

# Air Quality

1-hour TSP Concentration ( $\mu\text{g}/\text{m}^3$ ) at Location AM1

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/8/2023	Sibata LD-5R	942532	0.00108	Fine	13:50	14:50	15:50	34	35	32	34	285	500
10/8/2023	Sibata LD-5R	942532	0.00108	Fine	13:30	14:30	15:30	34	36	30	33		
16/8/2023	Sibata LD-5R	942532	0.00108	Fine	9:03	10:03	11:03	29	20	28	26		
22/8/2023	Sibata LD-5R	942532	0.00108	Fine	11:19	12:19	13:19	39	40	38	39		
28/8/2023	Sibata LD-5R	942532	0.00108	Fine	15:19	16:19	17:19	33	34	30	32		
								<b>Average</b>	<b>33</b>				
								<b>Max.</b>	<b>40</b>				
								<b>Min.</b>	<b>20</b>				

1-hour TSP Concentration ( $\mu\text{g}/\text{m}^3$ ) at Location AM2

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/8/2023	Sibata LD-5R	882106	0.00107	Fine	13:35	14:35	15:35	30	31	29	30	279	500
11/8/2023	Sibata LD-5R	882106	0.00107	Fine	13:45	14:45	15:45	30	40	35	35		
16/8/2023	Sibata LD-5R	882106	0.00107	Fine	8:30	9:30	10:30	32	34	33	33		
22/8/2023	Sibata LD-5R	882106	0.00107	Fine	11:14	12:14	13:14	36	39	38	38		
28/8/2023	Sibata LD-5R	882106	0.00107	Fine	15:13	16:13	17:13	35	36	40	37		
								<b>Average</b>	<b>35</b>				
								<b>Max.</b>	<b>40</b>				
								<b>Min.</b>	<b>29</b>				

1-hour TSP Concentration ( $\mu\text{g}/\text{m}^3$ ) at Location AM3

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/8/2023	Sibata LD-5R	0Z4545	0.00114	Fine	14:00	15:00	16:00	49	50	48	49	285	500
10/8/2023	Sibata LD-5R	0Z4546	0.00114	Fine	14:00	15:00	16:00	30	36	33	33		
16/8/2023	Sibata LD-5R	0Z4545	0.00114	Fine	8:45	9:45	10:45	29	30	29	33		
22/8/2023	Sibata LD-5R	0Z4545	0.00114	Fine	11:29	12:29	13:29	40	43	42	38		
28/8/2023	Sibata LD-5R	0Z4545	0.00114	Fine	15:25	16:25	17:25	42	44	45	44		
								<b>Average</b>	<b>39</b>				
								<b>Max.</b>	<b>50</b>				
								<b>Min.</b>	<b>29</b>				

The Summary of TSP 24-hour Concentration (µg/m<sup>3</sup>) at Location AM1

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Averaged Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )
4/8/2023	Fine	30.5	1004.6	1473.11	1497.11	1440	40	1.43	2066	2.7316	2.7999	0.0683	33	164	260
10/8/2023	Fine	28.4	1003.5	1499.86	1523.86	1440	35	1.27	1828	2.6699	2.7048	0.0349	19		
16/8/2023	Fine	31.1	1006.0	1523.86	1547.86	1440	40	1.44	2066	2.6589	2.7344	0.0755	37		
22/8/2023	Fine	30.2	1005.7	1549.01	1573.01	1440	40	1.44	2069	2.6720	2.7212	0.0492	24		
28/8/2023	Fine	29.5	1002.8	1573.01	1597.01	1440	40	1.43	2066	2.6440	2.7128	0.0688	33		
												Average	29		
												Min	19		
												Max	37		

The Summary of 24-hour TSP Concentration (µg/m<sup>3</sup>) at Location AM2

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )
4/8/2023	Fine	30.5	1004.6	1233.33	1257.33	1440	36	1.08	1562	2.7332	2.7832	0.0500	32	152	260
11/8/2023	Fine	28.4	1003.5	1257.33	1281.33	1440	40	1.21	1738	2.6726	2.7475	0.0749	43		
16/8/2023	Fine	31.1	1006.0	1285.28	1309.28	1440	38.5	1.16	1670	2.6872	2.7327	0.0455	27		
22/8/2023	Fine	30.2	1005.7	1309.28	1333.28	1440	40	1.21	1737	2.6872	2.7427	0.0555	32		
28/8/2023	Fine	29.5	1002.8	1333.28	1357.28	1440	38	1.14	1648	2.6437	2.6935	0.0498	30		
												Average	33		
												Min	27		
												Max	43		

The Summary of 24-hour TSP Concentration (µg/m<sup>3</sup>) at Location AM3

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )
4/8/2023	Fine	30.5	1004.6	2240.15	2264.15	1440	42	1.43	2053	2.7455	2.8470	0.1015	49	163	260
10/8/2023	Fine	28.4	1003.5	2266.46	2290.46	1440	42	1.43	2058	2.6824	2.8127	0.1303	63		
16/8/2023	Fine	31.1	1006.0	2290.46	2314.46	1440	39	1.33	1911	2.6951	2.7459	0.0508	27		
22/8/2023	Fine	30.2	1005.7	2314.46	2338.46	1440	41	1.39	2009	2.6951	2.7615	0.0664	33		
28/8/2023	Fine	29.5	1002.8	2338.46	2362.46	1440	38	1.29	1862	2.6585	2.7140	0.0555	30		
												Average	40		
												Min	27		
												Max	63		

- Remarks:  
 1. Orange Text equal to exceed Action Level  
 2. Red Text equal to exceed Limit Level

# Noise

**Impact Phase Construction Noise Monitoring Data at Location NM1a**

Date	Weather	Wind speed m/s	Start Time	End Time	$L_{eq}$ (dB(A))							$L_{10}$ (dB(A))						$L_{90}$ (dB(A))						
					1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th	
4/8/2023	Fine	2.1	8:02	8:32	52.6	51.9	53.2	52.4	52.9	51.9	52.5	54.2	53.6	55.6	54.4	54.9	53.3	47.6	46.2	48.2	47.1	47.2	46.9	
10/8/2023	Fine	1.1	14:30	15:00	52.3	53.2	54.1	52.4	53.9	52.1	53.1	54.2	55.3	56.1	54.3	55.9	54.4	47.1	46.2	47.2	46.9	46.2	47.1	
16/8/2023	Fine	2.3	14:00	14:30	51.2	52.3	52.1	53.2	53.4	54.1	52.8	56.2	57.3	58.2	59.3	58.4	60.1	46.2	47.3	47.1	49.2	46.3	48.2	
22/8/2023	Fine	2.0	9:30	10:00	49.5	50.4	51.1	52.3	51.4	52.3	51.3	42.1	53.3	54.4	53.2	54.3	53.5	45.4	44.6	45.6	46.2	44.4	45	
28/8/2023	Fine	1.8	10:00	10:30	53.2	52.4	53.3	52.4	51.3	52.2	52.5	54.3	53.3	54.4	53.5	53.3	54.5	45.4	44.3	45.3	45.6	45.2	44.6	
											<b>Average</b>		52.5											
											<b>Baseline Level</b>		55.4											
											<b>Action Level</b>		When one valid documented complaint is received											
											<b>Limit Level</b>		75											

**Impact Phase Construction Noise Monitoring Data at Location NM2a**

Date	Weather	Wind speed m/s	Start Time	End Time	$L_{eq}$ (dB(A))							$L_{10}$ (dB(A))						$L_{90}$ (dB(A))						
					1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th	
4/8/2023	Fine	1.0	11:45	12:15	47.1	47.3	46.2	46.9	48.1	48.0	47.3	49.2	49.9	48.4	48.6	50.2	52.3	42.6	42.9	41.2	41.1	43.6	43.1	
10/8/2023	Fine	1.7	16:00	16:30	45.6	47.1	48.1	47.6	48.2	47.7	47.5	47.1	49.2	50.2	49.9	50.3	49.3	40.1	41.1	41.6	40.6	41.2	41.9	
16/8/2023	Fine	2.5	16:09	16:39	47.2	48.3	49.1	48.8	51.2	49.1	49.1	52.2	53.5	61.2	54.1	60.2	62.4	45.2	46.2	45.7	45.9	46.9	45.1	
22/8/2023	Fine	1.7	13:10	13:40	54.5	53.4	55.1	54.3	55.4	54.3	54.5	57.1	56.3	58.4	57.5	56.3	57.5	46.4	45.6	46.8	47.1	46.6	45.5	
28/8/2023	Fine	0.0	15:30	16:00	50.5	50.1	53.1	52.3	53.4	52.3	52.1	53.1	52.4	52.2	54.3	54.3	53	49.4	47.6	48.6	47.3	45	47.4	
											<b>Average</b>		51.1											
											<b>Baseline Level</b>		54.5											
											<b>Action Level</b>		When one valid documented complaint is received											
											<b>Limit Level</b>		75											

# Water Quality

Monitoring Location: WM1

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
4-Aug-23	11:30	Sunny	0.05	0.2	25.9	6.5	<7.4	<4	6.7	>7.7	>7.8	7.4	>9.2	>9.5	7.2	>9.7	>11.4

Monitoring Location: WM2

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
4-Aug-23	7:50	Sunny	0.15	0.4	26.2	6.8	>7.6	>7.7	7.0	<5	<4	32.2	>108.3	>108.9	30.8	>94.5	>94.7

Remarks

1. Sample will be grabbed on surface when the water depth is less than 1m.
2. "TBC" equal to "To be confirm"
3. Orange Text equal to exceed Action Level
4. Red Text equal to exceed Limit Level






### CERTIFICATE OF ANALYSIS

Client	: ACUMEN LABORATORY AND TESTING LIMITED	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9
Contact	: HUNTINGTON HUI	Contact	: Richard Fung	Work Order	: HK2331167
Address	: UNIT D, 12/F, FORD GLORY PLAZA, NOS.37-39 WING HONG STREET, CHEUNG SHA WAN, KOWLOON, HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
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Telephone	: ---	Telephone	: +852 2610 1044		
Facsimile	: ---	Facsimile	: +852 2610 2021		
Project	: ---			Date Samples Received	: 04-Aug-2023
Order number	: ---	Quote number	: HKE/2751/2022_V2	Issue Date	: 18-Aug-2023
C-O-C number	: ---			No. of samples received	: 2
Site	: NENTX			No. of samples analysed	: 2

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This document has been signed by those names that appear on this report and are the authorised signatories.

<i>Signatories</i>	<i>Position</i>	<i>Authorised results for</i>
 Fung Lim Chee, Richard	Managing Director	Inorganics
 Fung Lim Chee, Richard	Managing Director	Metals_ENV
 Ng Sin Kou, May	Laboratory Manager	Microbiology_ENV





## General Comments

This report supersedes any previous report(s) with the same work order number. All pages of this report have been checked and approved for release. When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Testing period is from 04-Aug-2023 to 18-Aug-2023.

Key: LOR = Limit of reporting; CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

### Specific Comments for Work Order: HK2331167

Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in chilled condition.

Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.

Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.

Microbiological sample(s) was/ were collected in 250mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 15:35.

NOT DETECTED denotes result(s) is (are) less than the Limit of Report (LOR).

ED037 - Titration end point for Total Alkalinity is pH 4.5 while end point for Total Alkalinity <20mg/L is pH 4.2.

Water sample(s) digested by in-house method E-3005 prior to the determination of total metals. The in-house method is developed based on USEPA method 3005.

EA002 - pH value is reported as at 25°C. Calibration range of pH value is 4.0 - 10.0. Results exceeding this range is for reference only.

EA025 - The accredited LOR of Total Suspended Solids is 0.5mg/L. Results below this LOR are for reference only.



### Analytical Results

Sub-Matrix: WATER

				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	04-Aug-2023	04-Aug-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2331167-001	HK2331167-002	-----	-----	-----	-----
<b>EA/ED: Physical and Aggregate Properties</b>									
EA002: pH Value	----	0.1	pH Unit	7.2	7.2	---	---	---	---
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	64	133	---	---	---	---
EA025: Suspended Solids (SS)	----	0.1	mg/L	7.2	30.8	---	---	---	---
ED037: Total Alkalinity as CaCO3	----	1	mg/L	19	35	---	---	---	---
<b>ED/EK: Inorganic Nonmetallic Parameters</b>									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	2	17	---	---	---	---
ED045K: Chloride	16887-00-6	0.5	mg/L	5	6	---	---	---	---
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.08	---	---	---	---
EK058A: Nitrate as N	14797-55-8	0.01	mg/L	0.05	0.24	---	---	---	---
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.2	0.4	---	---	---	---
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	---	---	---	---
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	---	---	---	---
<b>EP: Aggregate Organics</b>									
EP005: Total Organic Carbon	----	1	mg/L	<1	<1	---	---	---	---
EP020: Oil & Grease	----	5	mg/L	<5	<5	---	---	---	---
EP026C: Chemical Oxygen Demand	----	5	mg/L	6	7	---	---	---	---
EP030: Biochemical Oxygen Demand	----	2	mg/L	<2	<2	---	---	---	---
<b>EG: Metals and Major Cations - Total</b>									
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	---	---	---	---
EG020: Copper	7440-50-8	1	µg/L	<1	2	---	---	---	---
EG020: Lead	7439-92-1	1	µg/L	<1	4	---	---	---	---
EG020: Manganese	7439-96-5	1	µg/L	46	1160	---	---	---	---
EG020: Nickel	7440-02-0	1	µg/L	<1	4	---	---	---	---
EG020: Zinc	7440-66-6	10	µg/L	15	68	---	---	---	---
EG032: Calcium	7440-70-2	50	µg/L	3740	16100	---	---	---	---
EG032: Iron	7439-89-6	10	µg/L	780	2710	---	---	---	---
EG032: Magnesium	7439-95-4	50	µg/L	560	1480	---	---	---	---
EG032: Potassium	7440-09-7	50	µg/L	460	2140	---	---	---	---
EG032: Sodium	7440-23-5	50	µg/L	7740	5840	---	---	---	---



Sub-Matrix: WATER				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	04-Aug-2023	04-Aug-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2331167-001	HK2331167-002	-----	-----	-----	
<b>EM: Microbiological Testing</b>									
EM002: E. coli	---	1	CFU/100mL	57	230	---	---	---	
EM003: Total Coliforms	---	1	CFU/100mL	68	290	---	---	---	



**Laboratory Duplicate (DUP) Report**

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5216689)</b>								
HK2331167-002	WM2	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	133	133	0.0
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5216690)</b>								
HK2331167-002	WM2	EA002: pH Value	----	0.1	pH Unit	7.2	7.2	0.0
HK2330961-009	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.7	7.7	0.0
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5216691)</b>								
HK2331167-002	WM2	ED037: Total Alkalinity as CaCO3	----	1	mg/L	35	35	0.0
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5217727)</b>								
HK2331057-008	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.6	5.2	6.5
HK2331119-002	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	74.3	73.8	0.7
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218201)</b>								
HK2331204-003	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	<1	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218202)</b>								
HK2331191-006	Anonymous	ED045K: Chloride	16887-00-6	1	mg/L	<1	<1	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218206)</b>								
HK2331204-003	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5226515)</b>								
HK2331913-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	21.4	21.9	2.2
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5235403)</b>								
HK2331167-001	WM1	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5237953)</b>								
HK2331167-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.2	0.2	0.0
<b>EP: Aggregate Organics (QC Lot: 5232484)</b>								
HK2330922-001	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	18	18	0.0
<b>EP: Aggregate Organics (QC Lot: 5234681)</b>								
HK2331121-001	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	<5	<5	0.0
<b>EG: Metals and Major Cations - Total (QC Lot: 5217956)</b>								
HK2331167-002	WM2	EG032: Iron	7439-89-6	10	µg/L	2710	2610	3.6
		EG032: Calcium	7440-70-2	50	µg/L	16100	15700	2.9
		EG032: Magnesium	7439-95-4	50	µg/L	1480	1500	1.6
		EG032: Potassium	7440-09-7	50	µg/L	2140	1940	10.1



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
<b>EG: Metals and Major Cations - Total (QC Lot: 5217956) - Continued</b>								
HK2331167-002	WM2	EG032: Sodium	7440-23-5	50	µg/L	5840	5820	0.4
<b>EG: Metals and Major Cations - Total (QC Lot: 5217957)</b>								
HK2331167-002	WM2	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	4	4	0.0
		EG020: Manganese	7439-96-5	1	µg/L	1160	1180	2.0
		EG020: Nickel	7440-02-0	1	µg/L	4	4	0.0
		EG020: Zinc	7440-66-6	10	µg/L	68	71	4.4

**Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report**

Matrix: WATER				Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)		
						LCS	DCS	Low	High	Value	Control Limit	
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5216689)</b>												
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	146.9 µS/cm	98.7	----	93.5	106	----	----	
				<1	1412 µS/cm	97.9	----	94.3	105	----	----	
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5216691)</b>												
ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	50 mg/L	103	----	95.0	105	----	----	
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5217727)</b>												
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	90.5	----	86.6	113	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218201)</b>												
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	5 mg/L	101	----	91.4	109	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218202)</b>												
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	98.6	----	88.2	108	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218206)</b>												
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	99.4	----	92.4	106	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5226515)</b>												
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.9	----	89.3	109	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5235403)</b>												



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
Method: Compound	CAS Number					LCS	DCS	Low	High	Value	Control Limit
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5235403) - Continued</b>											
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	---	---	---	---	---	---	---
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5237953)</b>											
EK061A: Total Kjeldahl Nitrogen as N	---	0.1	mg/L	<0.1	0.5 mg/L	120	---	89.0	120	---	---
<b>EP: Aggregate Organics (QC Lot: 5216487)</b>											
EP030: Biochemical Oxygen Demand	---	---	mg/L	---	198 mg/L	101	---	77.6	118	---	---
<b>EP: Aggregate Organics (QC Lot: 5232484)</b>											
EP005: Total Organic Carbon	---	1	mg/L	<1	5 mg/L	98.0	---	87.3	120	---	---
				<1	100 mg/L	96.0	---	88.8	120	---	---
<b>EP: Aggregate Organics (QC Lot: 5234681)</b>											
EP026C: Chemical Oxygen Demand	---	---	mg/L	---	25 mg/L	99.6	---	92.0	108	---	---
				---	250 mg/L	101	---	92.3	106	---	---
<b>EP: Aggregate Organics (QC Lot: 5237171)</b>											
EP020: Oil & Grease	---	2	mg/L	<2	20 mg/L	99.4	---	81.7	105	---	---
<b>EG: Metals and Major Cations - Total (QC Lot: 5217956)</b>											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	101	---	85.0	115	---	---
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	104	---	85.0	115	---	---
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	102	---	85.0	115	---	---
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	99.3	---	85.0	115	---	---
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	102	---	85.0	115	---	---
<b>EG: Metals and Major Cations - Total (QC Lot: 5217957)</b>											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	106	---	85.0	109	---	---
EG020: Copper	7440-50-8	1	µg/L	<1	50 µg/L	106	---	90.0	111	---	---
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	99.1	---	89.0	111	---	---
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	103	---	85.0	115	---	---
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	103	---	87.0	110	---	---
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	104	---	86.0	114	---	---



**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report**

Matrix: WATER

					<b>Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report</b>					
<i>Laboratory sample ID</i>	<i>Sample ID</i>	<i>Method: Compound</i>	<i>CAS Number</i>	<i>Spike Concentration</i>	<i>Spike Recovery (%)</i>		<i>Recovery Limits (%)</i>		<i>RPD (%)</i>	
					<i>MS</i>	<i>MSD</i>	<i>Low</i>	<i>High</i>	<i>Value</i>	<i>Control Limit</i>
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218201)</b>										
HK2331204-003	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	5 mg/L	105	----	75.0	125	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218202)</b>										
HK2331191-006	Anonymous	ED045K: Chloride	16887-00-6	5 mg/L	115	----	75.0	125	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5218206)</b>										
HK2331204-003	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	95.8	----	75.0	125	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5226515)</b>										
HK2331913-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	103	----	75.0	125	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5237953)</b>										
HK2332352-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N	----	50 mg/L	114	----	75.0	125	----	----
<b>EP: Aggregate Organics (QC Lot: 5232484)</b>										
HK2330922-001	Anonymous	EP005: Total Organic Carbon	----	25 mg/L	100	----	75.0	125	----	----
<b>EP: Aggregate Organics (QC Lot: 5234681)</b>										
HK2331117-001	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	106	----	75.0	125	----	----
<b>EG: Metals and Major Cations - Total (QC Lot: 5217956)</b>										
HK2331167-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	103	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	113	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	108	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	107	----	75.0	125	----	----
		EG032: Sodium	7440-23-5	2000 µg/L	108	----	75.0	125	----	----
<b>EG: Metals and Major Cations - Total (QC Lot: 5217957)</b>										
HK2331167-001	WM1	EG020: Cadmium	7440-43-9	5 µg/L	108	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	110	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	102	----	75.0	125	----	----
		EG020: Manganese	7439-96-5	50 µg/L	102	----	75.0	125	----	----
		EG020: Nickel	7440-02-0	50 µg/L	105	----	75.0	125	----	----



Matrix: WATER

*Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report*

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
<b>EG: Metals and Major Cations - Total (QC Lot: 5217957) - Continued</b>										
HK2331167-001	WM1	EG020: Zinc	7440-66-6	50 µg/L	110	----	75.0	125	----	----