

CERTIFICATE OF ANALYSIS

Work Order : KL2002627 Client : SMHB SDN BHD Contact : TANG YY-SAN Address : 38, JALAN 1/76D DESA PANDAN KUALA LUMPUR 55100 E-mail : tangys@smhb.com Telephone : ---- Facsimile : ---- Project : ENVIRONMENTAL MONITORING AT PULAU INDAH, KLANG Order number : ---- C-O-C number : ---- Sampler : CHOO, FADZIL, HUSNI Site : WESTPORT PHASE II DEVELOPMENT Quote number : KL2019SMHB0002	Page : 1 of 13 Laboratory : ALS Technichem (M) Sdn. Bhd. Contact : AbdulQaiyum Musa Address : WISMA ALS, 21, Jalan Astaka U8/84, Bukit Jelutong Shah Alam Selangor Malaysia 40150 E-mail : AbdulQaiyum.Musa@alsglobal.com Telephone : +60175552985 Facsimile : +603 7845 8258 QC Level : ALS Malaysia Standard Quality Schedule Date Samples Received : 02-Mar-2020 17:00 Date Analysis Commenced : 03-Mar-2020 Issue Date : 11-Mar-2020 13:59 No. of samples received : 24 No. of samples analysed : 24
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This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



Signatories

This laboratory is accredited under STANDARDS MALAYSIA. The tests reported herein have been performed in accordance with laboratory's Terms of Accreditation. This document has been electronically signed by authorized signatories indicated below. Electronic signing has been carried out in compliance with procedure specified in 21 CFR Part 11.

Signatories

Nazirah Ariffin
 Nuramira Abdmalek
 SitiAisha AbdAziz
 YiuLay Lee

Position

Lab Supervisor - Environmental (IKM No: M/3878/6603/13)
 Chemist (IKM No: M/4867/8027/18)
 Lab Supervisor - Microbiology (MJMM No: 0289)
 Lab Manager - Environmental (IKM No: M/2712/4566/04/08)



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, ASTM, NIOSH and BS EN. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

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.

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

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

ø = ALS is not accredited for these tests.

~ = Indicates an estimated value.

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- In Situ measurement results provided by client
- Result < LOR = Not Detected (ND)
- Where moisture determination has been performed, results are reported on a dry weight basis.



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W1 LT TOP	W1 LT MIDDLE	W1 LT BOTTOM	W2 LT TOP	W2 LT MIDDLE
				Sampling date/time	02-Mar-2020 13:28	02-Mar-2020 13:33	02-Mar-2020 13:39	02-Mar-2020 13:52	02-Mar-2020 13:56
				KL2002627-001	KL2002627-002	KL2002627-003	KL2002627-004	KL2002627-005	KL2002627-005
Physical and Aggregate Properties									
Salinity	APHA2520B	0.1	parts/1000		27.8	27.6	27.7	27.5	27.6
Total Suspended Solids	APHA2540D	1	mg/L		11	9	8	5	11
Turbidity	APHA2130B	1.0	NTU		3.3	7.2	6.2	4.1	7.3
Aggregate Organics									
Biochemical Oxygen Demand	APHA5210B	1	mg/L		3	3	3	3	2
Chemical Oxygen Demand	APHA5220D	1	mg/L		11	11	10	12	8
Oil & Grease	APHA5520B	1	mg/L		<1	<1	<1	<1	<1
Total Phenols	APHA5530B&D	10	µg/L		<10	<10	<10	<10	<10
Inorganic and Nonmetallic Properties									
Ammonia (Unionized)	APHA4500 NH3	10	µg/L		<10	<10	21	31	18
Hexavalent Chromium	APHA3500-Cr-D	10	µg/L		<10	<10	<10	<10	<10
Total Cyanide	APHA4500CN C&E	5	µg/L		<5	<5	<5	<5	<5
Nitrate as NO3	CH17-16	10	µg/L		115	100	128	98	81
Nitrite as NO2	APHA4500-NO2-B	10	µg/L		96	97	90	156	157
Phosphate as P	APHA4500-P F	10	µg/L		<10	<10	<10	<10	<10
Metals and Major Cations									
Aluminium	APHA3125B	0.1	µg/L		48.0	55.0	87.0	41.8	50.8
Cadmium	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Copper	APHA3125B	0.1	µg/L		0.6	0.6	0.7	0.7	0.5
Lead	APHA3125B	0.1	µg/L		0.8	0.5	0.6	0.2	0.3
Mercury	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	APHA3125B	0.1	µg/L		6.6	6.4	7.8	6.4	5.6
Metals Speciation									
Arsenious Acid (As (III))	CH17-85	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Polycyclic Aromatics Hydrocarbons (PAHs)									
Polycyclic Aromatic Hydrocarbons (PAHs)	USEPA8270C	5	µg/L		<5	<5	<5	<5	<5
Organotin									
Tributyltin	OG-17-33	2	ngSn/L		<2	<2	<2	<2	<2
In Situ Measurement									
Conductivity	SP-21-020	1	uS/cm		68100	68500	68800	68900	68500
Dissolved Oxygen	SP-21-019	0.01	mg/L		5.15	5.08	5.27	5.41	4.98
pH - Field	SP-21-017	0.1	pH Unit		8.4	8.4	8.4	8.4	8.4
Temperature	SP-21-018	0.1	°C		30.5	30.3	30.3	30.7	30.6
Microbiological Testing									



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W1 LT TOP	W1 LT MIDDLE	W1 LT BOTTOM	W2 LT TOP	W2 LT MIDDLE
				Sampling date/time	02-Mar-2020 13:28	02-Mar-2020 13:33	02-Mar-2020 13:39	02-Mar-2020 13:52	02-Mar-2020 13:56
				KL2002627-001	KL2002627-002	KL2002627-003	KL2002627-004	KL2002627-005	KL2002627-005
Microbiological Testing - Continued									
Enterococci	APHA9230C	1	CFU/100m L		20	12	<1	<1	<1
Total Faecal Coliform Count	APHA9222D	1	CFU/100m L		80	500	100	440	520
Acid Extractable Surrogates									
2-Fluorophenol	USEPA8270C	0.5	%		40.6	45.4	41.1	41.2	44.0
Phenol-d5	USEPA8270C	0.5	%		47.5	53.5	44.8	46.9	50.6
2,4,6-Tribromophenol	USEPA8270C	0.5	%		101	111	111	110	104
Base/Neutral Extractable Surrogates									
Nitrobenzene -d5	USEPA8270C	0.5	%		106	104	105	96.2	108
2-Fluorobiphenyl	USEPA8270C	0.5	%		101	98.3	104	85.8	92.5
4-Terphenyl-d14	USEPA8270C	0.5	%		121	121	109	108	110



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W2 LT BOTTOM	W3 LT TOP	W3 LT MIDDLE	W3 LT BOTTOM	W4 LT TOP
				Sampling date/time	02-Mar-2020 14:02	02-Mar-2020 12:56	02-Mar-2020 13:01	02-Mar-2020 13:11	02-Mar-2020 12:25
				KL2002627-006	KL2002627-007	KL2002627-008	KL2002627-009	KL2002627-010	KL2002627-010
Physical and Aggregate Properties									
Salinity	APHA2520B	0.1	parts/1000		27.4	27.6	27.6	27.6	27.8
Total Suspended Solids	APHA2540D	1	mg/L		7	4	11	10	3
Turbidity	APHA2130B	1.0	NTU		10.1	5.0	11.3	11.3	3.3
Aggregate Organics									
Biochemical Oxygen Demand	APHA5210B	1	mg/L		4	4	2	3	3
Chemical Oxygen Demand	APHA5220D	1	mg/L		12	14	8	12	14
Oil & Grease	APHA5520B	1	mg/L		<1	<1	<1	<1	<1
Total Phenols	APHA5530B&D	10	µg/L		<10	<10	<10	<10	<10
Inorganic and Nonmetallic Properties									
Ammonia (Unionized)	APHA4500 NH3	10	µg/L		17	11	12	<10	<10
Hexavalent Chromium	APHA3500-Cr-D	10	µg/L		<10	<10	<10	<10	<10
Total Cyanide	APHA4500CN C&E	5	µg/L		<5	<5	<5	<5	<5
Nitrate as NO3	CH17-16	10	µg/L		36	50	<10	<10	<10
Nitrite as NO2	APHA4500-NO2-B	10	µg/L		145	154	90	155	<10
Phosphate as P	APHA4500-P F	10	µg/L		<10	<10	<10	10	<10
Metals and Major Cations									
Aluminium	APHA3125B	0.1	µg/L		89.5	44.2	132	1.6	30.9
Cadmium	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Copper	APHA3125B	0.1	µg/L		0.7	0.5	0.7	0.3	0.5
Lead	APHA3125B	0.1	µg/L		0.5	0.3	0.8	<0.1	0.4
Mercury	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	APHA3125B	0.1	µg/L		6.4	4.6	5.8	1.3	5.4
Metals Speciation									
Arsenious Acid (As (III))	CH17-85	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Polycyclic Aromatics Hydrocarbons (PAHs)									
Polycyclic Aromatic Hydrocarbons (PAHs)	USEPA8270C	5	µg/L		<5	<5	<5	<5	<5
Organotin									
Tributyltin	OG-17-33	2	ngSn/L		<2	<2	<2	<2	<2
In Situ Measurement									
Conductivity	SP-21-020	1	uS/cm		68600	68200	68400	68500	67500
Dissolved Oxygen	SP-21-019	0.01	mg/L		5.02	5.79	5.51	5.08	6.28
pH - Field	SP-21-017	0.1	pH Unit		8.5	8.3	8.3	8.4	8.2
Temperature	SP-21-018	0.1	°C		30.6	30.7	30.5	30.3	29.8
Microbiological Testing									



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W2 LT BOTTOM	W3 LT TOP	W3 LT MIDDLE	W3 LT BOTTOM	W4 LT TOP
				Sampling date/time	02-Mar-2020 14:02	02-Mar-2020 12:56	02-Mar-2020 13:01	02-Mar-2020 13:11	02-Mar-2020 12:25
				KL2002627-006	KL2002627-007	KL2002627-008	KL2002627-009	KL2002627-010	
Microbiological Testing - Continued									
Enterococci	APHA9230C	1	CFU/100m L	<1	<1	<1	<1	<1	<1
Total Faecal Coliform Count	APHA9222D	1	CFU/100m L	64	420	56	2080	60	
Acid Extractable Surrogates									
2-Fluorophenol	USEPA8270C	0.5	%	43.4	42.2	43.0	51.4	52.8	
Phenol-d5	USEPA8270C	0.5	%	48.6	47.4	48.6	53.9	56.8	
2,4,6-Tribromophenol	USEPA8270C	0.5	%	100	102	102	105	111	
Base/Neutral Extractable Surrogates									
Nitrobenzene -d5	USEPA8270C	0.5	%	105	99.0	114	106	108	
2-Fluorobiphenyl	USEPA8270C	0.5	%	97.3	85.9	92.2	94.5	82.6	
4-Terphenyl-d14	USEPA8270C	0.5	%	121	113	119	136	129	



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W4 LT MIDDLE	W4 LT BOTTOM	W5 LT TOP	W5 LT MIDDLE	W5 LT BOTTOM
				Sampling date/time	02-Mar-2020 12:30	02-Mar-2020 12:41	02-Mar-2020 11:55	02-Mar-2020 12:00	02-Mar-2020 12:12
				KL2002627-011	KL2002627-012	KL2002627-013	KL2002627-014	KL2002627-015	KL2002627-015
Physical and Aggregate Properties									
Salinity	APHA2520B	0.1	parts/1000		27.9	27.7	27.8	27.7	27.9
Total Suspended Solids	APHA2540D	1	mg/L		8	11	9	2	4
Turbidity	APHA2130B	1.0	NTU		3.2	8.1	3.1	8.1	9.1
Aggregate Organics									
Biochemical Oxygen Demand	APHA5210B	1	mg/L		2	2	2	4	3
Chemical Oxygen Demand	APHA5220D	1	mg/L		8	8	7	12	15
Oil & Grease	APHA5520B	1	mg/L		<1	<1	<1	<1	<1
Total Phenols	APHA5530B&D	10	µg/L		<10	<10	<10	<10	<10
Inorganic and Nonmetallic Properties									
Ammonia (Unionized)	APHA4500 NH3	10	µg/L		<10	<10	10	<10	<10
Hexavalent Chromium	APHA3500-Cr-D	10	µg/L		<10	<10	<10	<10	<10
Total Cyanide	APHA4500CN C&E	5	µg/L		<5	<5	<5	<5	<5
Nitrate as NO3	CH17-16	10	µg/L		50	46	58	<10	100
Nitrite as NO2	APHA4500-NO2-B	10	µg/L		<10	<10	<10	<10	<10
Phosphate as P	APHA4500-P F	10	µg/L		<10	<10	<10	<10	16
Metals and Major Cations									
Aluminium	APHA3125B	0.1	µg/L		47.6	46.9	28.5	36.5	46.2
Cadmium	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Copper	APHA3125B	0.1	µg/L		0.6	0.8	0.8	0.9	2.0
Lead	APHA3125B	0.1	µg/L		0.4	0.6	0.4	0.4	0.4
Mercury	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	APHA3125B	0.1	µg/L		6.1	6.0	5.6	6.6	7.0
Metals Speciation									
Arsenious Acid (As (III))	CH17-85	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Polycyclic Aromatics Hydrocarbons (PAHs)									
Polycyclic Aromatic Hydrocarbons (PAHs)	USEPA8270C	5	µg/L		<5	<5	<5	<5	<5
Organotin									
Tributyltin	OG-17-33	2	ngSn/L		<2	<2	<2	<2	<2
In Situ Measurement									
Conductivity	SP-21-020	1	uS/cm		67600	67700	67000	67300	67700
Dissolved Oxygen	SP-21-019	0.01	mg/L		5.52	6.02	5.71	5.83	6.02
pH - Field	SP-21-017	0.1	pH Unit		8.3	8.3	8.4	8.3	8.3
Temperature	SP-21-018	0.1	°C		29.7	29.7	29.7	29.6	29.5
Microbiological Testing									



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W4 LT MIDDLE	W4 LT BOTTOM	W5 LT TOP	W5 LT MIDDLE	W5 LT BOTTOM
				Sampling date/time	02-Mar-2020 12:30	02-Mar-2020 12:41	02-Mar-2020 11:55	02-Mar-2020 12:00	02-Mar-2020 12:12
				KL2002627-011	KL2002627-012	KL2002627-013	KL2002627-014	KL2002627-015	KL2002627-015
Microbiological Testing - Continued									
Enterococci	APHA9230C	1	CFU/100m L	<1	<1	<1	<1	<1	<1
Total Faecal Coliform Count	APHA9222D	1	CFU/100m L	<1	120	7400	60	12	
Acid Extractable Surrogates									
2-Fluorophenol	USEPA8270C	0.5	%	57.4	45.7	40.9	53.5	49.4	
Phenol-d5	USEPA8270C	0.5	%	49.9	53.7	43.6	52.6	55.7	
2,4,6-Tribromophenol	USEPA8270C	0.5	%	74.8	100	126	108	108	
Base/Neutral Extractable Surrogates									
Nitrobenzene -d5	USEPA8270C	0.5	%	75.5	92.0	124	97.4	94.9	
2-Fluorobiphenyl	USEPA8270C	0.5	%	54.7	91.9	61.2	89.0	83.6	
4-Terphenyl-d14	USEPA8270C	0.5	%	71.6	104	76.6	113	102	



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W6 LT TOP	W6 LT MIDDLE	W6 LT BOTTOM	W7 LT TOP	W7 LT MIDDLE
				Sampling date/time	02-Mar-2020 14:45	02-Mar-2020 14:50	02-Mar-2020 14:56	02-Mar-2020 14:18	02-Mar-2020 14:25
				KL2002627-016	KL2002627-017	KL2002627-018	KL2002627-018	KL2002627-019	KL2002627-020
Physical and Aggregate Properties									
Salinity	APHA2520B	0.1	parts/1000		27.6	27.9	27.6	27.4	27.4
Total Suspended Solids	APHA2540D	1	mg/L		6	8	6	8	3
Turbidity	APHA2130B	1.0	NTU		4.3	7.1	11.2	5.1	13.7
Aggregate Organics									
Biochemical Oxygen Demand	APHA5210B	1	mg/L		4	5	5	2	2
Chemical Oxygen Demand	APHA5220D	1	mg/L		16	15	16	8	8
Oil & Grease	APHA5520B	1	mg/L		<1	<1	<1	<1	<1
Total Phenols	APHA5530B&D	10	µg/L		<10	<10	<10	<10	<10
Inorganic and Nonmetallic Properties									
Ammonia (Unionized)	APHA4500 NH3	10	µg/L		<10	<10	<10	91	11
Hexavalent Chromium	APHA3500-Cr-D	10	µg/L		<10	<10	<10	<10	<10
Total Cyanide	APHA4500CN C&E	5	µg/L		<5	<5	<5	<5	<5
Nitrate as NO3	CH17-16	10	µg/L		56	74	123	810	<10
Nitrite as NO2	APHA4500-NO2-B	10	µg/L		<10	<10	<10	210	191
Phosphate as P	APHA4500-P F	10	µg/L		<10	<10	<10	11	<10
Metals and Major Cations									
Aluminium	APHA3125B	0.1	µg/L		57.4	60.6	66.5	88.7	96.6
Cadmium	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Copper	APHA3125B	0.1	µg/L		0.6	51.8	4.2	1.0	0.9
Lead	APHA3125B	0.1	µg/L		0.3	0.5	0.3	0.4	0.6
Mercury	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	APHA3125B	0.1	µg/L		4.5	53.1	7.1	7.5	6.4
Metals Speciation									
Arsenious Acid (As (III))	CH17-85	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Polycyclic Aromatics Hydrocarbons (PAHs)									
Polycyclic Aromatic Hydrocarbons (PAHs)	USEPA8270C	5	µg/L		<5	<5	<5	<5	<5
Organotin									
Tributyltin	OG-17-33	2	ngSn/L		<2	<2	<2	<2	<2
In Situ Measurement									
Conductivity	SP-21-020	1	uS/cm		67800	68000	68000	68000	68100
Dissolved Oxygen	SP-21-019	0.01	mg/L		5.95	5.64	5.72	6.03	6.07
pH - Field	SP-21-017	0.1	pH Unit		8.4	8.4	8.4	8.3	8.3
Temperature	SP-21-018	0.1	°C		30.6	30.5	30.5	30.8	30.7
Microbiological Testing									



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W6 LT TOP	W6 LT MIDDLE	W6 LT BOTTOM	W7 LT TOP	W7 LT MIDDLE
				Sampling date/time	02-Mar-2020 14:45	02-Mar-2020 14:50	02-Mar-2020 14:56	02-Mar-2020 14:18	02-Mar-2020 14:25
				KL2002627-016	KL2002627-017	KL2002627-018	KL2002627-019	KL2002627-020	KL2002627-020
Microbiological Testing - Continued									
Enterococci	APHA9230C	1	CFU/100m L	<1	<1	<1	<1	<1	<1
Total Faecal Coliform Count	APHA9222D	1	CFU/100m L	160	48	32	600	68	
Acid Extractable Surrogates									
2-Fluorophenol	USEPA8270C	0.5	%	54.8	53.6	53.0	51.8	53.8	
Phenol-d5	USEPA8270C	0.5	%	53.9	55.7	56.3	54.3	55.0	
2,4,6-Tribromophenol	USEPA8270C	0.5	%	90.2	100	107	90.0	93.3	
Base/Neutral Extractable Surrogates									
Nitrobenzene -d5	USEPA8270C	0.5	%	96.1	100	108	92.4	95.6	
2-Fluorobiphenyl	USEPA8270C	0.5	%	79.1	90.4	89.7	94.4	87.4	
4-Terphenyl-d14	USEPA8270C	0.5	%	88.8	118	101	117	109	



Analytical Results

Sub-Matrix: SEAWATER

Compound	Method	LOR	Unit	Client sample ID	W7 LT BOTTOM	W8 LT TOP	W8 LT MIDDLE	W8 LT BOTTOM	----
				Sampling date/time	02-Mar-2020 14:34	02-Mar-2020 15:15	02-Mar-2020 15:21	02-Mar-2020 15:28	----
				KL2002627-021	KL2002627-022	KL2002627-023	KL2002627-023	KL2002627-024	-----
Physical and Aggregate Properties									
Salinity	APHA2520B	0.1	parts/1000		27.8	25.6	25.8	26.8	----
Total Suspended Solids	APHA2540D	1	mg/L		12	7	9	7	----
Turbidity	APHA2130B	1.0	NTU		9.2	7.1	14.3	15.1	----
Aggregate Organics									
Biochemical Oxygen Demand	APHA5210B	1	mg/L		3	6	4	5	----
Chemical Oxygen Demand	APHA5220D	1	mg/L		12	16	16	15	----
Oil & Grease	APHA5520B	1	mg/L		<1	<1	<1	<1	----
Total Phenols	APHA5530B&D	10	µg/L		<10	<10	<10	<10	----
Inorganic and Nonmetallic Properties									
Ammonia (Unionized)	APHA4500 NH3	10	µg/L		<10	10	30	18	----
Hexavalent Chromium	APHA3500-Cr-D	10	µg/L		<10	<10	<10	<10	----
Total Cyanide	APHA4500CN C&E	5	µg/L		<5	<5	<5	<5	----
Nitrate as NO3	CH17-16	10	µg/L		230	<10	236	90	----
Nitrite as NO2	APHA4500-NO2-B	10	µg/L		124	589	602	301	----
Phosphate as P	APHA4500-P F	10	µg/L		<10	65	<10	26	----
Metals and Major Cations									
Aluminium	APHA3125B	0.1	µg/L		1.2	85.4	85.1	112	----
Cadmium	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	----
Copper	APHA3125B	0.1	µg/L		<0.1	0.4	0.9	0.9	----
Lead	APHA3125B	0.1	µg/L		<0.1	0.4	0.6	0.8	----
Mercury	APHA3125B	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	----
Zinc	APHA3125B	0.1	µg/L		0.4	5.9	7.2	7.2	----
Metals Speciation									
Arsenious Acid (As (III))	CH17-85	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
Polycyclic Aromatics Hydrocarbons (PAHs)									
Polycyclic Aromatic Hydrocarbons (PAHs)	USEPA8270C	5	µg/L		<5	<5	<5	<5	----
Organotin									
Tributyltin	OG-17-33	2	ngSn/L		<2	<2	<2	<2	----
In Situ Measurement									
Conductivity	SP-21-020	1	uS/cm		68200	68200	68200	68300	----
Dissolved Oxygen	SP-21-019	0.01	mg/L		5.95	6.08	6.01	5.81	----
pH - Field	SP-21-017	0.1	pH Unit		8.4	7.8	7.8	7.9	----
Temperature	SP-21-018	0.1	°C		30.7	30.8	30.7	30.6	----
Microbiological Testing									



Analytical Results

Sub-Matrix: SEAWATER

				Client sample ID	W7 LT BOTTOM	W8 LT TOP	W8 LT MIDDLE	W8 LT BOTTOM	----
				Sampling date/time	02-Mar-2020 14:34	02-Mar-2020 15:15	02-Mar-2020 15:21	02-Mar-2020 15:28	----
Compound	Method	LOR	Unit	KL2002627-021	KL2002627-022	KL2002627-023	KL2002627-024	-----	
Microbiological Testing - Continued									
<i>Enterococci</i>	APHA9230C	1	CFU/100m L	<1	<1	12	8		----
Total Faecal Coliform Count	APHA9222D	1	CFU/100m L	200	200	160	192		----
Acid Extractable Surrogates									
2-Fluorophenol	USEPA8270C	0.5	%	51.1	46.5	40.1	40.6		----
Phenol-d5	USEPA8270C	0.5	%	51.8	52.0	43.2	43.4		----
2,4,6-Tribromophenol	USEPA8270C	0.5	%	88.2	103	126	130		----
Base/Neutral Extractable Surrogates									
Nitrobenzene -d5	USEPA8270C	0.5	%	95.7	95.2	133	126		----
2-Fluorobiphenyl	USEPA8270C	0.5	%	90.4	96.2	64.9	62.4		----
4-Terphenyl-d14	USEPA8270C	0.5	%	139	98.2	68.4	68.7		----



Surrogate Control Limits

Sub-Matrix: SEAWATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	20	60
Phenol-d5	----	20	60
2,4,6-Tribromophenol	118-79-6	50	140
Base/Neutral Extractable Surrogates			
Nitrobenzene -d5	4165-60-0	50	140
2-Fluorobiphenyl	321-60-8	50	140
4-Terphenyl-d14	1718-51-0	50	140