Test results from the grab sampling of ambient air conducted on 18 May returned detectable concentrations of hydrogen sulphide (H₂S) in all samples.

Potential health impacts and odorous properties of H_2S are described in the ESR summary sheet published in October 2019 (https://www.esr.cri.nz/assets/Hydrogen-Sulphide-Fact-Sheet.pdf). H_2S is a colourless gas with the characteristic odour of rotten eggs. It is responsible for the characteristic odour associated with geothermal areas.

Some of the H₂S concentrations that have been measured in the ambient air close to the Christchurch Wastewater Treatment Plant are of the same order of magnitude as the Office of Environmental Health Hazard Assessment (California) air quality criteria for potentially causing headache, nausea, and physiological responses to odour (which is 0.059 ppm). However, the concentrations of H₂S measured on 18 May clearly show a decrease in H₂S concentrations with increasing distance from the CWTP, with H₂S concentrations measured in the vicinity of Bromley School (site 10) for example being one quarter of the OEHHA criteria.

Collection of ambient air samples will continue on a weekly basis in the meantime, to establish more information about the range of H_2S concentrations in the suburbs downwind of the Christchurch Waste Water Treatment Plant. Council is now investigating using equipment to monitor for H_2S over longer time periods.





Certificate of Analysis

Kurt Scoringe

Kurt.Scoringe@ccc.govt.nz

Te Hononga Civic Offices Lab reference: 22-0023
53 Hereford Street, Christchurch Submitted by: Nigel Grant

Date received: 18/05/2022 Date analyzed: 18/05/2022

Date analyzed: 18/05/2022 Report date: 19/05/2022

Order No:

Reference: 18th-May-2022

Laboratory ID		22-0023-1	22-0023-2	22-0023-3	22-0023-4	22-0023-5	22-0023-6
Customer ID		Site 1 - Cuthberts/Ruru	Site 2 - Cuthberts Rd. Plant Gates	Site 5 - SH74 by Dam	Site 7 - Pond Inlet	Trickling filter 1	Trickling filter 2
Sampling time		18/05/2022, 10:40	18/05/2022, 10:45	18/05/2022, 10:10	18/05/2022, 09:30	18/05/2022, 09:15	18/05/2022, 09:15
Analyte (CAS)	Unit						
monoterpenes	ppbv	<loq< td=""><td>1100</td><td><loq< td=""><td><loq< td=""><td>2220</td><td>39</td></loq<></td></loq<></td></loq<>	1100	<loq< td=""><td><loq< td=""><td>2220</td><td>39</td></loq<></td></loq<>	<loq< td=""><td>2220</td><td>39</td></loq<>	2220	39
decamethylcyclopenta siloxane (541-02-6)	ppbv	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
ethanol (64-17-5)	ppbv	21	14	<loq< td=""><td>29</td><td><loq< td=""><td>13</td></loq<></td></loq<>	29	<loq< td=""><td>13</td></loq<>	13
heptanes	ppbv	<loq< td=""><td><loq< td=""><td><l0q< td=""><td><l0q< td=""><td><loq< td=""><td><l0q< td=""></l0q<></td></loq<></td></l0q<></td></l0q<></td></loq<></td></loq<>	<loq< td=""><td><l0q< td=""><td><l0q< td=""><td><loq< td=""><td><l0q< td=""></l0q<></td></loq<></td></l0q<></td></l0q<></td></loq<>	<l0q< td=""><td><l0q< td=""><td><loq< td=""><td><l0q< td=""></l0q<></td></loq<></td></l0q<></td></l0q<>	<l0q< td=""><td><loq< td=""><td><l0q< td=""></l0q<></td></loq<></td></l0q<>	<loq< td=""><td><l0q< td=""></l0q<></td></loq<>	<l0q< td=""></l0q<>
hydrogen sulphide (7783-06-4)	ppbv	23	172	39	368	48	19
pentanes	ppbv	7	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td>9</td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td>9</td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td>9</td></loq<></td></loq<>	<loq< td=""><td>9</td></loq<>	9
methane (74-82-8)	ppbv	1934	3063	1835	4842	3221	1977
methanol (67-56-1)	ppbv	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
methyl mercaptan (74-93-1)	ppbv	<loq< td=""><td><loq< td=""><td><loq< td=""><td>6</td><td>9</td><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td>6</td><td>9</td><td><loq< td=""></loq<></td></loq<></td></loq<>	<loq< td=""><td>6</td><td>9</td><td><loq< td=""></loq<></td></loq<>	6	9	<loq< td=""></loq<>
styrene (100-42-5)	ppbv	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
xylenes + ethylbenzene	ppbv	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""><td><loq< td=""></loq<></td></loq<></td></loq<>	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
benzene (71-43-2)*	ppbv	<loq< td=""><td>49</td><td><loq< td=""><td><loq< td=""><td>84</td><td><loq< td=""></loq<></td></loq<></td></loq<></td></loq<>	49	<loq< td=""><td><loq< td=""><td>84</td><td><loq< td=""></loq<></td></loq<></td></loq<>	<loq< td=""><td>84</td><td><loq< td=""></loq<></td></loq<>	84	<loq< td=""></loq<>
Laboratory ID		22-0023-7	22-0023-8	22-0023-9	22-0023-10	22-0023-11	22-0023-12
Laboratory ID Customer ID		22-0023-7 Site 3a - Shortland St.	22-0023-8 Site 4a - Met Site	22-0023-9 Site 13 - Energy Plant	22-0023-10 Site 6a - Affordable Storage	22-0023-11 Site 12 - StJohns/ Seascape	22-0023-12 Site 10 - Bromley Sch.
		Site 3a - Shortland St.	Site 4a -	Site 13 - Energy Plant	Site 6a -	Site 12 - StJohns/	Site 10 -
Customer ID Sampling time	Unit	Site 3a - Shortland St.	Site 4a - Met Site	Site 13 - Energy Plant	Site 6a - Affordable Storage	Site 12 - StJohns/ Seascape	Site 10 - Bromley Sch.
Customer ID Sampling time	Unit ppbv	Site 3a - Shortland St.	Site 4a - Met Site	Site 13 - Energy Plant	Site 6a - Affordable Storage	Site 12 - StJohns/ Seascape	Site 10 - Bromley Sch.
Customer ID Sampling time Analyte (CAS)	1	Site 3a - Shortland St. 18/05/2022, 10:00	Site 4a - Met Site 18/05/2022, 10:05	Site 13 - Energy Plant 18/05/2022, 09:40	Site 6a - Affordable Storage 18/05/2022, 10:17	Site 12 - StJohns/ Seascape 18/05/2022, 10:23	Site 10 - Bromley Sch. 18/05/2022, 10:30
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane	ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq< td=""><td>Site 4a - Met Site 18/05/2022, 10:05</td><td>Site 13 - Energy Plant 18/05/2022, 09:40</td><td>Site 6a - Affordable Storage 18/05/2022, 10:17</td><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23</td><td>Site 10 - Bromley Sch. 18/05/2022, 10:30</td></loq<>	Site 4a - Met Site 18/05/2022, 10:05	Site 13 - Energy Plant 18/05/2022, 09:40	Site 6a - Affordable Storage 18/05/2022, 10:17	Site 12 - StJohns/ Seascape 18/05/2022, 10:23	Site 10 - Bromley Sch. 18/05/2022, 10:30
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane (541-02-6) ethanol	ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq <loq< td=""><td>Site 4a - Met Site 18/05/2022, 10:05 25 <loq< td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq< td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq< td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23</td><td>Site 10 - Bromley Sch. 18/05/2022, 10:30</td></loq<></td></loq<></td></loq<></td></loq<></loq 	Site 4a - Met Site 18/05/2022, 10:05 25 <loq< td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq< td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq< td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23</td><td>Site 10 - Bromley Sch. 18/05/2022, 10:30</td></loq<></td></loq<></td></loq<>	Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq< td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq< td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23</td><td>Site 10 - Bromley Sch. 18/05/2022, 10:30</td></loq<></td></loq<>	Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq< td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23</td><td>Site 10 - Bromley Sch. 18/05/2022, 10:30</td></loq<>	Site 12 - StJohns/ Seascape 18/05/2022, 10:23	Site 10 - Bromley Sch. 18/05/2022, 10:30
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane (541-02-6) ethanol (64-17-5)	ppbv ppbv ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq <loq 31</loq </loq 	Site 4a - Met Site 18/05/2022, 10:05 25 <loq <loq<="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38</loq </td><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 6<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24<="" td=""></loq></td></loq></td></loq></td></loq>	Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38</loq 	Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 6<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24<="" td=""></loq></td></loq></td></loq>	Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24<="" td=""></loq></td></loq>	Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24<="" td=""></loq>
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane (541-02-6) ethanol (64-17-5) heptanes hydrogen sulphide	ppbv ppbv ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq 31="" <loq="" <loq<="" td=""><td>Site 4a - Met Site 18/05/2022, 10:05 25 <loq <loq="" <loq<="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" <loq<="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 6="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24="" <loq<="" td=""></loq></td></loq></td></loq></td></loq></td></loq></td></loq>	Site 4a - Met Site 18/05/2022, 10:05 25 <loq <loq="" <loq<="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" <loq<="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 6="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24="" <loq<="" td=""></loq></td></loq></td></loq></td></loq></td></loq>	Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" <loq<="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 6="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24="" <loq<="" td=""></loq></td></loq></td></loq></td></loq>	Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 6="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24="" <loq<="" td=""></loq></td></loq></td></loq>	Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24="" <loq<="" td=""></loq></td></loq>	Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 24="" <loq<="" td=""></loq>
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane (541-02-6) ethanol (64-17-5) heptanes hydrogen sulphide (7783-06-4)	ppbv ppbv ppbv ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq 31="" 91<="" <loq="" td=""><td>Site 4a - Met Site 18/05/2022, 10:05 25 <loq <loq="" <loq<="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" 461<="" <loq="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14<="" 24="" <loq="" td=""></loq></td></loq></td></loq></td></loq></td></loq></td></loq>	Site 4a - Met Site 18/05/2022, 10:05 25 <loq <loq="" <loq<="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" 461<="" <loq="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14<="" 24="" <loq="" td=""></loq></td></loq></td></loq></td></loq></td></loq>	Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" 461<="" <loq="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14<="" 24="" <loq="" td=""></loq></td></loq></td></loq></td></loq>	Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14<="" 24="" <loq="" td=""></loq></td></loq></td></loq>	Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14<="" 24="" <loq="" td=""></loq></td></loq>	Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14<="" 24="" <loq="" td=""></loq>
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane (541-02-6) ethanol (64-17-5) heptanes hydrogen sulphide (7783-06-4) pentanes methane	ppbv ppbv ppbv ppbv ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq< td=""><td>Site 4a - Met Site 18/05/2022, 10:05 25 <loq 17<="" <loq="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" 461="" <loq="" <loq<="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 6="" <loq="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" <loq="" <loq<="" td=""></loq></td></loq></td></loq></td></loq></td></loq></td></loq<>	Site 4a - Met Site 18/05/2022, 10:05 25 <loq 17<="" <loq="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" 461="" <loq="" <loq<="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 6="" <loq="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" <loq="" <loq<="" td=""></loq></td></loq></td></loq></td></loq></td></loq>	Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 38="" 461="" <loq="" <loq<="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 6="" <loq="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" <loq="" <loq<="" td=""></loq></td></loq></td></loq></td></loq>	Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 6="" <loq="" <loq<="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" <loq="" <loq<="" td=""></loq></td></loq></td></loq>	Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" <loq="" <loq<="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" <loq="" <loq<="" td=""></loq></td></loq>	Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" <loq="" <loq<="" td=""></loq>
Customer ID Sampling time Analyte (CAS) monoterpenes decamethylcyclopenta siloxane (541-02-6) ethanol (64-17-5) heptanes hydrogen sulphide (7783-06-4) pentanes methane (74-82-8) methanol	ppbv ppbv ppbv ppbv ppbv ppbv	Site 3a - Shortland St. 18/05/2022, 10:00 <loq< td=""><td>Site 4a - Met Site 18/05/2022, 10:05 25 <loq 1449<="" 17="" <loq="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 3438<="" 38="" 461="" <loq="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 1900<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" 1048<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" 3589<="" <loq="" td=""></loq></td></loq></td></loq></td></loq></td></loq></td></loq<>	Site 4a - Met Site 18/05/2022, 10:05 25 <loq 1449<="" 17="" <loq="" td=""><td>Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 3438<="" 38="" 461="" <loq="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 1900<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" 1048<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" 3589<="" <loq="" td=""></loq></td></loq></td></loq></td></loq></td></loq>	Site 13 - Energy Plant 18/05/2022, 09:40 12 <loq 3438<="" 38="" 461="" <loq="" td=""><td>Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 1900<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" 1048<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" 3589<="" <loq="" td=""></loq></td></loq></td></loq></td></loq>	Site 6a - Affordable Storage 18/05/2022, 10:17 17 <loq 18="" 1900<="" 6="" <loq="" td=""><td>Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" 1048<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" 3589<="" <loq="" td=""></loq></td></loq></td></loq>	Site 12 - StJohns/ Seascape 18/05/2022, 10:23 11 <loq 10="" 1048<="" <loq="" td=""><td>Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" 3589<="" <loq="" td=""></loq></td></loq>	Site 10 - Bromley Sch. 18/05/2022, 10:30 20 <loq 14="" 24="" 3589<="" <loq="" td=""></loq>
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ab reference: 22-0023 Report date: 19/05/2022



Certificate of Analysis

Laboratory ID		22-0023-13
Customer ID		Site 11- Mem. Cem.
Sampling time		18/05/2022, 10:35
Analyte (CAS)	Unit	
monoterpenes	ppbv	<loq< td=""></loq<>
decamethylcyclopenta siloxane (541-02-6)	ppbv	<loq< td=""></loq<>
ethanol (64-17-5)	ppbv	49
heptanes	ppbv	<loq< td=""></loq<>
hydrogen sulphide (7783-06-4)	ppbv	60
pentanes	ppbv	19
methane (74-82-8)	ppbv	5259
methanol (67-56-1)	ppbv	<loq< td=""></loq<>
methyl mercaptan (74-93-1)	ppbv	<loq< td=""></loq<>
styrene (100-42-5)	ppbv	<loq< td=""></loq<>
xylenes + ethylbenzene	ppbv	<loq< td=""></loq<>
benzene (71-43-2)*	ppbv	<loq< td=""></loq<>

* - Mass scan results.

Method approver:

Anatoly Chernyshev, PhD Director

Method Summary

The samples were analysed as received using direct injection – Selected Ion Flow Tube Mass Spectrometry (SIFT-MS) in Mass Scan Mode (reporting limit is 100 ppbv) and Selected Ion Mode (LOQ is 5 ppbv).

Report Notes

The samples were received in acceptable condition. Wind direction during sampling: NE. New components detected and added to the SIM method: benzene.

Lab reference: 22-0023 Report date: 19/05/2022