

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
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/9/2023	Sibata LD-5R	942532	0.00108	Fine	8:10	9:10	10:10	45	50	49	48	285	500
11/9/2023	Sibata LD-5R	882106	0.00107	Fine	13:12	14:12	15:12	36	39	38	38		
14/9/2023	Sibata LD-5R	942532	0.00108	Fine	8:10	9:10	10:10	36	39	37	37		
20/9/2023	Sibata LD-5R	942532	0.00108	Fine	8:09	9:09	10:09	51	50	54	52		
26/9/2023	Sibata LD-5R	942532	0.00108	Fine	8:06	9:06	10:06	54	50	53	52		
28/9/2023	Sibata LD-5R	942532	0.00108	Fine	8:01	9:01	10:01	39	40	39	39		
Average								44					
Max.								54					
Min.								36					

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
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/9/2023	Sibata LD-5R	882106	0.00107	Fine	8:25	9:25	10:25	36	39	38	38	279	500
11/9/2023	Sibata LD-5R	024546	0.00114	Fine	13:22	14:22	15:22	36	37	39	37		
14/9/2023	Sibata LD-5R	882106	0.00107	Fine	8:16	9:16	10:16	40	38	41	40		
20/9/2023	Sibata LD-5R	882106	0.00107	Fine	8:31	9:31	10:31	40	42	41	41		
26/9/2023	Sibata LD-5R	882106	0.00107	Fine	8:16	9:16	10:16	42	40	39	40		
28/9/2023	Sibata LD-5R	882106	0.00107	Fine	8:21	9:21	10:21	40	41	40	40		
Average								39					
Max.								42					
Min.								36					

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
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/9/2023	Sibata LD-5R	024545	0.00114	Fine	8:40	9:40	10:40	50	51	49	50	285	500
11/9/2023	Sibata LD-5R	942532	0.00108	Fine	13:33	14:33	15:33	41	42	40	41		
14/9/2023	Sibata LD-5R	024545	0.00114	Fine	8:30	9:30	10:30	41	44	36	40		
20/9/2023	Sibata LD-5R	024545	0.00114	Fine	8:40	9:40	10:40	40	39	41	40		
26/9/2023	Sibata LD-5R	024545	0.00114	Fine	8:29	9:29	10:29	51	50	49	50		
28/9/2023	Sibata LD-5R	024545	0.00114	Fine	8:30	9:30	10:30	53	49	50	51		
Average								45					
Max.								53					
Min.								36					

The Summary of TSP 24-hour Concentration (µg/m³) at Location AM1

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time (minutes)	Averaged Flow Rate	Averaged Flow Rate	Total Flow Volume (m ³)	Filter Weight (g)		Particulate weight (g)	Concentration (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)	
		(°C)	(hPa)	Initial	Final		(cfm)	(m ³ /min)		Initial	Final					
4/9/2023	Fine	30.5	1004.6	1597.01	1621.01	1440	41	1.47	2114	2.7155	2.7840	0.0685	32	164	260	
11/9/2023	Fine	28.4	1003.5	1621.01	1645.01	1440	40	1.52	2184	2.6998	2.7769	0.0771	35			
14/9/2023	Fine	31.1	1006.0	1645.01	1669.01	1440	38	1.46	2108	2.7143	2.7942	0.0799	38			
20/9/2023	Fine	30.2	1005.7	1669.01	1693.01	1440	40	1.52	2188	2.7045	2.7943	0.0898	41			
26/9/2023	Fine	29.5	1002.8	1693.01	1717.01	1440	40	1.52	2187	2.6847	2.7844	0.0997	46			
28/9/2023	Fine	29.5	1002.8	1717.01	1741.01	1440	40	1.52	2189	2.6846	2.7898	0.1052	48			
													Average			40
													Min			32
													Max	48		

The Summary of 24-hour TSP Concentration (µg/m³) at Location AM2

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time (minutes)	Averaged Flow Rate	Flow Rate	Total Flow Volume (m ³)	Filter Weight (g)		Particulate weight (g)	Concentration (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)	
		(°C)	(hPa)	Initial	Final		(cfm)	(m ³ /min)		Initial	Final					
4/9/2023	Fine	30.5	1004.6	1357.28	1381.28	1440	40	1.20	1734	2.7045	2.7641	0.0596	34	152	260	
11/9/2023	Fine	28.4	1003.5	1381.28	1405.28	1440	40	1.03	1483	2.6744	2.7195	0.0451	30			
14/9/2023	Fine	31.1	1006.0	1405.28	1429.28	1440	40	1.04	1492	2.7046	2.7560	0.0514	34			
20/9/2023	Fine	30.2	1005.7	1429.28	1453.28	1440	39	1.00	1440	2.7099	2.7753	0.0654	45			
26/9/2023	Fine	29.5	1002.8	1453.28	1477.28	1440	40	1.02	1462	2.7251	2.7939	0.0688	47			
28/9/2023	Fine	29.5	1002.8	1477.28	1501.28	1440	42	1.08	1559	2.7180	2.8014	0.0834	53			
													Average			41
													Min			30
													Max	53		

The Summary of 24-hour TSP Concentration (µg/m³) at Location AM3

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time (minutes)	Averaged Flow Rate	Flow Rate	Total Flow Volume (m ³)	Filter Weight (g)		Particulate weight (g)	Concentration (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)	
		(°C)	(hPa)	Initial	Final		(cfm)	(m ³ /min)		Initial	Final					
4/9/2023	Fine	30.5	1004.6	2362.46	2386.46	1440	40	1.36	1957	2.6578	2.7395	0.0817	42	163	260	
11/9/2023	Fine	28.4	1003.5	2366.46	2410.46	1440	40	1.11	1596	2.7194	2.7913	0.0719	45			
14/9/2023	Fine	31.1	1006.0	2410.46	2434.46	1440	40	1.12	1608	2.7074	2.7647	0.0573	36			
20/9/2023	Fine	30.2	1005.7	2434.46	2458.46	1440	38	1.02	1470	2.7201	2.7988	0.0787	54			
26/9/2023	Fine	29.5	1002.8	2458.46	2482.46	1440	42	1.20	1732	2.7049	2.8129	0.1080	62			
28/9/2023	Fine	29.5	1002.8	2482.46	2506.46	1440	41	1.14	1637	2.7202	2.8298	0.1096	67			
													Average			51
													Min			36
													Max	67		

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
11/9/2023	Fine	1.6	13:00	13:30	57.6	58.1	59.6	57.5	56.1	57.2	57.8	59.3	59.9	61.2	59.4	60.3	60.1	46.2	47.2	46.3	46.9	46.4	47.1
14/9/2023	Fine	2.6	11:00	11:30	58.6	59.1	60.2	59.2	59.1	58.6	59.2	61.7	62.6	60.4	61.2	63.3	63.1	52.6	52.4	51.4	51.6	51.7	52.6
20/9/2023	Fine	1.6	9:30	10:00	59.1	58.2	60.1	59.2	60.2	58.4	59.3	62.2	61.6	63.6	60.2	62.1	63.3	64.1	55.2	54.4	54.3	54.6	55.4
26/9/2023	Fine	1.8	8:12	8:42	55.6	56.2	58.1	57.2	55.6	56.1	56.6	57.6	58.3	61.1	61.4	59.1	58.6	46.1	47.1	46.3	47.4	47.6	48.1
Average											58.3												
Baseline Level											55.4												
Action Level											When one valid documented complaint is received												
Limit Level											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
11/9/2023	Fine	1.1	11:00	11:30	50.2	49.3	48.2	50.4	50.6	49.9	49.8	52.3	51.6	51.2	52.6	52.3	51.2	49.6	48.2	47.9	49.2	48.6	48.1
14/9/2023	Fine	2.1	15:50	16:20	54.5	53.6	55.1	53.4	54.1	53.6	54.1	58.1	57.6	60.1	61.2	60.6	59.1	50.4	61.6	51.7	50.9	52.2	51.7
20/9/2023	Fine	2.2	14:40	15:10	54.6	53.6	54.4	55.1	54.9	55.3	54.7	58.1	57.2	56.6	58.6	57.7	56.3	50.2	51.6	50.3	51.4	52.2	52.6
26/9/2023	Fine	1.7	14:06	14:36	53.2	54.3	55.2	54.6	54.6	53.3	54.3	57.1	56.2	57.9	58.1	57.6	56.3	49.1	49.2	49.9	50.2	48.2	49.1
Average											53.6												
Baseline Level											54.5												
Action Level											When one valid documented complaint is received												
Limit Level											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
20-Sep-23	16:49	Fine	0.05	1.0	23.6	7.8	<7.4	<4	7.2	>7.7	>7.8	4.3	>9.2	>9.5	3.0	>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
20-Sep-23	7:45	Fine	0.05	2.0	22.7	7.6	<5	<4	7.2	>7.6	>7.7	12.0	>108.3	>108.9	7.6	>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	: HK2337717
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		
E-mail	: Huntington.Hui@arecongroup.com	E-mail	: richard.fung@alsglobal.com		
Telephone	: ---	Telephone	: +852 2610 1044		
Facsimile	: ---	Facsimile	: +852 2610 2021		
Project	: NENTX			Date Samples Received	: 20-Sep-2023
Order number	: ---	Quote number	: HKE/2751/2022_V2	Issue Date	: 05-Oct-2023
C-O-C number	: ---			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

This report may not be reproduced except with prior written approval from the testing laboratory.

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 20-Sep-2023 to 05-Oct-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: HK2337717

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 18:15.

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	20-Sep-2023	20-Sep-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2337717-001	HK2337717-002	-----	-----	-----	
EA/ED: Physical and Aggregate Properties									
EA002: pH Value	----	0.1	pH Unit	7.1	7.6	---	---	---	
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	50	127	---	---	---	
EA025: Suspended Solids (SS)	----	0.1	mg/L	3.0	7.6	---	---	---	
ED037: Total Alkalinity as CaCO3	----	1	mg/L	11	31	---	---	---	
ED/EK: Inorganic Nonmetallic Parameters									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	4	20	---	---	---	
ED045K: Chloride	16887-00-6	0.5	mg/L	6	4	---	---	---	
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.13	---	---	---	
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	0.4	0.3	---	---	---	
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.02	<0.01	---	---	---	
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	---	---	---	
EP: Aggregate Organics									
EP005: Total Organic Carbon	----	1	mg/L	2	2	---	---	---	
EP020: Oil & Grease	----	5	mg/L	<5	<5	---	---	---	
EP026C: Chemical Oxygen Demand	----	5	mg/L	9	6	---	---	---	
EP030: Biochemical Oxygen Demand	----	2	mg/L	<2	<2	---	---	---	
EG: Metals and Major Cations - Total									
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	---	---	---	
EG020: Copper	7440-50-8	1	µg/L	1	<1	---	---	---	
EG020: Lead	7439-92-1	1	µg/L	<1	1	---	---	---	
EG020: Manganese	7439-96-5	1	µg/L	32	563	---	---	---	
EG020: Nickel	7440-02-0	1	µg/L	<1	<1	---	---	---	
EG020: Zinc	7440-66-6	10	µg/L	14	10	---	---	---	
EG032: Calcium	7440-70-2	50	µg/L	2400	16200	---	---	---	
EG032: Iron	7439-89-6	10	µg/L	270	670	---	---	---	
EG032: Magnesium	7439-95-4	50	µg/L	430	1290	---	---	---	
EG032: Potassium	7440-09-7	50	µg/L	680	1450	---	---	---	
EG032: Sodium	7440-23-5	50	µg/L	6340	4680	---	---	---	



Sub-Matrix: WATER				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	20-Sep-2023	20-Sep-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2337717-001	HK2337717-002	-----	-----	-----	-----
EM: Microbiological Testing									
EM002: E. coli	----	1	CFU/100mL	160	210	---	---	---	---
EM003: Total Coliforms	----	1	CFU/100mL	240	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 (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 5313143)								
HK2337674-012	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.7	7.8	0.0
HK2337674-018	Anonymous	EA002: pH Value	----	0.1	pH Unit	4.4	4.4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5313144)								
HK2337674-018	Anonymous	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	770	770	0.0
HK2337597-001	Anonymous	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	239	238	0.5
EA/ED: Physical and Aggregate Properties (QC Lot: 5313151)								
HK2337674-007	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	232	231	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5321620)								
HK2337717-001	WM1	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.6	13.2
HK2337798-009	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.6	9.7	1.6
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5315990)								
HK2337598-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5316003)								
HK2337717-001	WM1	ED045K: Chloride	16887-00-6	1	mg/L	6	6	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5316004)								
HK2337717-001	WM1	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	4	3	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5320391)								
HK2337717-001	WM1	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5327553)								
HK2338486-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	16.7	16.6	0.3
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5328372)								
HK2337717-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.4	0.3	0.0
EP: Aggregate Organics (QC Lot: 5329781)								
HK2337717-001	WM1	EP026C: Chemical Oxygen Demand	----	5	mg/L	9	9	0.0
EP: Aggregate Organics (QC Lot: 5337320)								
HK2338711-006	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<1	<1	0.0
EG: Metals and Major Cations - Total (QC Lot: 5315714)								
HK2337717-001	WM1	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	1	<1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0



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
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5327553)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.2	----	89.3	109	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5328372)											
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	0.5 mg/L	103	----	89.0	120	----	----
EP: Aggregate Organics (QC Lot: 5315560)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	106	----	77.6	118	----	----
EP: Aggregate Organics (QC Lot: 5329746)											
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	83.1	----	81.7	105	----	----
EP: Aggregate Organics (QC Lot: 5329781)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	101	----	92.0	108	----	----
					250 mg/L	98.7	----	92.3	106	----	----
EP: Aggregate Organics (QC Lot: 5337320)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	110	----	87.3	120	----	----
				<1	100 mg/L	97.7	----	88.8	120	----	----
EG: Metals and Major Cations - Total (QC Lot: 5315714)											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	100	----	85.0	109	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	50 µg/L	101	----	90.0	111	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	104	----	89.0	111	----	----
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	102	----	85.0	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	101	----	87.0	110	----	----
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	102	----	86.0	114	----	----
EG: Metals and Major Cations - Total (QC Lot: 5315717)											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	98.8	----	85.0	115	----	----
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	106	----	85.0	115	----	----
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	105	----	85.0	115	----	----
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	102	----	85.0	115	----	----
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	106	----	85.0	115	----	----



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

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
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5315990)										
HK2337598-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	94.6	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5316003)										
HK2337717-001	WM1	ED045K: Chloride	16887-00-6	5 mg/L	93.2	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5316004)										
HK2337717-001	WM1	ED041K: Sulphate as SO4 - Turbidimetric	----	5 mg/L	91.0	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5327553)										
HK2338486-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	105	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5328372)										
HK2337717-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.5 mg/L	92.9	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5329781)										
HK2337592-001	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	104	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5337320)										
HK2338711-006	Anonymous	EP005: Total Organic Carbon	----	5 mg/L	101	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5315714)										
HK2337598-001	Anonymous	EG020: Cadmium	7440-43-9	5 µg/L	97.2	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	100	----	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	98.9	----	75.0	125	----	----
		EG020: Zinc	7440-66-6	50 µg/L	99.7	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5315717)										
HK2337717-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	113	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	109	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	108	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	108	----	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
EG: Metals and Major Cations - Total (QC Lot: 5315717) - Continued										
HK2337717-001	WM1	EG032: Sodium	7440-23-5	2000 µg/L	116	----	75.0	125	----	----






CERTIFICATE OF ANALYSIS

Client	: ACUMEN LABORATORY AND TESTING LIMITED	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 5
Contact	: HUNTINGTON HUI	Contact	: Richard Fung	Work Order	: HK2338652
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		
E-mail	: Huntington.Hui@aurecongroup.com	E-mail	: richard.fung@alsglobal.com		
Telephone	: ---	Telephone	: +852 2610 1044		
Facsimile	: ---	Facsimile	: +852 2610 2021		
Project	: NENTX			Date Samples Received	: 28-Sep-2023
Order number	: ---	Quote number	: HKE/2751/2022_V3	Issue Date	: 09-Oct-2023
C-O-C number	: ---			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

This report may not be reproduced except with prior written approval from the testing laboratory.

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 28-Sep-2023 to 09-Oct-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: HK2338652

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 125mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 10:05.

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

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	WM 2	GR 3			
				Sampling date / time	28-Sep-2023	28-Sep-2023	---	---	---
Compound	CAS Number	LOR	Unit		HK2338652-001	HK2338652-002	-----	-----	-----
EA/ED: Physical and Aggregate Properties									
EA002: pH Value	----	0.1	pH Unit		7.1	7.2	---	---	---
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm		131	129	---	---	---
EA025: Suspended Solids (SS)	----	0.1	mg/L		5.5	4.9	---	---	---
ED/EK: Inorganic Nonmetallic Parameters									
EK055K: Ammonia as N	7664-41-7	0.01	mg/L		0.12	0.10	---	---	---
EP: Aggregate Organics									
EP005: Total Organic Carbon	----	1	mg/L		2	2	---	---	---
EP026C: Chemical Oxygen Demand	----	5	mg/L		<5	6	---	---	---
EP030: Biochemical Oxygen Demand	----	2	mg/L		<2	<2	---	---	---
EG: Metals and Major Cations - Total									
EG020: Zinc	7440-66-6	10	µg/L		13	20	---	---	---
EG032: Iron	7439-89-6	10	µg/L		910	670	---	---	---
EM: Microbiological Testing									
EM002: E. coli	----	1	CFU/100mL		2100	220	---	---	---
EM003: Total Coliforms	----	1	CFU/100mL		3400	380	---	---	---



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 (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 5328751)								
HK2338652-001	WM 2	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	131	131	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5328752)								
HK2338652-001	WM 2	EA002: pH Value	----	0.1	pH Unit	7.1	7.1	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5340160)								
HK2338909-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	1.7	1.5	12.3
HK2338913-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	4.7	4.9	4.7
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5338567)								
HK2339219-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	18.9	20.1	6.1
EP: Aggregate Organics (QC Lot: 5337295)								
HK2338652-002	GR 3	EP026C: Chemical Oxygen Demand	----	5	mg/L	6	5	0.0
EP: Aggregate Organics (QC Lot: 5337320)								
HK2338711-006	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<1	<1	0.0
EG: Metals and Major Cations - Total (QC Lot: 5329872)								
HK2338652-002	GR 3	EG032: Iron	7439-89-6	10	µg/L	670	670	0.0
EG: Metals and Major Cations - Total (QC Lot: 5329873)								
HK2338652-002	GR 3	EG020: Zinc	7440-66-6	10	µg/L	20	19	0.0

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
EA/ED: Physical and Aggregate Properties (QC Lot: 5328751)											
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	146.9 µS/cm	98.0	----	93.5	106	----	----
				<1	1412 µS/cm	99.6	----	94.3	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5340160)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	96.0	----	86.6	113	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5338567)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.0	----	89.3	109	----	----



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
EP: Aggregate Organics (QC Lot: 5328687)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	89.8	----	77.6	118	----	----
EP: Aggregate Organics (QC Lot: 5337295)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	101	----	92.0	108	----	----
					250 mg/L	99.6	----	92.3	106	----	----
EP: Aggregate Organics (QC Lot: 5337320)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	110	----	87.3	120	----	----
				<1	100 mg/L	97.7	----	88.8	120	----	----
EG: Metals and Major Cations - Total (QC Lot: 5329872)											
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	106	----	85.0	115	----	----
EG: Metals and Major Cations - Total (QC Lot: 5329873)											
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	97.8	----	86.0	114	----	----

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

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
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5338567)										
HK2339219-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	112	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5337295)										
HK2338652-001	WM 2	EP026C: Chemical Oxygen Demand	----	10 mg/L	99.0	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5337320)										
HK2338711-006	Anonymous	EP005: Total Organic Carbon	----	5 mg/L	101	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5329872)										
HK2338652-001	WM 2	EG032: Iron	7439-89-6	2000 µg/L	105	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5329873)										
HK2338652-001	WM 2	EG020: Zinc	7440-66-6	50 µg/L	97.4	----	75.0	125	----	----