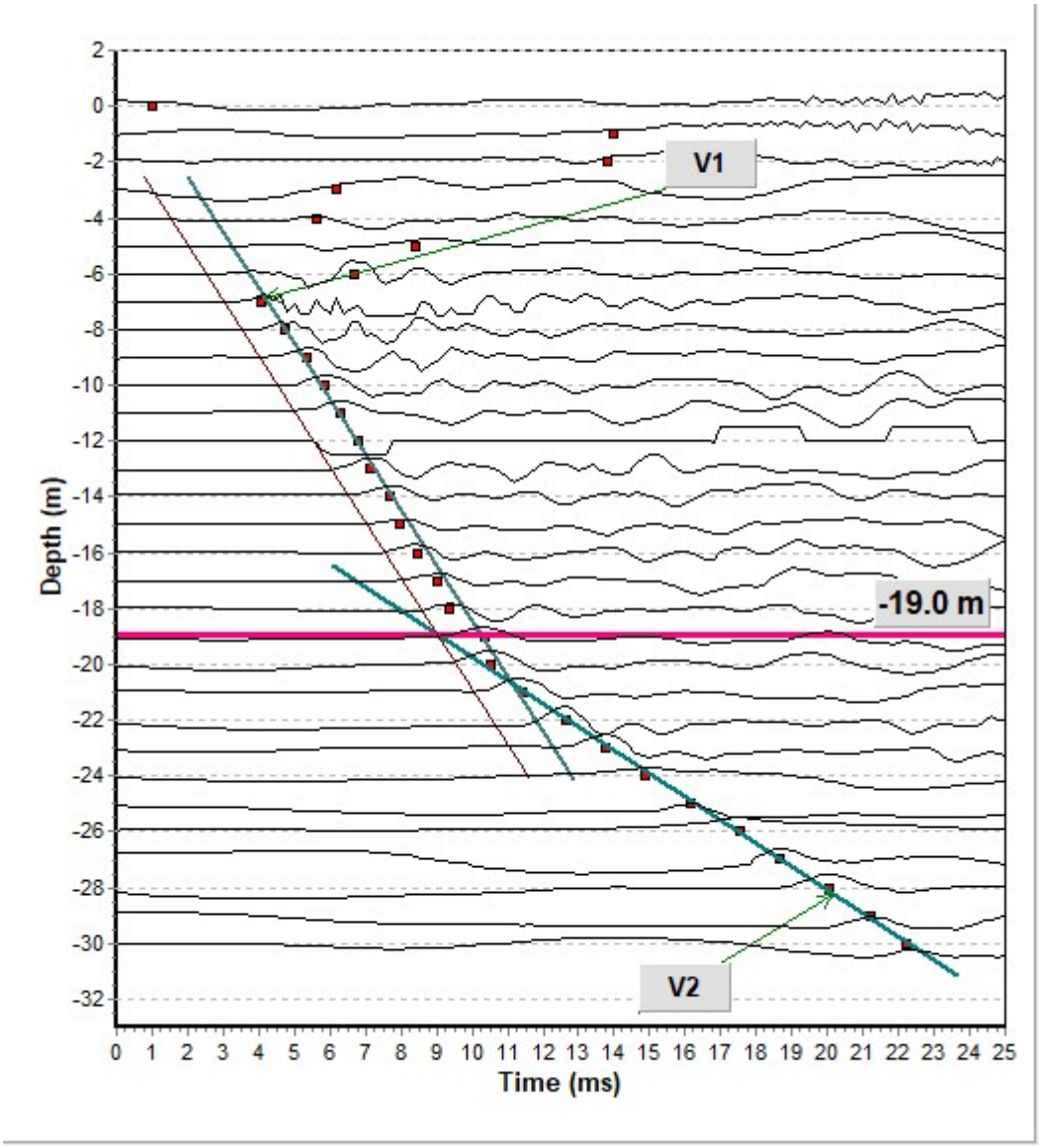
UKAS TESTING
2788

Appendix F: Parallel Seismic Geophysical data

Test Results

Site	MARES	**Pile Type**	Bored	**Tube Top level (m)**	0.0
Job	26822	**Pile No.**	01	**Intersection (m)**	0.3
Date	06/01/2023 12:23	**Operator**	AGB	**Distance to tube (m)**	1.0

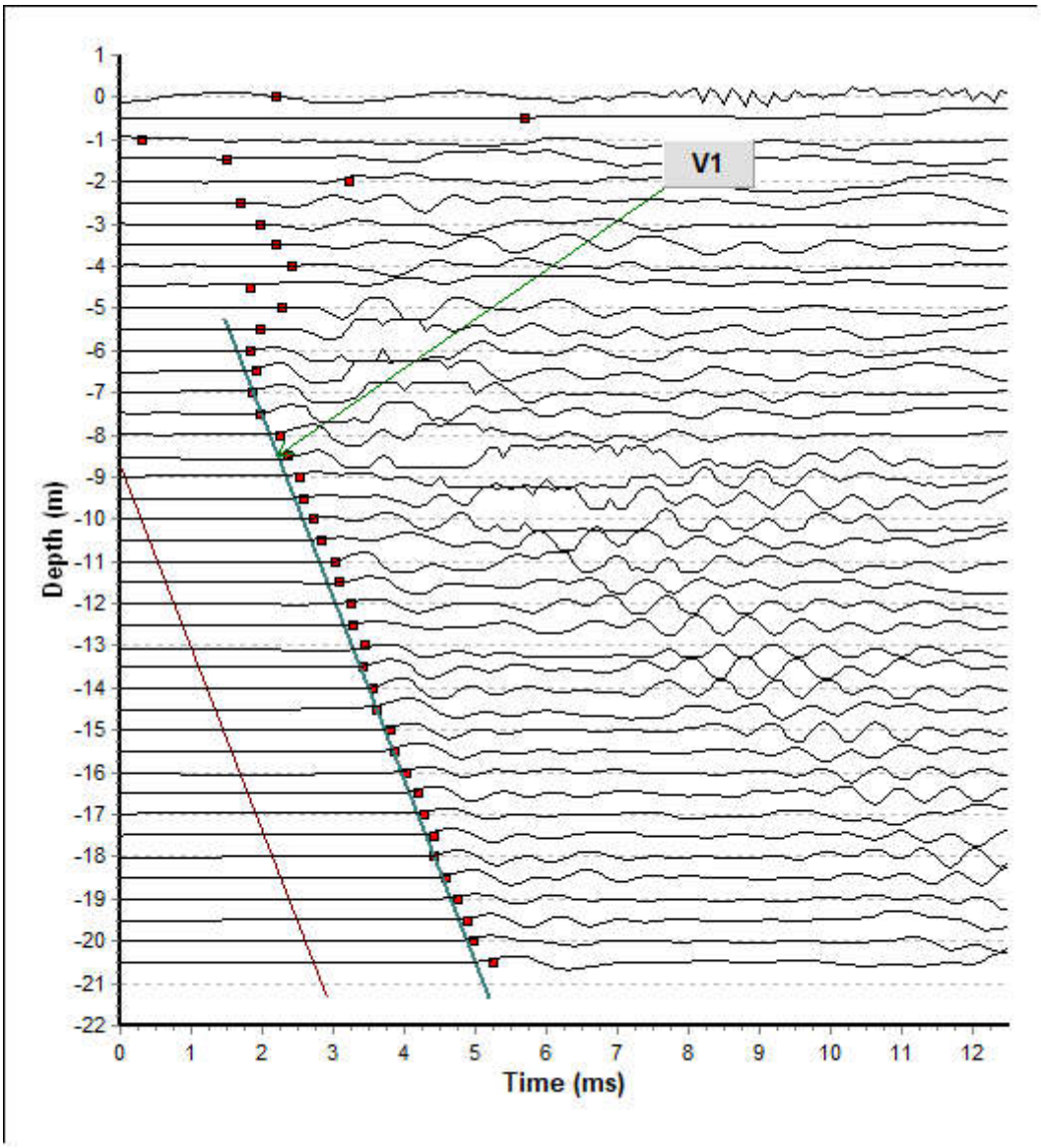
Velocity V1	1986	m/sec
Velocity V2	835	m/sec
Intersection	-19.0	m



Test Results

Site	MARES	**Pile Type**	Bored	**Tube Top level (m)**	0.0
Job	26822	**Pile No.**	BH02	**Intersection (m)**	0.4
Date	20/12/2022 12:39	**Operator**	AGB	**Distance to tube (m)**	1.0

Velocity V1	4309	m/sec
Velocity V2	440	m/sec
Intersection	N/A	m

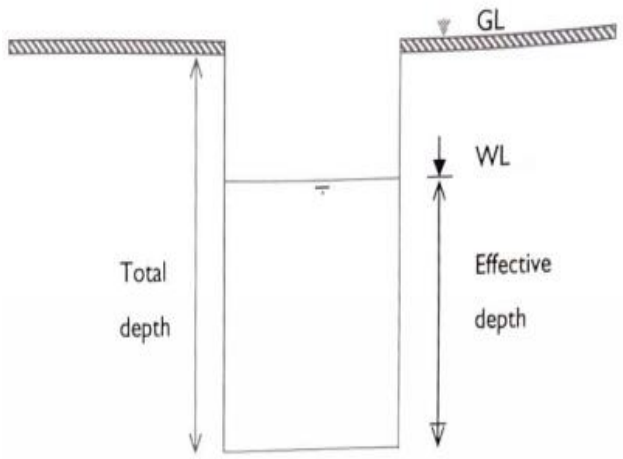


Appendix G: Falling Head test results

A2 Site Investigation	**SOIL INFILTRATION TEST** In accordance with BRE Digest 365	
Client: Chi and June Cheung	**Engineer:** CM	**WS01**
Project: 50 Maresfield Gardens	**Date:** 16/12/2022	
Job Number: 26822	**Time to fill pit:** *	

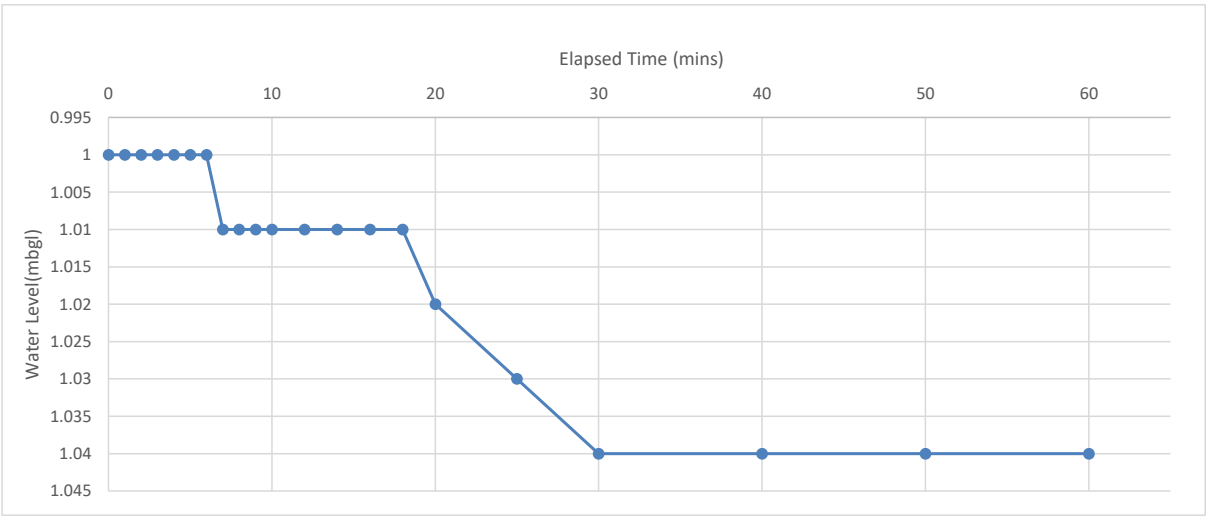
Borehole Dimensions

	Diameter (m)	*Total depth (m)*	*Effective depth (m)*
	0.13	1.5	0.5



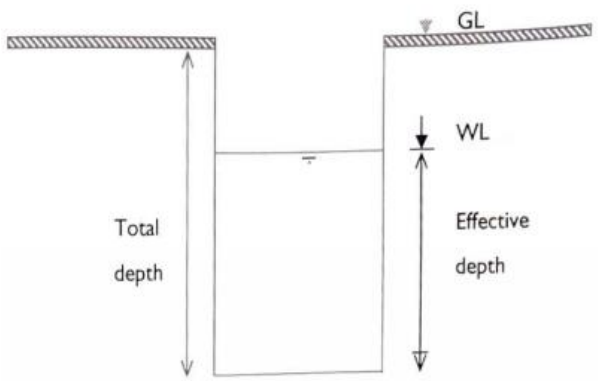
*Attempted to fill hole 4no. times with a 25L drum.
Water soakaway too rapid to fill to ground level, rest level approx 1.0m bgl. Soakaway test taken from 1.0m bgl.

Elapsed Time (mins)	*Water Level (mbgl)*	*Head (m)*	*Head (%)*
0	1	0.5	100.0
1	1	0.5	100.0
2	1	0.5	100.0
3	1	0.5	100.0
4	1	0.5	100.0
5	1	0.5	100.0
6	1	0.5	100.0
7	1.01	0.49	98.0
8	1.01	0.49	98.0
9	1.01	0.49	98.0
10	1.01	0.49	98.0
12	1.01	0.49	98.0
14	1.01	0.49	98.0
16	1.01	0.49	98.0
18	1.01	0.49	98.0
20	1.02	0.48	96.0
25	1.03	0.47	94.0
30	1.04	0.46	92.0
40	1.04	0.46	92.0
50	1.04	0.46	92.0
60	1.04	0.46	92.0

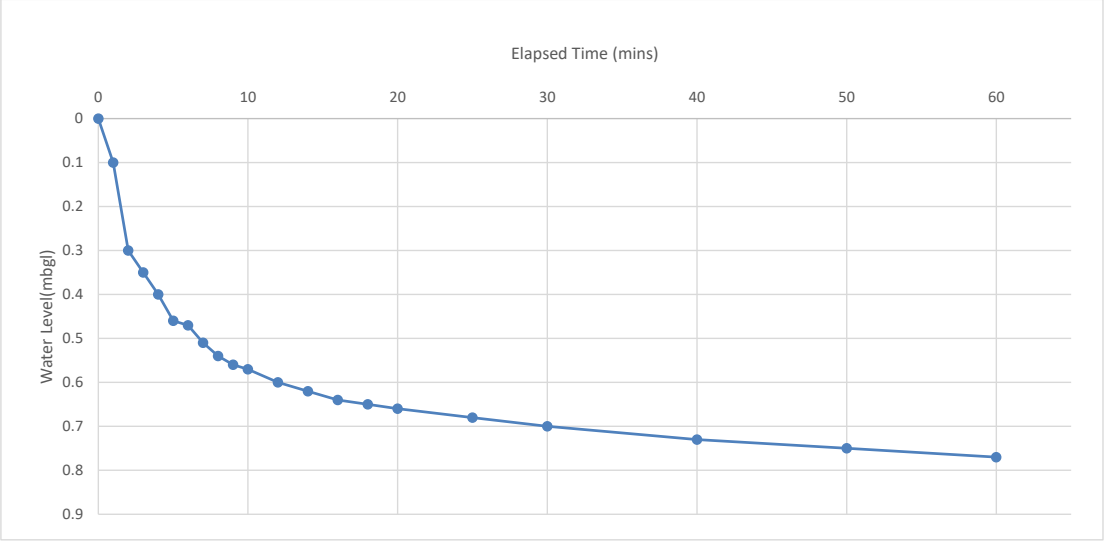


A2 Site Investigation	**SOIL INFILTRATION TEST** In accordance with BRE Digest 365	
Client: Chi and June Cheung	**Engineer:** CM	**WS02**
Project: 50 Maresfield Gardens	**Date:** 16/12/2022	
Job Number: 26822	**Time to fill pit: 1 min**	

Borehole Dimensions			
	Diameter (m)	*Total depth (m)*	*Effective depth (m)*
	0.22	2.5	2.5



Elapsed Time (mins)	*Water Level (mbgl)*	*Head (m)*	*Head (%)*
0	0	2.5	100.0
1	0.1	2.4	96.0
2	0.3	2.2	88.0
3	0.35	2.15	86.0
4	0.4	2.1	84.0
5	0.46	2.04	81.6
6	0.47	2.03	81.2
7	0.51	1.99	79.6
8	0.54	1.96	78.4
9	0.56	1.94	77.6
10	0.57	1.93	77.2
12	0.6	1.9	76.0
14	0.62	1.88	75.2
16	0.64	1.86	74.4
18	0.65	1.85	74.0
20	0.66	1.84	73.6
25	0.68	1.82	72.8
30	0.7	1.8	72.0
40	0.73	1.77	70.8
50	0.75	1.77	70.8
60	0.77	1.73	69.2



A2 Site Investigation

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One Westminster Bridge Rd
London, SE1 7XW

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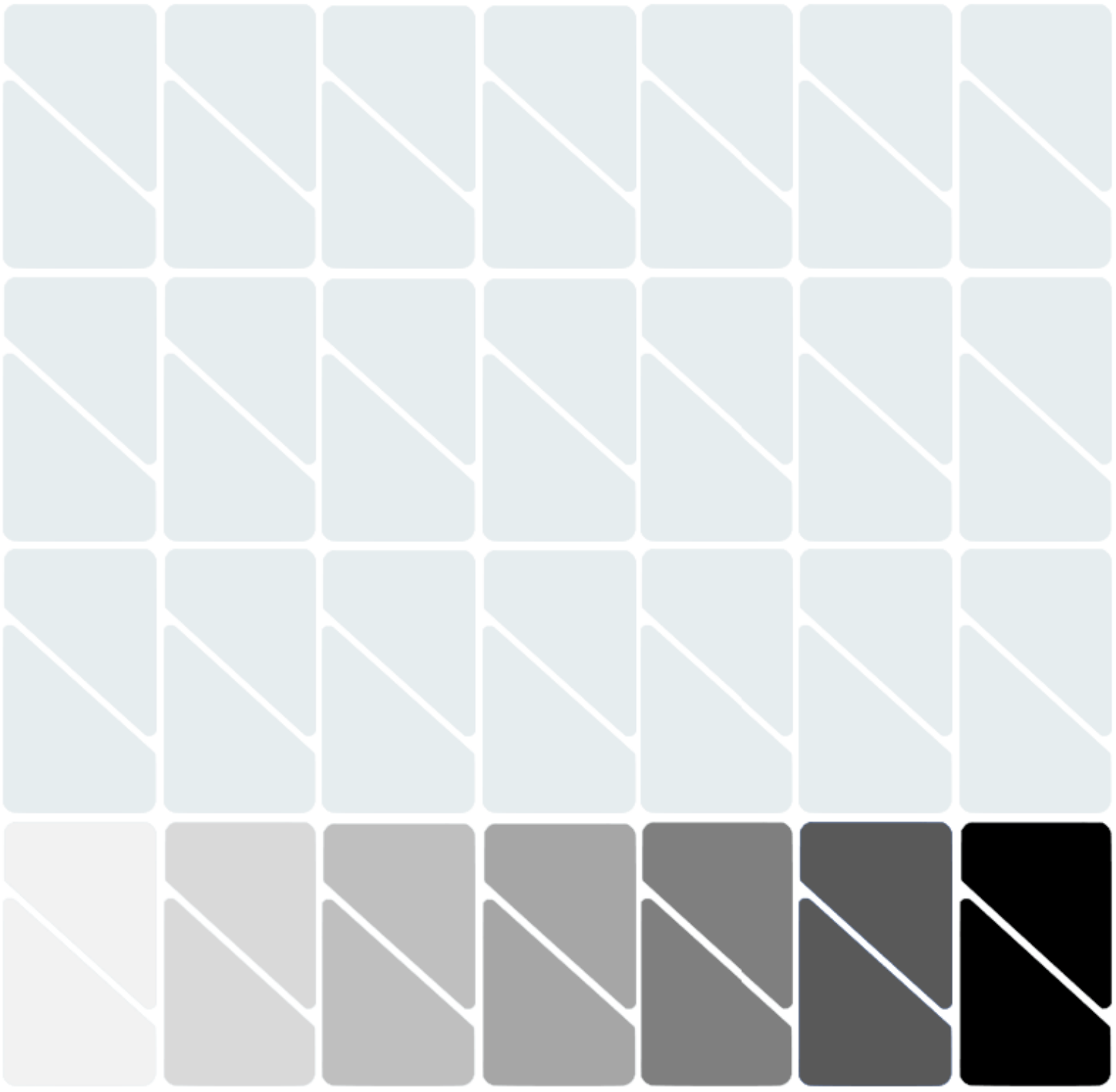

Appendix B: Qualitative Risk Assessment Matrix

A-squared Studio Engineers Ltd. qualitative risk assessment for geo-environmental purposes is undertaken in accordance with *CIRIA C552: Contaminated Land Risk Assessment, A Guide to Good Practice (Rudland et al., 2001)*. The CIRIA C552 risk categories and the assessment methodology are summarised below in Table C.1, Table C.2 and Table C.3. Potential magnitude and potential likelihood are both classified to enable a risk rating to be assessed.

Potential magnitude takes into account the potential consequences should a complete source–pathway–receptor linkage be present. Potential magnitude is classified as per Table C.1.

Table C.1 Definition of potential magnitude of consequence

Category	Definition
Severe	Acute risks to human health, catastrophic damage to buildings / property, major pollution to controlled waters.
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species, significant damage to buildings or structures.
Mild	Pollution of non-sensitive waters, minor damage to buildings or structures.
Minor	Damage to non-sensitive ecosystems or species.

Potential likelihood takes into account the presence of the hazard and receptor as well as the integrity of the pathway for exposure, i.e., whether a source-pathway-receptor linkage is present or not. Potential likelihood is classified as per Table D.2.

Table C.2 Definition of potential likelihood of exposure

Category	Definition
High Likelihood	Pollutant linkage may be present and is almost certain to occur in the long-term. Or there is evidence of harm to the receptor.
Likely	Pollutant linkage may be present, and it is probable that it will occur over the long-term.
Low Likelihood	Pollutant linkage may be present, and there is a possibility that it will occur, although there is no certainty that it will do so.
Unlikely	Pollutant linkage may be present, but it is improbable that it will occur.

The potential magnitude of consequence and the potential likelihood of exposure are assessed in accordance with the risk matrix presented in Table C.3.

Table C.3 Geo-environmental risk assessment matrix

		Potential Magnitude of Consequence			
		Severe	Medium	Mild	Minor
Potential Likelihood of Exposure	High Likelihood	Very High	High	Moderate	Low to Moderate
	Likely	High	Moderate	Low to Moderate	Low
	Low Likelihood	Moderate	Low to Moderate	Low	Very Low
	Unlikely	Low to Moderate	Low	Very Low	Very Low

Appendix C: GQRA Screening Tables

Controlled Waters Generic Quantitative Assessment for Groundwater

Maresfield Gardens

Key:

Exceedance of the Drinking Water GAC

GAC - Generic Assessment Criteria

Laboratory Report Ref.		**Drinking Water GAC**	310403	310404	310405	310406
Exploratory Location Ref.			BH03	WS02	WS03	WS05
Sample Date			30/01/2023	30/01/2023	30/01/2023	30/01/2023
Aquifer Unit			CM	CM	CM	CM
GAC Refs.	**Units**	UK and EU Drinking Water Standards and WHO Guidline Values				
TPH						
>C5-C6 Aliphatic	ug/l	300	< 1.0	< 1.0	< 1.0	< 1.0
>C6-C8 Aliphatic	ug/l	300	< 1.0	< 1.0	< 1.0	< 1.0
>C8-C10 Aliphatic	ug/l	300	< 5.0	12.4	< 5.0	< 5.0
>C10-C12 Aliphatic	ug/l	300	8.0	47.4	< 5.0	< 5.0
>C12-C16 Aliphatic	ug/l	300	17.2	434	< 5.0	< 5.0
>C16-C21 Aliphatic	ug/l	Insoluble	22.4	178	< 5.0	< 5.0
>C21-C35 Aliphatic	ug/l	Insoluble	68.3	60.0	12.4	9.3
>C35-C40 Aliphatic	ug/l	Insoluble	< 5.0	< 5.0	< 5.0	< 5.0
Total (>C5-C40) Aliphatic	ug/l		116	752	12.4	9.3
>C5-C7 Aromatic	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0
>C7-C8 Aromatic	ug/l	700	< 1.0	< 1.0	< 1.0	< 1.0
>C8-C10 Aromatic	ug/l	300	< 5.0	< 5.0	< 5.0	< 5.0
>C10-C12 Aromatic	ug/l	90	8.5	5.5	< 5.0	< 5.0
>C12-C16 Aromatic	ug/l	90	7.5	32.6	< 5.0	< 5.0
>C16-C21 Aromatic	ug/l	90	11.3	33.4	< 5.0	< 5.0
>C21-C35 Aromatic	ug/l	90	22.5	< 5.0	< 5.0	< 5.0
>C35-C40 Aromatic	ug/l	-	< 5.0	< 5.0	< 5.0	< 5.0
Total (>C5-C40) Aromatic	ug/l	-	49.8	71.5	< 5.0	< 5.0
Total (>C5-C40) AliAro	ug/l	-	166	823	12.4	9.3
BTEX						
Benzene	ug/l	1	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	ug/l	700	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	ug/l	300	< 1.00	< 1.00	< 1.00	< 1.00
Xylenes	ug/l	500	< 1.00	< 1.00	< 1.00	< 1.00
MTBE	ug/l	15	< 1.00	< 1.00	< 1.00	< 1.00
VOC						
MTBE	ug/l	15	< 1	< 1	< 1	< 1
Heptane	ug/l	-	< 1	< 1	< 1	< 1
Octane	ug/l	-	< 1	< 1	< 1	< 1
Nonane	ug/l	-	< 1	< 1	< 1	< 1
Benzene	ug/l	1	< 1	< 1	< 1	< 1
Toluene	ug/l	700	< 1	< 1	< 1	< 1
Ethylbenzene	ug/l	300	< 1	< 1	< 1	< 1
m+p-xylene	ug/l	500	< 1	< 1	< 1	< 1
o-xylene	ug/l	500	< 1	< 1	< 1	< 1
cis-1,2-dichloroethene	ug/l	-	< 1	< 1	< 1	< 1
1,1-Dichloroethane	ug/l	0.007	< 1	< 1	< 1	< 1
Chloroform	ug/l	-	< 1	< 1	< 1	< 1
Tetrachloromethane	ug/l	100 sum	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	ug/l		< 1	< 1	< 1	< 1
Trichloroethylene	ug/l		< 1	< 1	< 1	< 1
Tetrachloroethylene	ug/l	3	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	ug/l	200	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroetha	ug/l	10 (sum)	< 1	< 1	< 1	< 1
Chlorobenzene	ug/l		< 1	< 1	< 1	< 1
Bromobenzene	ug/l	5	< 1	< 1	< 1	< 1
Bromodichloromethane	ug/l	-	< 1	< 1	< 1	< 1
Methylethylbenzene	ug/l	100	< 1	< 1	< 1	< 1
1,1-Dichloro-1-propene	ug/l	-	< 1	< 1	< 1	< 1
Trans - 1-2 -dichloroethylene	ug/l	-	< 1	< 1	< 1	< 1
2,2-Dichloropropane	ug/l	-	< 1	< 1	< 1	< 1
Bromochloromethane	ug/l	-	< 1	< 1	< 1	< 1
1,2-Dichloroethane	ug/l	-	< 1	< 1	< 1	< 1
Dibromomethane	ug/l	-	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	3	< 1	< 1	< 1	< 1
cis-1,3-Dichloro-1-propene	ug/l	-	< 1	< 1	< 1	< 1
trans-1,3-Dichloro-1-propene	ug/l	-	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	ug/l	-	< 1	< 1	< 1	< 1
Dibromochloromethane	ug/l	-	< 1	< 1	< 1	< 1
1,3-Dichloropropane	ug/l	-	< 1	< 1	< 1	< 1
Bromoethane	ug/l	20	< 1	< 1	< 1	< 1
Styrene	ug/l	-	< 1	< 1	< 1	< 1
Propylbenzene	ug/l	20	< 1	< 1	< 1	< 1
2-Chlorotoluene	ug/l	-	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	ug/l	-	< 1	< 1	< 1	< 1
4-Chlorotoluene	ug/l	-	< 1	< 1	< 1	< 1
t-butylbenzene	ug/l	-	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	ug/l	-	< 1	< 1	< 1	< 1
1-methylpropylbenzene	ug/l	-	< 1	< 1	< 1	< 1
p-cymene	ug/l	-	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	ug/l	-	< 1	< 1	< 1	< 1
Butylbenzene	ug/l	-	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	ug/l	-	< 1	< 1	< 1	< 1
Hexachlorobutadiene	ug/l	-	< 1	< 1	< 1	< 1
1,2,3 - Trichlorobenzene	ug/l	0.6	< 1	< 1	< 1	< 1
Naphthalene	ug/l	-	2	< 1	< 1	< 1
1,2,4 - Trichlorobenzene	ug/l	-	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	ug/l	-	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	ug/l	300	< 1	< 1	< 1	< 1
Bromoform	ug/l	1000	< 1	< 1	< 1	< 1

Controlled Waters Generic Quantitative Assessment for Groundwater

Maresfield Gardens

Key:

Exceedance of the Drinking Water GAC

GAC - Generic Assessment Criteria

Laboratory Report Ref.		Drinking Water GAC	310403	310404	310405	310406
Exploratory Location Ref.			BH03	WS02	WS03	WS05
Sample Date			30/01/2023	30/01/2023	30/01/2023	30/01/2023
Aquifer Unit			CM	CM	CM	CM
GAC Refs.	Units	UK and EU Drinking Water Standards and WHO Guidline Values				
SVOC						
Phenol	ug/l	-	< 1.00	< 1.00	-	-
Aniline	ug/l	-	< 1.00	< 1.00	-	-
Bis(2-chloroethyl)ether	ug/l	-	< 1.00	< 1.00	-	-
2-Chlorophenol	ug/l	-	< 1.00	< 1.00	-	-
1,3-Dichlorobenzene	ug/l	-	< 1.00	< 1.00	-	-
1,4-Dichlorobenzene	ug/l	300	< 1.00	< 1.00	-	-
Benzyl Alcohol	ug/l	-	< 1.00	< 1.00	-	-
1,2-Dichlorobenzene	ug/l	1000	< 1.00	< 1.00	-	-
2-Methylphenol	ug/l	-	< 1.00	< 1.00	-	-
Bis(2-chloroisopropyl)ether	ug/l	-	< 1.00	< 1.00	-	-
3 and 4-methylphenol	ug/l	-	< 1.00	< 1.00	-	-
N-Nitroso-di-n-propylamine	ug/l	-	< 1.00	< 1.00	-	-
Hexachloroethane	ug/l	-	< 1.00	< 1.00	-	-
Nitrobenzene	ug/l	-	< 1.00	< 1.00	-	-
Isophorone	ug/l	-	< 1.00	< 1.00	-	-
2-Nitrophenol	ug/l	-	< 1.00	< 1.00	-	-
2,4-Dimethylphenol	ug/l	-	< 1.00	< 1.00	-	-
Bis(2-chloroethoxy)methane	ug/l	-	< 1.00	< 1.00	-	-
2,4-Dichlorophenol	ug/l	-	< 1.00	< 1.00	-	-
1,3,5-Trichlorobenzene	ug/l	-	< 1.00	< 1.00	-	-
Naphthalene	ug/l	-	< 0.01	< 0.01	-	-
2-Chloroaniline	ug/l	-	< 1.00	< 1.00	-	-
Hexachloro-1,3-butadiene	ug/l	-	< 1.00	< 1.00	-	-
4-Chloro-3-methylphenol	ug/l	-	< 1.00	< 1.00	-	-
2-Methylnaphthalene	ug/l	-	< 1.00	< 1.00	-	-
1-Methylnaphthalene	ug/l	-	< 1.00	< 1.00	-	-
Hexachlorocyclopentadiene	ug/l	-	< 1.00	< 1.00	-	-
2,4,5-Trichlorophenol	ug/l	-	< 1.00	< 1.00	-	-
2,4,6-Trichlorophenol	ug/l	-	< 1.00	< 1.00	-	-
1-Chloronaphthalene	ug/l	-	< 1.00	< 1.00	-	-
2-Nitroaniline	ug/l	-	< 1.00	< 1.00	-	-
1,4-Dinitrobenzene	ug/l	-	< 1.00	< 1.00	-	-
Dimethyl phthalate	ug/l	-	< 1.00	< 1.00	-	-
1,3-dinitrobenzene	ug/l	-	< 1.00	< 1.00	-	-
2,6-dinitrotoluene	ug/l	-	< 1.00	< 1.00	-	-
Acenaphthylene	ug/l	-	< 0.01	< 0.01	-	-
1,2-Dinitrobenzene	ug/l	-	< 1.00	< 1.00	-	-
3-Nitroaniline	ug/l	-	< 1.00	< 1.00	-	-
Acenaphthene	ug/l	-	< 0.01	< 0.01	-	-
4-nitrophenol	ug/l	-	< 1.00	< 1.00	-	-
Dibenzofuran	ug/l	-	< 1.00	< 1.00	-	-
2,3,5,6-Tetrachlorophenol	ug/l	-	< 1.00	< 1.00	-	-
2,3,5,6-Tetrachlorophenol	ug/l	-	< 1.00	< 1.00	-	-
Diethyl phthalate	ug/l	-	< 1.00	< 1.00	-	-
1-chloro-4-phenoxybenzene	ug/l	-	< 1.00	< 1.00	-	-
Fluorene	ug/l	-	< 0.01	< 0.01	-	-
4-Nitroaniline	ug/l	-	< 1.00	< 1.00	-	-
Dinitro-o-cresol	ug/l	-	< 1.00	< 1.00	-	-
Diphenylamine	ug/l	-	< 1.00	< 1.00	-	-
Anisenzene	ug/l	-	< 1.00	< 1.00	-	-
1-bromo-4-phenoxybenzene	ug/l	-	< 1.00	< 1.00	-	-
Hexachlorobenzene	ug/l	0.05	< 1.00	< 1.00	-	-
Pentachlorophenol	ug/l	9	< 1.00	< 1.00	-	-
Phenanthrene	ug/l	-	< 0.01	< 0.01	-	-
Anthracene	ug/l	-	< 0.01	< 0.01	-	-
Carbazole	ug/l	-	< 1.00	< 1.00	-	-
Dibutyl phthalate	ug/l	-	< 1.00	< 1.00	-	-
Fluoranthene	ug/l	-	< 0.01	0.02	-	-
Pyrene	ug/l	-	< 0.01	0.02	-	-
Butyl benzyl phthalate	ug/l	-	< 1.00	< 1.00	-	-
Bis-2-ethylhexylphtalate	ug/l	8	< 1.00	< 1.00	-	-
Dioxyctyl phthalate	ug/l	-	< 1.00	< 1.00	-	-
Benzo(a)anthracene	ug/l	-	< 0.01	< 0.01	-	-
Chrysene	ug/l	-	< 0.01	0.01	-	-
Bis(2-ethylhexyl)phthalate	ug/l	-	< 1.00	< 1.00	-	-
Benzo(b)fluoranthene	ug/l	0.1 sum	< 0.01	< 0.01	-	-
Benzo(k)fluoranthene	ug/l		< 0.01	0.01	-	-
Benzo(ghi)perylene	ug/l		< 0.01	< 0.01	-	-
Indeno(1,2,3-CD)pyrene	ug/l		< 0.01	< 0.01	-	-
Benzo(a)pyrene	ug/l	0.01	< 0.01	< 0.01	-	-
Dibenzo(a,h)anthracene	ug/l	-	< 0.01	< 0.01	-	-

Human Health Generic Quantitative Assessment for Groundwater

Maresfield Gardens

Key:

Exceedance of the GAC

GAC - Generic Assessment Criteria

		Residential					
Laboratory Report Ref.				310403	310404	310405	310408
Exploratory Location Ref.				BH03	WS02	WS03	WS05
Sample Date				30/01/2023	30/01/2023	30/01/2023	30/01/2023
Aquifer Unit	**Units**			CM	CM	CM	CM
		GAC	**GAC Ref.**				
TPH							
>C5-C8 Aliphatic	ug/l	1900	SoBRA	< 1.0	< 1.0	< 1.0	< 1.0
>C6-C8 Aliphatic	ug/l	1500	SoBRA	< 1.0	< 1.0	< 1.0	< 1.0
>C8-C10 Aliphatic	ug/l	57	SoBRA	< 5.0	12.4	< 5.0	< 5.0
>C10-C12 Aliphatic	ug/l	37	SoBRA	8.0	47.4	< 5.0	< 5.0
>C12-C16 Aliphatic	ug/l	-		17.2	454	< 5.0	< 5.0
>C16-C21 Aliphatic	ug/l	-		22.4	178	< 5.0	< 5.0
>C21-C35 Aliphatic	ug/l	-		68.3	60.0	12.4	9.3
>C35-C40 Aliphatic	ug/l	-		< 5.0	< 5.0	< 5.0	< 5.0
Total (>C5-C40) Aliphatic	ug/l	-		116	752	12.4	9.3
>C5-C7 Aromatic	ug/l	210000	SoBRA	< 1.0	< 1.0	< 1.0	< 1.0
>C7-C8 Aromatic	ug/l	220000	SoBRA	< 1.0	< 1.0	< 1.0	< 1.0
>C8-C10 Aromatic	ug/l	1900	SoBRA	< 5.0	< 5.0	< 5.0	< 5.0
>C10-C12 Aromatic	ug/l	6800	SoBRA	8.5	5.5	< 5.0	< 5.0
>C12-C16 Aromatic	ug/l	39000	SoBRA	7.5	32.6	< 5.0	< 5.0
>C16-C21 Aromatic	ug/l	-		11.3	33.4	< 5.0	< 5.0
>C21-C35 Aromatic	ug/l	-		22.5	< 5.0	< 5.0	< 5.0
>C35-C40 Aromatic	ug/l	-		< 5.0	< 5.0	< 5.0	< 5.0
Total (>C5-C40) Aromatic	ug/l	-		49.8	71.5	< 5.0	< 5.0
Total (>C5-C40) AliphAro	ug/l	-		166	823	12.4	9.3
BTEX							
Benzene	ug/l	210	SoBRA	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	ug/l	10,000	SoBRA	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	ug/l	230,000	SoBRA	< 1.00	< 1.00	< 1.00	< 1.00
Xylenes	ug/l	9,500	SoBRA	< 1.00	< 1.00	< 1.00	< 1.00
MTBE	ug/l	83,000	SoBRA	< 1.00	< 1.00	< 1.00	< 1.00
VOC							
MTBE	ug/l	83,000	SoBRA	< 1	< 1	< 1	< 1
Nicotane	ug/l		-	< 1	< 1	< 1	< 1
Octane	ug/l		-	< 1	< 1	< 1	< 1
Nonane	ug/l		-	< 1	< 1	< 1	< 1
Benzene	ug/l	210	SoBRA	< 1	< 1	< 1	< 1
Toluene	ug/l	230,000	SoBRA	< 1	< 1	< 1	< 1
Ethylbenzene	ug/l	10,000	SoBRA	< 1	< 1	< 1	< 1
m+p-xylene	ug/l	9,500	SoBRA	< 1	< 1	< 1	< 1
o-xylene	ug/l	12,000	SoBRA	< 1	< 1	< 1	< 1
cis-1,2-dichloroethene	ug/l	130	SoBRA	< 1	< 1	< 1	< 1
1,1-Dichloroethane	ug/l	2,700	SoBRA	< 1	< 1	< 1	< 1
Chloroform	ug/l	790	SoBRA	< 1	< 1	< 1	< 1
Tetrachloromethane	ug/l	5.3	SoBRA	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	ug/l	3,000	SoBRA	< 1	< 1	< 1	< 1
Trichloroethylene	ug/l	5.7	SoBRA	< 1	< 1	< 1	< 1
Tetrachloroethylene	ug/l	34	SoBRA	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	ug/l	240	SoBRA	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroetha	ug/l	1,600	SoBRA	< 1	< 1	< 1	< 1
Chlorobenzene	ug/l	98	SoBRA	< 1	< 1	< 1	< 1
Bromobenzene	ug/l	220	SoBRA	< 1	< 1	< 1	< 1
Bromodichloromethane	ug/l	17	SoBRA	< 1	< 1	< 1	< 1
Methylethylbenzene	ug/l		-	< 1	< 1	< 1	< 1
1,1-Dichloro-1-propene	ug/l		-	< 1	< 1	< 1	< 1
Trans - 1-2 -dichloroethylene	ug/l	160	SoBRA	< 1	< 1	< 1	< 1
2,2-Dichloropropane	ug/l		-	< 1	< 1	< 1	< 1
Bromochloromethane	ug/l		-	< 1	< 1	< 1	< 1
1,2-Dichloroethane	ug/l		-	< 1	< 1	< 1	< 1
Dibromomethane	ug/l		-	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l		-	< 1	< 1	< 1	< 1
cis-1,3-Dichloro-1-propene	ug/l		-	< 1	< 1	< 1	< 1
trans-1,3-Dichloro-1-propene	ug/l		-	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	ug/l	520	SoBRA	< 1	< 1	< 1	< 1
Dibromochloromethane	ug/l		-	< 1	< 1	< 1	< 1
1,3-Dichloropropane	ug/l		-	< 1	< 1	< 1	< 1
Dibromoethane	ug/l		-	< 1	< 1	< 1	< 1
Styrene	ug/l	8,800	SoBRA	< 1	< 1	< 1	< 1
Propylbenzene	ug/l	2,700	SoBRA	< 1	< 1	< 1	< 1
2-Chlorotoluene	ug/l		-	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	ug/l		-	< 1	< 1	< 1	< 1
4-Chlorotoluene	ug/l		-	< 1	< 1	< 1	< 1
t-butylbenzene	ug/l		-	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	ug/l		-	< 1	< 1	< 1	< 1
1-methylpropylbenzene	ug/l		-	< 1	< 1	< 1	< 1
p-cymene	ug/l		-	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	ug/l	31	SoBRA	< 1	< 1	< 1	< 1
Butylbenzene	ug/l		-	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	ug/l		-	< 1	< 1	< 1	< 1
Hexachlorobutadiene	ug/l	1.7	SoBRA	< 1	< 1	< 1	< 1
1-2-3 - Trichlorobenzene	ug/l	35	SoBRA	< 1	< 1	< 1	< 1
Naphthalene	ug/l	220	SoBRA	2	< 1	< 1	< 1
1-2-4 - Trichlorobenzene	ug/l	24	SoBRA	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	ug/l	5,000	SoBRA	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	ug/l	2,000	SoBRA	< 1	< 1	< 1	< 1
Bromoform	ug/l	3,100	SoBRA	< 1	< 1	< 1	< 1

Human Health Generic Quantitative Assessment for Groundwater

Maresfield Gardens

Key:

Exceedance of the GAC

GAC - Generic Assessment Criteria

Laboratory Report Ref.		Residential		310403	310404	310405	310408
Exploratory Location Ref.				BH03	WS02	WS03	WS05
Sample Date				30/01/2023	30/01/2023	30/01/2023	30/01/2023
Aquifer Unit	Units	GAC	GAC Ref.	CM	CM	CM	CM
SVOC							
Phenol	ug/l	-		< 1.00	< 1.00	-	-
Aniline	ug/l	-		< 1.00	< 1.00	-	-
Bis(2-chloroethyl)ether	ug/l	-		< 1.00	< 1.00	-	-
2-Chlorophenol	ug/l	-		< 1.00	< 1.00	-	-
1,3-Dichlorobenzene	ug/l	31	SoBRA	< 1.00	< 1.00	-	-
1,4-Dichlorobenzene	ug/l	5,000	SoBRA	< 1.00	< 1.00	-	-
Benzyl Alcohol	ug/l			< 1.00	< 1.00	-	-
1,2-Dichlorobenzene	ug/l	2,000	SoBRA	< 1.00	< 1.00	-	-
2-Methylphenol	ug/l	-		< 1.00	< 1.00	-	-
Bis(2-chloroisopropyl)ether	ug/l	-		< 1.00	< 1.00	-	-
3 and 4-methylphenol	ug/l	-		< 1.00	< 1.00	-	-
N-Nitrosodi-n-propylamine	ug/l			< 1.00	< 1.00	-	-
Hexachloroethane	ug/l	8.5	SoBRA	< 1.00	< 1.00	-	-
Nitrobenzene	ug/l	-		< 1.00	< 1.00	-	-
Isophorone	ug/l	-		< 1.00	< 1.00	-	-
2-Nitrophenol	ug/l	-		< 1.00	< 1.00	-	-
2,4-Dimethylphenol	ug/l	-		< 1.00	< 1.00	-	-
Bis(2-chloroethoxy)methane	ug/l	-		< 1.00	< 1.00	-	-
2,4-Dichlorophenol	ug/l	-		< 1.00	< 1.00	-	-
1,3,5-Trichlorobenzene	ug/l	7.4	SoBRA	< 1.00	< 1.00	-	-
Naphthalene	ug/l	220	SoBRA	< 0.01	< 0.01	-	-
4-Chloroaniline	ug/l	-		< 1.00	< 1.00	-	-
Hexachloro-1,3-butadiene	ug/l	-		< 1.00	< 1.00	-	-
4-Chloro-3-methylphenol	ug/l	-		< 1.00	< 1.00	-	-
2-Methylnaphthalene	ug/l	-		< 1.00	< 1.00	-	-
1-Methylnaphthalene	ug/l	-		< 1.00	< 1.00	-	-
Hexachlorocyclopentadiene	ug/l	-		< 1.00	< 1.00	-	-
2,4,6-Trichlorophenol	ug/l	-		< 1.00	< 1.00	-	-
2,4,5-Trichlorophenol	ug/l	-		< 1.00	< 1.00	-	-
1-Chloronaphthalene	ug/l	-		< 1.00	< 1.00	-	-
2-Nitroaniline	ug/l	-		< 1.00	< 1.00	-	-
1,4-Dinitrobenzene	ug/l	-		< 1.00	< 1.00	-	-
Dimethyl phthalate	ug/l	-		< 1.00	< 1.00	-	-
1-3-dinitrobenzene	ug/l	-		< 1.00	< 1.00	-	-
2-6-dinitrotoluene	ug/l	-		< 1.00	< 1.00	-	-
Acenaphthylene	ug/l	220,000	SoBRA	< 0.01	< 0.01	-	-
1,2-Dinitrobenzene	ug/l	-		< 1.00	< 1.00	-	-
3-Nitroaniline	ug/l	-		< 1.00	< 1.00	-	-
Acenaphthene	ug/l	-		< 0.01	< 0.01	-	-
4-nitrophenol	ug/l	-		< 1.00	< 1.00	-	-
Dibenzofuran	ug/l	-		< 1.00	< 1.00	-	-
2,3,5,6-Tetrachlorophenol	ug/l	-		< 1.00	< 1.00	-	-
2,3,4,6-Tetrachlorophenol	ug/l	-		< 1.00	< 1.00	-	-
Diethyl phthelate	ug/l	-		< 1.00	< 1.00	-	-
1-chloro-4-phenoxybenzene	ug/l			< 1.00	< 1.00	-	-
Fluorene	ug/l	210,000	SoBRA	< 0.01	< 0.01	-	-
4-Nitroaniline	ug/l	-		< 1.00	< 1.00	-	-
Dinitro-o-cresol	ug/l	-		< 1.00	< 1.00	-	-
Diphenylamine	ug/l	-		< 1.00	< 1.00	-	-
Azobenzene	ug/l	-		< 1.00	< 1.00	-	-
1-bromo-4-phenoxybenzene	ug/l	-		< 1.00	< 1.00	-	-
Hexachlorobenzene	ug/l	16	SoBRA	< 1.00	< 1.00	-	-
Pentachlorophenol	ug/l	-		< 1.00	< 1.00	-	-
Phenanthrene	ug/l	-		< 0.01	< 0.01	-	-
Anthracene	ug/l	-		< 0.01	< 0.01	-	-
Carbazole	ug/l	-		< 1.00	< 1.00	-	-
Dibutyl phthalate	ug/l	-		< 1.00	< 1.00	-	-
Fluoranthene	ug/l	-		< 0.01	0.02	-	-
Pyrene	ug/l	-		< 0.01	0.02	-	-
Butyl benzyl phthalate	ug/l	-		< 1.00	< 1.00	-	-
Bis-2-ethylhexyladipate	ug/l	-		< 1.00	< 1.00	-	-
Diisooctyl phthalate	ug/l	-		< 1.00	< 1.00	-	-
Benzo(a)anthracene	ug/l	-		< 0.01	< 0.01	-	-
Chrysene	ug/l	-		< 0.01	0.01	-	-
Bis(2-ethylhexyl)phthalate	ug/l	-		< 1.00	< 1.00	-	-
Benzo(b)fluoranthene	ug/l	-		< 0.01	< 0.01	-	-
Benzo(k)fluoranthene	ug/l	-		< 0.01	0.01	-	-
Benzo(a)pyrene	ug/l	-		< 0.01	< 0.01	-	-
Indeno(1,2,3-CD)pyrene	ug/l	-		< 0.01	< 0.01	-	-
Dibenz(a,h)anthracene	ug/l	-		< 0.01	< 0.01	-	-
Benzo(ghi)perylene	ug/l	-		< 0.01	< 0.01	-	-

Human Health Generic Quantitative Assessment for Soil

Maresfield Gardens

Key:

Exceedance of the GAC

GAC - Generic Assessment Criteria

Laboratory Report Ref.			306567	306569	306571	306573	306951	308089	308094	308096	308099	308100	308102
Exploratory Location Ref.		Residential With Home Grown Produce	WS01	WS01	WS02	WS03	BH02	WS04	WS05	WS05	WS06	WS06	WS07
Sample Depth (m)			0.80	2.80	1.00	1.50	0.50	0.80	0.80	2.50	1.00	3.00	2.00
Sample Date			16/12/2022	16/12/2022	16/12/2022	16/12/2022	20/12/2022	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Made Ground / Natural ?	Units	1% SOM	MG	CG	MG	MG	MG	MG	MG	CG	MG	CG	MG
		GAC / GAC Ref.											
Anions and Other													
Moisture Content	%	-	12.9	-	14.3	14.9	12.9	19.8	16.4	15.7	15.0	16.1	12.3
Material removed	%	-	13.4	-	8.2	8.8	8.0	-	-	-	-	-	-
Description of inert material removed	-	-	Stones/Brick	-	Stones	Stones	Stones/Clinker	-	-	-	-	-	-
Hexavalent Chromium	mg/kg	21.00 DEFRA C4SLs	< 0.8	-	< 0.8	< 0.8	< 0.8	-	-	-	-	-	-
Total Sulphur	%	-	nt	-	nt	nt	nt	-	-	-	-	-	-
Acid Soluble Sulphate (SO4)	%	-	nt	-	nt	nt	nt	-	-	-	-	-	-
Water Soluble Boron	mg/kg	290.00 LQM S4ULs	< 0.5	-	1.4	< 0.5	1.2	-	-	-	-	-	-
Fraction of Organic Carbon	-	-	0.0077	-	0.0046	0.0028	0.0207	-	-	-	-	-	-
pH	pH units	-	8.2	-	8.1	8.2	8.6	-	-	-	-	-	-
Soil Organic Matter	%	-	0.9	-	0.7	0.3	2.1	-	-	-	-	-	-
Total Organic Carbon	%	-	0.77	-	0.46	0.28	2.1	-	-	-	-	-	-
Heavy Metals and Metalloids													
Arsenic	mg/kg	37.00 DEFRA C4SLs	20.0	-	29.6	16.7	20.4	-	-	-	-	-	-
Barium	mg/kg	1300.00 CL:AIRE GAC	87.4	-	92.0	28.7	212	-	-	-	-	-	-
Beryllium	mg/kg	1.70 LQM S4ULs	< 1.0	-	1.3	< 1.0	< 1.0	-	-	-	-	-	-
Cadmium	mg/kg	22.00 DEFRA C4SLs	< 0.5	-	< 0.5	< 0.5	< 0.5	-	-	-	-	-	-
Chromium	mg/kg	910.00 LQM S4ULs	41.7	-	69.8	43.9	47.1	-	-	-	-	-	-
Chromium (III)	mg/kg	910.00 LQM S4ULs	41.7	-	69.8	43.9	47.1	-	-	-	-	-	-
Copper	mg/kg	2400.00 LQM S4ULs	32.8	-	35.5	15.4	54.4	-	-	-	-	-	-
Lead	mg/kg	200.00 DEFRA C4SLs	91.1	-	47.7	22.3	292	-	-	-	-	-	-
Mercury	mg/kg	11.00 LQM S4ULs	< 0.5	-	< 0.5	< 0.5	< 0.5	-	-	-	-	-	-
Molybdenum	mg/kg	- -	1.1	-	1.4	< 0.5	1.1	-	-	-	-	-	-
Nickel	mg/kg	130.00 LQM S4ULs	21.5	-	47.9	12.5	23.1	-	-	-	-	-	-
Selenium	mg/kg	250.00 LQM S4ULs	< 1.0	-	< 1.0	< 1.0	< 1.0	-	-	-	-	-	-
Vanadium	mg/kg	410.00 LQM S4ULs	59.4	-	105	59.2	68.3	-	-	-	-	-	-
Zinc	mg/kg	3700.00 LQM S4ULs	97.4	-	103	63.6	208	-	-	-	-	-	-
Asbestos													
Asbestos	-	Present	Not Detected	-	Not Detected	Not Detected	Not Detected	-	-	-	-	-	-
PAHs													
Naphthalene	mg/kg	2.30 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.07	-	-	-	-	-	-
Acenaphthylene	mg/kg	170.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.07	-	-	-	-	-	-
Acenaphthene	mg/kg	210.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.04	-	-	-	-	-	-
Fluorene	mg/kg	170.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.04	-	-	-	-	-	-
Phenanthrene	mg/kg	95.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.42	-	-	-	-	-	-
Anthracene	mg/kg	2400.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.13	-	-	-	-	-	-
Fluoranthene	mg/kg	280.00 LQM S4ULs	0.2	< 0.1	< 0.1	< 0.1	1.37	-	-	-	-	-	-
Pyrene	mg/kg	620.00 LQM S4ULs	0.1	< 0.1	< 0.1	< 0.1	1.26	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	7.20 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.86	-	-	-	-	-	-
Chrysene	mg/kg	15.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.94	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	2.60 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.95	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	77.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	1.27	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	5.00 DEFRA C4SLs	< 0.1	< 0.1	< 0.1	< 0.1	1.24	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	27.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.62	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.24 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.35	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	320.00 LQM S4ULs	< 0.1	< 0.1	< 0.1	< 0.1	0.69	-	-	-	-	-	-
Total PAH(16)	mg/kg		0.4	< 0.4	< 0.4	< 0.4	10.3	-	-	-	-	-	-
TPH													
>C5-C8 Aliphatic	mg/kg	42.00 LQM S4ULs	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C8 Aliphatic	mg/kg	100.00 LQM S4ULs	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic	mg/kg	27.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.6	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic	mg/kg	130.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	110	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic	mg/kg	1100.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	391	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic	mg/kg	65000.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	254	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic	mg/kg	65000.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.9	< 1.0	31.2	< 1.0	< 1.0	< 1.0
>C35-C40 Aliphatic	mg/kg	65000.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total aliphatic hydrocarbons (>C5 - C40)	mg/kg	- -	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.6	< 1.0	788	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic	mg/kg	70.00 LQM S4ULs	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic	mg/kg	130.00 LQM S4ULs	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic	mg/kg	34.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.6	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic	mg/kg	74.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	83.8	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic	mg/kg	140.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	429	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic	mg/kg	260.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	137	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic	mg/kg	1100.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.6	1.6	26.8	< 1.0	< 1.0	< 1.0
>C35-C40 Aromatic	mg/kg	1100.00 LQM S4ULs	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total aromatic hydrocarbons (>C5 - C40)	mg/kg	-	1.2	< 1.0	1.6	< 1.0	< 1.0	3.0	2.4	678	1.1	< 1.0	< 1.0
Total petroleum hydrocarbons (>C5 - C40)	mg/kg	-	1.7	< 1.0	2.3	< 1.0	< 1.0	7.6	2.6	1470	1.3	< 1.0	< 1.0
BTEX and MTBE													
Benzene	ug/kg	200.00 DEFRA C4SLs	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	ug/kg	130000.00 LQM S4ULs	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	ug/kg	47000.00 LQM S4ULs	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Xylenes	ug/kg	56000.00 LQM S4ULs	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
MTBE	ug/kg	49000.00 CL:AIRE GAC	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

Human Health Generic Quantitative Assessment for Soil

Maresfield Gardens

Key:

Exceedance of the GAC

GAC - Generic Assessment Criteria

Laboratory Report Ref.		Residential With Home Grown Produce		306567	306569	306571	306573	306951	308089	308094	308096	308099	308100	308102
Exploratory Location Ref.				WS01	WS01	WS02	WS03	BH02	WS04	WS05	WS05	WS06	WS06	WS07
Sample Depth (m)				0.80	2.80	1.00	1.50	0.50	0.80	0.80	2.50	1.00	3.00	2.00
Sample Date				16/12/2022	16/12/2022	16/12/2022	16/12/2022	20/12/2022	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023	13/01/2023
Made Ground / Natural ?	Units	1% SOM		MG	CG	MG	MG	MG	MG	MG	CG	MG	CG	MG
		GAC	GAC Ref.											
VOC														
Heptane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Octane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Nonane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzene	ug/kg	200	DEFRA C4SLs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	ug/kg	130,000	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	ug/kg	47,000	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
m/p-xylene	ug/kg	56,000	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
o-xylene	ug/kg	60,000	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
cis-1,2-dichloroethene	ug/kg	110	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1-Dichloroethene	ug/kg	2,400	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chloroform	ug/kg	910	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Tetrachloromethane	ug/kg	26	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,1-Trichloroethene	ug/kg	880	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Trichloroethylene	ug/kg	16	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Tetrachloroethylene	ug/kg	1,500	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,1,2-Tetrachloroethane	ug/kg	1,200	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,2,2-Tetrachloroetha	ug/kg	1,600	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chlorobenzene	ug/kg	480	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromobenzene	ug/kg	870	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromodichloromethane	ug/kg	16	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Methylethylbenzene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1-Dichloro-1-propene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Trans - 1-2 -dichloroethylene	ug/kg	190	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,2-Dichloropropane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromochloromethane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dichloroethane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dibromomethane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dichloropropane	ug/kg	240	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
cis-1,3-Dichloro-1-propene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,3-Dichloro-1-propene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,1,2-Trichloroethane	ug/kg	880	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dibromochloromethane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3-Dichloropropane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-dibromoethane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Styrene	ug/kg	35,000	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Propylbenzene	ug/kg	40,000	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Chlorotoluene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2,4-Trimethylbenzene	ug/kg	410	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Chlorotoluene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
tbutylbenzene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3,5-Trimethylbenzene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1-methylpropylbenzene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
p-cymene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3-Dichlorobenzene	ug/kg	440	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Butylbenzene	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	ug/kg	-		< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachlorobutadiene	ug/kg	320	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1-2-3 - Trichlorobenzene	ug/kg	1,500	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Naphthalene	ug/kg	2,300	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2,4 - Trichlorobenzene	ug/kg	2,600	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,4-Dichlorobenzene	ug/kg	61,000	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dichlorobenzene	ug/kg	24,000	LQM S4ULs	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Bromoform	ug/kg	5,200	CLAIRE GAC	< 10.0	< 10.0	-	-	-	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
SVOC														
Phenol	mg/kg	440	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aniline	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis(2-chloroethyl)ether	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Chlorophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-Dichlorobenzene	mg/kg	0	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-Dichlorobenzene	mg/kg	61		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzyl Alcohol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-Dichlorobenzene	mg/kg	23	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Methylphenol	mg/kg	3,700	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis(2-chloroisopropyl)ether	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3 and 4-methylphenol	mg/kg	3,700	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
N-Nitrosodi-n-propylamine	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachloroethane	mg/kg	0	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrobenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isophorone	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Nitrophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dimethylphenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis(2-chloroethoxy)methane	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-Trichlorobenzene	mg/kg	0	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	mg/kg	2	LQM S4ULs	0.01	< 0.01	-	-	-	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01
2-Chloroaniline	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachloro-1,3-butadiene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-Chloro-3-methylphenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Methylnaphthalene	mg/kg	-		0.01	< 0.01	-	-	-	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01
1-Methylnaphthalene	mg/kg	-		0.02	< 0.01	-	-	-	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorocyclopentadiene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4,6-Trichlorophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4,5-Trichlorophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-Chloronaphthalene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Nitroaniline	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-Dinitrobenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dimethyl phthalate	mg/kg	1,800	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dinitrobenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,6-dinitrotoluene	mg/kg	78	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	mg/kg	170	LQM S4ULs	0.03	0.01	-	-	-	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-Dinitrobenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3-Nitroaniline	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	mg/kg	210	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-nitrophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzofuran	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,3,5,6-Tetrachlorophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,3,4,6-Tetrachlorophenol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diethyl phthalate	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-chloro-4-phenoxybenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	mg/kg	170	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-Nitroaniline	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dinitro-o-cresol	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diphenylamine	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-bromo-4-phenoxybenzene	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobenzene	mg/kg	4	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pentachlorophenol	mg/kg	27	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	mg/kg	95	LQM S4ULs	0.10	< 0.01	-	-	-	0.05	0.17	< 0.01	0.03	< 0.01	< 0.01
Anthracene	mg/kg	2,400	LQM S4ULs	0.03	< 0.01	-	-	-	0.03	0.08	< 0.01	0.01	< 0.01	< 0.01
Carbazole	mg/kg	-		0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibutyl phthalate	mg/kg	1,800	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	mg/kg	280	LQM S4ULs	0.27	< 0.01	-	-	-	0.19	0.49	< 0.01	0.04	< 0.01	< 0.01
Pyrene	mg/kg	620	LQM S4ULs	0.24	< 0.01	-	-	-	0.16	0.43	< 0.01	0.03	< 0.01	< 0.01
Butyl benzyl phthalate	mg/kg	42,000	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bis-2-ethylhexyladipate	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Diisooctyl phthalate	mg/kg	-		< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	mg/kg	7	LQM S4ULs	0.13	< 0.01	-	-	-	0.11	0.19	< 0.01	0.02	< 0.01	< 0.01
Chrysene	mg/kg	15	LQM S4ULs	0.16	< 0.01	-	-	-	0.10	0.31	< 0.01	0.03	< 0.01	< 0.01
Bis(2-ethylhexyl)phthalate	mg/kg	2,700	LQM S4ULs	< 0.01	< 0.01	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	mg/kg	3	LQM S4ULs	0.14	< 0.01	-	-	-	0.11	0.26	< 0.01	0.02	< 0.01	< 0.01
Benzo(k)fluoranthene	mg/kg	77	LQM S4ULs	0.17	< 0.01	-	-	-	0.13	0.31	< 0.01	0.01	< 0.01	< 0.01
Benzo(a)pyrene	mg/kg	5	DEFRA C4SLs	0.14	< 0.01	-	-	-	0.07	0.27	< 0.01	0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	mg/kg	27	LQM S4ULs	0.10	< 0.01	-	-	-	0.04	0.09	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	mg/kg	0	LQM S4ULs	0.05	< 0.01	-	-	-	0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	mg/kg	320	LQM S4ULs	0.11	< 0.01	-	-	-	0.04	0.12	< 0.01	< 0.01	< 0.01	< 0.01

Generic Quantitative Assessment for Vapours

Maresfield Gardens

Key:

Exceedance of the GAC

GAC - Generic Assessment Criteria

Laboratory Report Ref.		Residential	2571806	2591927	2571807	2578905
Exploratory Location Ref.			WS01	WS01	WS05	WS05
Sample Date			30/01/2023	17/02/2023	30/01/2023	06/02/2023
GAC Refs.	Units	A-Squared vGAC				
1,1,1-Trichloroethane	µg/m3	670000	< 2.8	< 2.8	< 2.8	< 2.8
1,1,2,2-Tetrachloroethane	µg/m3	6500	< 3.5	< 3.5	< 3.5	< 3.5
1,1,2-Trichloroethane	µg/m3	5400	< 2.8	< 2.8	< 2.8	< 2.8
1,1-Dichloroethene	µg/m3	65000	< 2.0	< 2.0	< 2.0	< 2.0
1,1-Dichloroethane	µg/m3	230000	< 2.1	< 2.1	< 2.1	< 2.1
1,2,4-Trichlorobenzene	µg/m3	1300	< 3.8	< 3.8	< 3.8	< 3.8
1,2,4-Trimethylbenzene	µg/m3	1100	< 2.5	< 2.5	< 2.5	< 2.5
1,2-Dibromoethane	µg/m3	-	< 3.9	< 3.9	< 3.9	< 3.9
1,2-Dichlorobenzene	µg/m3	41000	< 3.1	< 3.1	< 3.1	< 3.1
1,2-Dichloroethane	µg/m3	140	< 2.0	< 2.0	< 2.0	< 2.0
1,2-Dichloropropane	µg/m3	1000	< 2.4	< 2.4	< 2.4	< 2.4
1,3-Butadiene	µg/m3	-	< 1.1	< 1.1	< 1.1	< 1.1
1,3-Dichlorobenzene	µg/m3	1100	< 3.1	< 3.1	< 3.1	< 3.1
1,4-Dichlorobenzene	µg/m3	130000	< 3.1	< 3.1	< 3.1	< 3.1
1,4-Dioxane	µg/m3	-	< 1.8	< 1.8	< 1.8	< 1.8
4-Ethyltoluene	µg/m3	-	< 2.5	< 2.5	< 2.5	< 2.5
Acetone	µg/m3	-	< 9.7	26	12	12
Acrolein	µg/m3	-	< 1.2	< 1.2	< 1.2	< 1.2
Bromodichloromethane	µg/m3	-	< 3.4	< 3.4	< 3.4	< 3.4
Benzyl chloride	µg/m3	-	< 2.6	< 2.6	< 2.6	< 2.6
Benzene	µg/m3	1600	< 1.0	< 1.0	2.6	1.5
Bromomethane	µg/m3	-	< 2.0	< 2.0	< 2.0	< 2.0
Cis-1,2-dichloroethene	µg/m3	6500	< 2.0	< 2.0	< 2.0	< 2.0
Cis-1,3-dichloropropene	µg/m3	-	< 2.3	< 2.3	< 2.3	< 2.3
Chlorobenzene	µg/m3	6200	< 2.3	< 2.3	< 2.3	< 2.3
Carbon tetrachloride	µg/m3	-	< 3.2	< 3.2	< 3.2	< 3.2
Carbon disulphide	µg/m3	16000	21	32	70	59
Chloroethane	µg/m3	3200000	< 1.3	< 1.3	< 1.3	< 1.3
Chloroform	µg/m3	41000	< 2.5	< 2.5	< 2.5	< 2.5
Chloromethane	µg/m3	2900	< 10	< 10	< 10	< 10
Cyclohexane	µg/m3	-	< 1.8	< 1.8	9.1	15
Dibromochloromethane	µg/m3	-	< 4.3	< 4.3	< 4.3	< 4.3
Dichlorodifluoromethane	µg/m3	-	< 2.5	< 2.5	< 2.5	< 2.5
Dichlomethane	µg/m3	140000	< 25	< 25	< 25	< 25
Dichlorotetrafluoroethane	µg/m3	-	< 3.6	< 3.6	< 3.6	< 3.6
Ethyl acetate	µg/m3	-	< 1.8	< 1.8	< 1.8	< 1.8
Ethylbenzene	µg/m3	8300	< 1.3	< 1.3	< 1.3	< 1.3
Ethanol	µg/m3	-	< 5.8	< 5.8	< 5.8	< 5.8
Hexachlorobutadiene	µg/m3	160	< 5.4	< 5.4	< 5.4	< 5.4
Heptane	µg/m3	-	< 2.1	< 2.1	< 2.1	< 2.1
Hexane	µg/m3	-	< 11	< 11	< 11	< 11
Isopropyl alcohol	µg/m3	-	< 5.0	< 5.0	< 5.0	< 5.0
2-Hexanone (MBK)	µg/m3	-	< 2.1	< 2.1	< 2.1	< 2.1
MEK	µg/m3	-	< 1.5	3.7	2.1	< 1.5
Methyl methacrylate	µg/m3	-	< 2.1	< 2.1	< 2.1	< 2.1
MIBK	µg/m3	-	< 2.1	< 2.1	< 2.1	< 2.1
MTBE	µg/m3	810000	< 1.8	< 1.8	< 1.8	< 1.8
O-xylene	µg/m3	63000	< 1.3	< 1.3	< 1.3	< 1.3
M/p-xylene	µg/m3	63000	< 1.3	1.7	1.6	< 1.3
Propene	µg/m3	-	1.9	< 0.9	11	11
Styrene	µg/m3	-	< 2.2	3	3.7	4.4
Trans-1,2-dichloroethene	µg/m3	19000	< 2.0	< 2.0	< 2.0	< 2.0
Trans-1,3-dichloropropene	µg/m3	-	< 2.3	< 2.3	< 2.3	< 2.3
Bromoform	µg/m3	19000	< 5.3	< 5.3	< 5.3	< 5.3
Trichloroethene	µg/m3	650	< 2.7	< 2.7	< 2.7	< 2.7
Trichlorofluoromethane	µg/m3	-	< 2.9	< 2.9	< 2.9	< 2.9
Trichlorotrifluoroethane	µg/m3	-	< 3.9	< 3.9	< 3.9	< 3.9
Tetrachloroethene	µg/m3	6200	< 3.5	< 3.5	6.8	8.8
THF	µg/m3	-	< 1.5	< 1.5	< 1.5	< 1.5
1,3,5-Trimethylbenzene	µg/m3	-	< 2.5	< 2.5	< 2.5	< 2.5
Toluene	µg/m3	1600000	< 1.2	1.8	2.4	1.8
Vinyl acetate	µg/m3	-	< 1.8	< 1.8	< 1.8	< 1.8
Vinyl chloride	µg/m3	340	< 1.3	< 1.3	< 1.3	< 1.3
Naphthalene	µg/m3	840	< 2.7	< 2.7	< 2.7	< 2.7
TPH Aliphatic C5-C6	µg/m3	2800000	36	< 30	93	90
TPH Aliphatic C6-C8	µg/m3	2800000	31	48	210	190
TPH Aliphatic C8-C10	µg/m3	160000	84	190	160	120
TPH Aromatic C6-C7	µg/m3	34000	< 30	< 30	< 30	< 30
TPH Aromatic C7-C8	µg/m3	34000	< 30	< 30	< 30	< 30
TPH Aromatic C8-C10	µg/m3	34000	< 30	< 30	< 30	< 30
TPH >C10-C12	µg/m3	34000	160	180	110	96
PRO C5-C12	µg/m3	-	104	450	193	175
TPH >C5-C6	µg/m3	-	36	< 30	93	90
TPH >C6-C8	µg/m3	-	33	51	210	190
TPH >C8-C10	µg/m3	-	84	200	160	130

Appendix D: vGAC Derivation

A-squared Studio

Derivation of A-squared Soil Vapour Generic Assessment Criteria (vGAC)

Introduction:

The potential for volatile organic compounds (VOCs) present in the ground to represent human health risks via inhalation exposure is well documented. UK guidance on investigating, assessing and managing risks of inhalation of VOCs on land affected by contamination has been published in *CIRIA C682*. *CIRIA C682* is consistent with existing UK regulatory guidance on land contamination (e.g. the CLEA model and supporting documents) and complements *BS8576*.

A detailed framework for the assessment of VOCs is provided in *CIRIA C682*, which describes the development and use of screening criteria for VOC present in soil, groundwater and soil gas (vapour).

For soil it is recognised that for VOCs, published Soil Guideline Values (SGV) or calculated generic assessment criteria (GAC) that include, or are specific to, indoor inhalation exposure pathways may be used as conservative screening criteria. A-Squared Studio Engineers Ltd (A-squared) use SGV / GAC for VOCs in soil for a variety of land use scenarios including; *LQM Suitable for Use Levels (S4ULs) published in 2015*, *CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2009*, and SGV presented in *Environment Agency Science Report SC050021, dated 2009*. For assessing human health risks from VOCs in groundwater A-Squared use GAC presented in *SOBRA, Development of Generic Assessment Criteria for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater, Version 1.0, dated 2017*.

It is recognised within *CIRIA C682* that SGV / GAC for VOCs in soil and groundwater calculated using published coefficients to estimate the partitioning from the sorbed or dissolved phase into the gas phase (e.g. Henry's constant) may be conservative by up to several orders of magnitude. Additional conservatism of inhalation exposure may also occur through estimation of soil gas intrusion into building via the foundation using models such as Johnson & Ettinger (J&E) (ref. *Environmental Science & Technology, Heuristic model for the intrusion rate of contaminant vapors into buildings, dated 1991*), although there are recognisable differences between chlorinated and non-chlorinated compounds. The J&E model is known to typically overestimate the intrusion of non-chlorinated VOC into buildings, whilst chlorinated VOC may be underestimated.

It should also be recognised that comparison of laboratory data for VOCs in soils and groundwater with SGV / GAC may underestimate inhalation risk, due to the potential loss of VOCs during sampling.

The conservatism associated with estimating the indoor intrusion of VOCs derived from soil contamination has been recognised in the SR3 guidance for the use of the CLEA model (ref. *Environment Agency, Science Report – SC050021/SR3, Updated technical background to the CLEA model, dated 2009*), where calculated indoor VOC concentrations may be amended using a sub-surface soil to indoor air correction factor for petroleum hydrocarbons.

In view of the above, soil gas VOC monitoring and / or sampling can provide valuable additional data to assist in assessing human health risks. A-Squared detail herein vGAC which can be used for screening soil gas VOC concentrations in the assessment of human health risks via inhalation exposure within residential and commercial buildings. The vGAC are relevant to soil gas VOC concentrations measured in the following scenarios:

- Open spaces, with planned future development;
- Near slab – i.e. close to, but outside, the building footprint; and
- Sub slab – i.e. directly beneath the building footprint.

It is important to note that vGAC relate to soil gas concentrations only and are not for use when assessing the results of indoor air sampling.

It is not necessary to undertake soil gas VOC monitoring / sampling at all sites. Please note that the selection of sampling, monitoring and human health risk assessment methods is outside the scope of this note.

Methodology:

In line with recommendations (ref. *Environment Agency, Vapour transfer of soil contaminants, R&D Technical Report P5-018/TR, dated 2002*) and the approach taken within the CLEA model, A-Squared has used the J&E model as the basis to calculate the vGAC. A-Squared has also referred to *American Petroleum Institute, Johnson P.C., Identification of critical parameters for the Johnson & Ettinger (1991) vapour intrusion model, dated 2002*. Limitations of the J&E model for chlorinated compounds are noted.

The output of the J&E model is the calculation of an attenuation factor by the following equation (Equation 10.4 in the SR3 guidance):

$$\alpha = \frac{\left[\left(\frac{D_{eff} A_B}{Q_b L_T}\right) \exp\left(\frac{Q_s L_{crack}}{D_{crack} A_{crack}}\right)\right]}{\left[\exp\left(\frac{Q_s L_{crack}}{D_{crack} A_{crack}}\right) + \left(\frac{D_{eff} A_B}{Q_b L_T}\right) + \left(\frac{D_{eff} A_B}{Q_s L_T}\right)\left[\exp\left(\frac{Q_s L_{crack}}{D_{crack} A_{crack}}\right) - 1\right]\right]}$$

Where: α is the steady-state attenuation coefficient between soil and indoor air, dimensionless
D_{eff} is the effective diffusion coefficient for unsaturated soils, $cm^2\ s^{-1}$
A_B is the area of enclosed floor and walls below ground, cm^2
Q_b is the building ventilation rate, $cm^3\ s^{-1}$
L_T is the source-building separation, cm
Q_s is the volumetric flow rate of soil gas into the enclosed space, $cm^3\ s^{-1}$ [25 to 150]
L_{crack} is the foundation slab thickness, cm
A_{crack} is the floor crack area, cm^2
D_{crack} is the effective diffusion coefficient through the cracks, $cm^2\ s^{-1}$ [= D_{eff}]
Note: Appendix 1, Equation A10 where the Peclet number approaches infinity

The approach to calculating vGAC taken by A-Squared does not incorporate direct use of the full J&E model algorithm and uses a simple dilution relationship (Qsoil / QB), which is more conservative and suitable for screening purposes. This approach also negates the requirement to measure (or assume) a variety of soil and other physical characteristics (e.g. soil volumetric moisture content, total porosity, molecular diffusion in air).

The following components of vapour intrusion are incorporated within the model:

1. Partitioning of contaminants between groundwater, soil and vapour-phase;
2. Movement of contaminants in the soil vapour-phase through the unsaturated zone – diffusion controlled;
3. Movement of contaminants in the soil vapour-phase through the unsaturated zone – advection controlled for shallow soils beneath a building;
4. Movement of contaminants through the building foundation (dust-filled joints and cracks) - advection controlled; and
5. Dilution of soil gas vapours within indoor air.

Movement of soil gas vapours through advection forces (pressure differential) is recognised to be more rapid than via diffusion, particularly in close proximity to building foundations.

The following components of vapour intrusion are not included in the model:

1. Preferential flow paths through foundations (e.g. via large cracks or service entries); and
2. Biodegradation / bioattenuation during unsaturated zone transport, during intrusion via the foundation or whilst in indoor air.

Assuming that the contaminant source in the soil gas is directly beneath the building foundation and that movement is controlled by advection (i.e. the most conservative assumption), then the degree of reduction in VOC concentration as soil gas migrates from the source into buildings (known as the Attenuation Factor) can be estimated as the ratio of the flux of soil gas migration into the building (Qsoil) and the flux of air out of the building (building ventilation rate - QB).

i.e. Attenuation Factor = Qsoil / QB

The SR3 guidance provides recommendations for the calculation of the ventilation rate QB as follows:

QB = (H x Afoot x Ex) x 1,000,000 cm^3 m^{-3} x 1/3600 s hr^{-1}

Where:

H = height of living space (m)

Afoot = building footprint (m^2)

Ex = building air exchange rate (hr^{-1})

The building ventilation rate QB can be calculated for various building types (residential and commercial) using building parameters provided in Tables 3.3 and 4.21 in the SR3 guidance, and based on building air exchange rates (Ex) recommended in the SR3 guidance for residential properties (0.5 h^{-1}) and commercial properties (1.0 h^{-1}).

Values for the volumetric flow rate into the building (Qsoil) are calculated in the SR3 guidance, based on a combination of worst-case building parameters and soil type (crack / joint infill), and calculations provided in Appendix 1 of the SR3 guidance, as 25 and 150 cm^3 s^{-1} for the residential and commercial land uses, respectively.

The method described above using reasonably conservative vapour entry rates and indoor air exchange rates has been suggested to offer a more technically defensible approach for the development of site specific Attenuation Factors, compared with a method that uses a comparison between paired, indoor air and sub-slab soil gas data in empirical databases (ref. *Groundwater Monitoring & Remediation 34, Brewer R, Nagashima, J, Rigby, M, Schmidt, M, O'Neill, H., Estimation of Generic Subslab Attenuation Factors for Vapour Intrusion Investigations, dated 2014*).

Attenuation Factors used in the derivation of the vGAC are summarised in **Table 1**.

Calculation of vGAC, specific to both chemical and building type, has been undertaken through division of the Health Criteria Value (HCV) corrected for the critical receptor for a given end-use (e.g. residential or commercial), and the corresponding building-specific Attenuation Factor.

vGAC = Corrected HCV / Attenuation Factor

The HCV and critical receptor parameters have been taken from the following sources:

- *Suitable for Use Levels (S4ULs) published in 2015 by LQM*;
- *CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2009*; and
- *Environment Agency, Science Report SC050021, dated 2009*.

HCV have been corrected for commercial and residential scenarios as follows:

Commercial –

- An adult weighing 70 kg and breathing 15.7 m^3 air per day in accordance with the revised exposure parameters used in the SP1010 final project report for the Category 4 Screening Levels (C4SL) (Table 3.2)
- Background inhalation (mean daily intake - MDI) for an adult (Age Class 17).

Residential –

- A child weighing 13.3 kg (average of 0 - 6 year old female in accordance with Table 4.6 of the SR3 guidance and breathing 8.77 m^3 (average daily inhalation rate for a 0 - 6yr old female in accordance with SP1010 final project report for the C4SL (Table 3.2).
- Background inhalation (mean daily intake - MDI) for a child (Age Classes 1 - 6).
- Residential amendments to the MDI for younger age groups following Table 3.4 and Section 3.4.1 of guidance document SR2 (ref. *Environment Agency, Human health toxicological assessment of contaminants in soil, Science Report – Final SC050021/SR2, dated 2009*); amended to reflect mean daily inhalation rates in accordance with SP1010 final project report for the C4SL (Table 3.2).

Correction factors used to adjust adult MDI to younger age groups are summarised in **Table 2**.

Corrected HCVs are presented in **Table 3**.

A-Squared vGAC:

A-Squared vGAC are presented in **Table 4** for residential and commercial end-uses for common VOCs and have also been calculated for common semi-volatile organic chemicals (SVOCs), which may also have the potential to pose inhalation exposure risks.

A-Squared vGAC are simple screening criteria, in line with the principles of the CLEA model and the derivation of GAC, and are considered to be suitably conservative for use in a human health generic quantitative risk assessment (GQRA) for the following reasons:

- Calculation of the Attenuation Factor is based on the conservative assumption that the source lies directly beneath the foundation and that no additional depletion via diffusion occurs, i.e. attenuation is attributed solely to the dilution of soil gas as it moves through the foundation into indoor air;
- The vGAC are applicable to the most conservative soil type;
- Volumetric flow rate into buildings (Qsoil) is based on a combination of a sandy loam soil and conservative building type parameters; and
- Biodegradation of VOC is not taken into account. Biodegradation of non-chlorinated hydrocarbons can potentially attenuate soil gas concentrations and vapour intrusion by several orders of magnitude.

Uncertainties / Limitations:

The use of the J&E model is considered to be inappropriate for site conditions where non-aqueous phase liquid (NAPL) is present and potentially for use with modelling chlorinated hydrocarbons. The simplified A-Squared approach described negates these limitations provided representative soil gas concentrations are measured.

Use of the vGAC should only be undertaken with detailed knowledge of the conceptual site model (CSM) and an understanding of the potential limitations in the data for the site and should ideally be used as part of a multiple lines of evidence approach to assessing vapour intrusion.

Note that the compounds listed in the tables are not exhaustive and VOCs not listed may have the potential to pose an indoor inhalation risk. Additionally, the site specific CSM may indicate that not all compounds in the tables need to be tested for.

vGAC listed in **Table 4** may not be relevant or suitably protective where VOC migration is dominated by ground gas (carbon dioxide and methane) pressure driven flow or where other mechanisms leading to VOC exposure from soils (e.g. ingestion, dermal, dust inhalation) are active. vGAC may also not be relevant where the direct impact of foundation structures with NAPL occurs.

vGAC are not to be used for screening indoor or outdoor air quality results, where direct inhalation exposure is possible. In this scenario relevant inhalation HCV are suitable for use as screening criteria (for acceptable exposure scenarios) such as those in **Table 3**. In some instances, Occupational Exposure Limits may be more relevant.

The CSM associated with the vGAC does not consider vapour intrusion along underground service runs and migration into a building.

Table 1: Attenuation Factors Used for Residential and Commercial Land Use Scenarios

vGAC Land Use	SR3 Guidance Scenario	Building Living Space Height (m) [a]	Building Footprint A_{foot} (m^2) [a]	Building Air Exchange Rate (hr^{-1}) [a]	Building Ventilation Rate Q_B ($cm^3\ s^{-1}$) [b]	Soil Gas Flow Rate into Building Q_{soil} ($cm^3\ s^{-1}$) [c]	Attenuation Factor = Q_{soil}/Q_B
Residential	2-Storey Small Terrace House	4.8	28	0.5	18667	25	0.00134
Commercial	3-Storey Office (Pre-1970)	10.2	424	1.0	1201333	150	0.00012

Notes:

[a] From Table 3.3 and 4.21, SR3 Guidance

[b] Equation 10.5, SR3 Guidance

[c] Generic flow rate, Section 10.3, SR3 Guidance

Table 2: Correction Factors Used to Adjust Adult MDI to Younger Age Groups

Age Class	Body Weight (kg)[a]	Inhalation Rate (m^3/day)[b]	Correction Factor for Inhalation MDI[c]
1	5.6	5.4	0.34
2	9.8	8.0	0.51
3	12.7	8.9	0.57
4	15.1	10.1	0.64
5	16.9	10.1	0.64
6	19.7	10.1	0.64
17	70	15.7	-
Mean (AC 1-6)	**13.3**	**8.8**	**0.56**

Notes:

[a] Body weight from CLEA v1.06

[b] Inhalation rate from Table 3.2 of the SP1010 final project report for the C4SL

[c] Inhalation correction factors are the ratio of the average male and female inhalation rates for each age class to the adult rate at age class 17 (age 16–59 years) and are based on the rates used by the Category 4 Screening Levels to derive the C4SLs, following the methodology in the SR2 guidance

Table 3: Corrected Health Criteria Values

VOC / SVOC	Corrected Health Criteria Value (mg/m^3)[a]	
	Child (Residential)	Adult (Commercial)
Benzene	0.0021	0.0062
Toluene	2.1240	6.2420
Ethyl benzene	0.1127	0.3313
Xylenes	0.0910	0.2675
TPH Ali. C5-6	3.7928	11.1465
TPH Ali. C6-8	3.7928	11.1465
TPH Ali. C8-10	0.2200	0.6465
TPH Ali. C10-12	0.2200	0.6465
TPH Ali. C12-16	0.2200	0.6465
TPH Aro. C8-10	0.0455	0.1338
TPH Aro. C10-12	0.0455	0.1338
TPH Aro. C12-16	0.0455	0.1338
Acenaphthene	0.0910	0.2675
Acenaphthylene	0.0910	0.2675
Anthracene	0.4551	1.3376
Naphthalene	0.0013	0.0038
Vinyl chloride	0.0005	0.0013
1,2-dichloroethane	0.0002	0.0005
Tetrachloroethene	0.0083	0.0490
Tetrachoromethane	0.0025	0.0145
1,1,1-trichloroethane	0.9103	2.6752
Trichloroethene	0.0009	0.0025
Tetrachloroethane (1,1,2,2- and 1,1,1,2-)	0.0088	0.0259
1,1,2-trichloroethane	0.0074	0.0216
1,1-dichloroethene	0.0865	0.2541
1,1-dichloroethane*	0.3034	0.8917
1,2,4-Trimethylbenzene	0.0015	0.0045
MTBE	1.0954	3.2191
Chloroethane	4.3344	12.7382
Chloromethane	0.0039	0.0115
Cis-1,2-dichloroethene*	0.0091	0.0268
Dichloromethane	0.2037	0.5988
Trans-1,2-dichloroethene	0.0258	0.0758
Trichloromethane (chloroform)	0.0607	0.1783
Phenol	0.0152	0.0446
1,2–dichloropropane	0.0017	0.0051
Bromoform*	0.0303	0.0892
Isopropylbenzene	0.1734	0.5096
Hexachlorobutadiene	0.0003	0.0009
Carbon disulphide	0.0434	0.1275
Chlorobenzene	0.0123	0.0361
1,2-dichlorobenzene	0.0652	0.1917
1,3-dichlorobenzene	0.0030	0.0089
1,4-dichlorobenzene	0.1821	0.5350
1,2,3-trichlorobenzene	0.0015	0.0045
1,2,4-trichlorobenzene	0.0035	0.0103
1,3,5-trichlorobenzene	0.0015	0.0045
1,2,3,4-tetrachlorobenzene	0.0052	0.0152
1,2,3,5-tetrachlorobenzene	0.0006	0.0018
1,2,4,5-tetrachlorobenzene	0.0002	0.0004
Pentachlorobenzene	0.0008	0.0022
Hexachlorobenzene	0.0001	0.0003

Notes:

[a] Inhalation HCV has taken account of background inhalation for threshold compounds only

*in the absence of an inhlation HCV the oral HCV has been used

Table 4: A-Squared vGAC (Single Exposure Route)

	vGAC (mg/m^3)	
VOC / SVOC	**Residential**	**Commercial**
Attenuation Factor	*0.00134*	*0.00012*
Benzene	1.6	50
Toluene	1600	50000
Ethyl benzene	83	2600
Xylenes	63	2100
TPH Ali. C5-6	2800	89000
TPH Ali. C6-8	2800	89000
TPH Ali. C8-10	160	5200
TPH Ali. C10-12	160	5200
TPH Ali. C12-16	160	5200
TPH Aro. C8-10	34	1100
TPH Aro. C10-12	34	1100
TPH Aro. C12-16	34	1100
Acenaphthene	68	2100
Acenaphthylene	68	2100
Anthracene	340	11000
Naphthalene	0.84	29
Vinyl chloride	0.34	11
1,2-dichloroethane	0.14	4.3
Tetrachloroethene	6.2	290
Tetrachoromethane	1.8	91
1,1,1-trichloroethane	670	21000
Trichloroethene	0.65	20
Tetrachloroethane (1,1,2,2- and 1,1,1,2-)	6.5	210
1,1,2-trichloroethane	5.4	170
1,1-dichloroethene	65	2000
1,1-dichloroethane*	230	7100
1,2,4-Trimethylbenzene	1.1	36
MTBE	810	26000
Chloroethane	3200	100000
Chloromethane	2.9	92
Cis-1,2-dichloroethene*	6.5	210
Dichloromethane	140	4600
Trans-1,2-dichloroethene	19	600
Trichloromethane (chloroform)	41	1400
Phenol	9.4	340
1,2–dichloropropane	1.0	38
Bromoform*	19	680
Isopropylbenzene	120	3900
Hexachlorobutadiene	0.16	6.4
Carbon disulphide	16	510
Chlorobenzene	6.2	260
1,2-dichlorobenzene	41	1500
1,3-dichlorobenzene	1.1	36
1,4-dichlorobenzene	130	4200
1,2,3-trichlorobenzene	0.57	18
1,2,4-trichlorobenzene	1.3	50
1,3,5-trichlorobenzene	0.57	18
1,2,3,4-tetrachlorobenzene	1.9	89
1,2,3,5-tetrachlorobenzene	0.23	7.3
1,2,4,5-tetrachlorobenzene	0.06	1.8
Pentachlorobenzene	0.55	18
Hexachlorobenzene	0.08	2.5

Notes:

*in the absence of an inhlation HCV the oral HCV has been used

A-squared Studio

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