

CLIENT NAME: DEFENCE CONSTRUCTION CANADA 14 ALERT BLVD, 8 WING TRENTON ASTRA, ON K0K3W0 (613) 392-2811

ATTENTION TO: Cameron Chadwick

PROJECT: Alert Eureka

AGAT WORK ORDER: 17T243248

MICROBIOLOGY ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

WATER ANALYSIS REVIEWED BY: Parvathi Malemath, Data Reviewer

DATE REPORTED: Aug 09, 2017

PAGES (INCLUDING COVER): 13

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*NOTES		

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V1)

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA) AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation.



AGAT WORK ORDER: 17T243248

PROJECT: Alert Eureka

5835 COOPERS AVENUE MISSISSAUGA, ONTARIO CANADA L4Z 1Y2 TEL (905)712-5100 FAX (905)712-5122 http://www.agatlabs.com

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

SAMPLING SITE:

ATTENTION TO: Cameron Chadwick SAMPLED BY:Kelsey Davidson

Microbio	logical Analy	vsis ((water)

DATE RECEIVED: 2017-07-28 DATE REPORTED: 2017-08-09

SAMPLE DESCRIPTION: ALT 4
SAMPLE TYPE: Water

DATE SAMPLED: 2017-07-25

 Parameter
 Unit
 G / S
 RDL
 8603875

 Fecal Coliform
 CFU/100mL
 2
 ND

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to SDWA - Microbiology

Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

8603875 RDL >1 indicates dilutions of the sample.

ND - Not Detected.

HOLDING TIME-the time from sample collection to initiation of analysis exceeded 48 hours

Certified By:





AGAT WORK ORDER: 17T243248

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CLIENT NAME: DEFENCE CONSTRUCTION CANADA SAMPLING SITE:

ATTENTION TO: Cameron Chadwick SAMPLED BY:Kelsey Davidson

O. Reg. 153(511) - PHCs F1 - F4 (Water	O. Reg.	153(511)) - PHCs F1	- F4	(Water)
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DATE RECEIVED: 2017-07-28				DATE REPORTED: 2017-08-0
	;	SAMPLE DESCRIPTION:	ALT 4	
		SAMPLE TYPE:	Water	
		DATE SAMPLED:	2017-07-25	
Parameter	Unit	G/S RDL	8603875	
Benzene	μg/L	0.20	<0.20	
Toluene	μg/L	0.20	<0.20	
Ethylbenzene	μg/L	0.10	<0.10	
Xylene Mixture	μg/L	0.20	<0.20	
F1 (C6 to C10)	μg/L	25	<25	
F1 (C6 to C10) minus BTEX	μg/L	25	<25	
F2 (C10 to C16)	μg/L	100	<100	
F3 (C16 to C34)	μg/L	100	<100	
F4 (C34 to C50)	μg/L	100	<100	
Gravimetric Heavy Hydrocarbons	μg/L	500	NA	
Surrogate	Unit	Acceptable Limits		
Terphenyl	%	60-140	66	

Comments:

RDL - Reported Detection Limit; G / S - Guideline / Standard

8603875

The C6-C10 fraction is calculated using Toluene response factor.

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.

Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons > C50 are present.

The chromatogram has returned to baseline by the retention time of nC50.

Total C6-C50 results are corrected for BTEX contributions.

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

nC6 and nC10 response factors are within 30% of Toluene response factor.

nC10, nC16 and nC34 response factors are within 10% of their average.

C50 response factor is within 70% of nC10 + nC16 nC34 average.

Linearity is within 15%.

Extraction and holding times were met for this sample.

Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153/04, results are considered valid without determining the PAH contribution if not requested by the client.

NA = Not Applicable

Certified By:

NPoprikolof



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CLIENT NAME: DEFENCE CONSTRUCTION CANADA

SAMPLING SITE:

ATTENTION TO: Cameron Chadwick SAMPLED BY:Kelsey Davidson

				Oil and	d Grease (+Total) - water
DATE RECEIVED: 2017-07-28					DATE REPORTED: 2017-08-09
		SAMPLE DES	CRIPTION:	ALT 4	
		SAM	PLE TYPE:	Water	
		DATE	SAMPLED:	2017-07-25	
Parameter	Unit	G/S	RDL	8603875	
Oil and Grease (animal/vegetable)	mg/L		0.5	0.5	
Oil and Grease (mineral) in water	mg/L		0.5	<0.5	
Oil and Grease (Total) in water	mg/L		0.5	0.5	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Certified By:





AGAT WORK ORDER: 17T243248

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5835 COOPERS AVENUE MISSISSAUGA, ONTARIO CANADA L4Z 1Y2 TEL (905)712-5100 FAX (905)712-5122 http://www.agatlabs.com

CLIENT NAME: DEFENCE CONSTRUCTION CANADA SAMPLING SITE:

ATTENTION TO: Cameron Chadwick SAMPLED BY:Kelsey Davidson

SAMPLING SITE.				SAMIFLED BT. Reisey Davidson
		Polycy	clic Aromati	c Hydrocarbons in Water - (PAH)
DATE RECEIVED: 2017-07-28				DATE REPORTED: 2017-08-09
Parameter	Unit	SAMPLE DESCRIPTION: SAMPLE TYPE: DATE SAMPLED: G/S RDL	ALT 4 Water 2017-07-25 8603875	
1-Methylnaphthalene	ug/L	0.01	<0.01	
2-Methylnaphthalene	ug/L	0.01	<0.01	
Acenaphthene	ug/L	0.01	<0.01	
Acenaphthylene	ug/L	0.01	<0.01	
Acridine	ug/L	0.01	<0.01	
Anthracene	ug/L	0.012	<0.012	
Benzo(a)anthracene	ug/L	0.018	<0.018	
Benzo(a)pyrene	ug/L	0.010	<0.010	
Benzo(b)fluoranthene	ug/L	0.01	<0.01	
Benzo(e)pyrene	ug/L	0.01	<0.01	
Benzo(ghi)perylene	ug/L	0.01	<0.01	
Benzo(k)fluoranthene	ug/L	0.01	<0.01	
Chrysene	ug/L	0.01	<0.01	
Dibenzo(a,h)anthracene	ug/L	0.01	<0.01	
Fluoranthene	ug/L	0.01	<0.01	
Fluorene	ug/L	0.01	<0.01	
Indeno(1,2,3-cd)pyrene	ug/L	0.01	<0.01	
Naphthalene	ug/L	0.01	<0.01	
Perylene	ug/L	0.01	<0.01	
Phenanthrene	ug/L	0.01	<0.01	
Pyrene	ug/L	0.01	<0.01	
Quinoline	ug/L	0.01	<0.01	
Surrogate	Unit	Acceptable Limits		
Nitrobenzene-d5	%	50-140	68	
2-Fluorobiphenyl	%	50-140	84	
Terphenyl-d14	%	50-140	71	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Certified By:

NPoprikolof



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CLIENT NAME: DEFENCE CONSTRUCTION CANADA

SAMPLING SITE:

ATTENTION TO: Cameron Chadwick SAMPLED BY:Kelsey Davidson

SAMPLING SITE:				SAMPLED BY: Reisey Davidson
			Inorgan	nic Chemistry (Water)
DATE RECEIVED: 2017-07-28				DATE REPORTED: 2017-08-09
	S	AMPLE DESCRIPTION: SAMPLE TYPE: DATE SAMPLED:	ALT 4 Water 2017-07-25	
Parameter	Unit	G/S RDL	8603875	
BOD (5)	mg/L	5	<5	
Electrical Conductivity	uS/cm	2	212	
pH	pH Units	NA	7.50	
Total Suspended Solids	mg/L	10	70	
Total Hardness (as CaCO3)	mg/L	0.5	79.0	
Alkalinity (as CaCO3)	mg/L	5	71	
Chloride	mg/L	0.10	11.0	
Nitrate as N	mg/L	0.05	0.22	
Nitrite as N	mg/L	0.05	<0.05	
Sulphate	mg/L	0.10	17.3	
Ammonia as N	mg/L	0.02	<0.02	
Chemical Oxygen Demand	mg/L	5	<5	
Phenols	μg/L	1	<1	
Calcium	mg/L	0.05	26.0	
Magnesium	mg/L	0.05	3.41	
Sodium	mg/L	0.05	6.81	
Potassium	mg/L	0.05	1.54	
Total Arsenic	mg/L	0.015	< 0.015	
Total Cadmium	mg/L	0.010	<0.010	
Total Chromium	mg/L	0.015	<0.015	
Total Copper	mg/L	0.015	<0.015	
Total Iron	mg/L	0.050	3.77	
Total Lead	μg/L	0.5	3.3	
Total Mercury	mg/L	0.0002	<0.0002	
Total Nickel	mg/L	0.015	<0.015	
1				

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

8603875 Please note that pH & TSS were completed past hold time. The results should be reviewed with discretion.

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Quality Assurance

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

PROJECT: Alert Eureka

SAMPLING SITE:

AGAT WORK ORDER: 17T243248

ATTENTION TO: Cameron Chadwick

SAMPLED BY:Kelsey Davidson

Microbiology Analysis															
RPT Date: Aug 09, 2017			D	UPLICAT	E		REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Accep Lim		Recovery	Acceptable Limits		Recovery		ptable nits
PARAMETER	Baton	ld					Value	Lower	Upper		Lower	Upper	,	Lower	Upper

Microbiological Analysis (water)

Fecal Coliform 8603875 8603875 ND ND NA <1

Comments: ND - Not detected; NA - % RPD Not Applicable

Certified By:



AGAT WORK ORDER: 17T243248

Quality Assurance

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

PROJECT: Alert Eureka ATTENTION TO: Cameron Chadwick SAMDI ING SITE. SAMPLED BY: Kelsey Davidson

			Trac	e Orç	gani	cs Ar	alysi	is							
RPT Date: Aug 09, 2017				UPLICATE			REFERENCE MATERIAL			METHOD BLANK SPIKE			MAT	MATRIX SPIKE	
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	1 1 1 1 1 1	ptable nits	Recovery	1 :	ptable nits
		ld					Value	Lower	Upper			Upper		Lower	Upper
Polycyclic Aromatic Hydrocar	rbons in Wate	r - (PAH)													
1-Methylnaphthalene	1	8593255	< 0.01	< 0.01	NA	< 0.01	102%	50%	140%	67%	50%	140%	69%	50%	140%
2-Methylnaphthalene	1	8593255	< 0.01	< 0.01	NA	< 0.01	101%	50%	140%	67%	50%	140%	68%	50%	140%
Acenaphthene	1	8593255	< 0.01	< 0.01	NA	< 0.01	101%	50%	140%	68%	50%	140%	59%	50%	140%
Acenaphthylene	1	8593255	< 0.01	< 0.01	NA	< 0.01	96%	50%	140%	68%	50%	140%	59%	50%	140%
Acridine	1	8593255	< 0.01	< 0.01	NA	< 0.01	85%	50%	140%	56%	50%	140%	62%	50%	140%
Anthracene	1	8593255	< 0.012	< 0.012	NA	< 0.012	94%	50%	140%	59%	50%	140%	58%	50%	140%
Benzo(a)anthracene	1	8593255	< 0.018	< 0.018	NA	< 0.018	91%	50%	140%	57%	50%	140%	59%	50%	140%
Benzo(a)pyrene	1	8593255	< 0.010	< 0.010	NA	< 0.010	101%	50%	140%	68%	50%	140%	81%	50%	140%
Benzo(b)fluoranthene	1	8593255	< 0.01	< 0.01	NA	< 0.01	111%	50%	140%	57%	50%	140%	63%	50%	140%
Benzo(e)pyrene	1	8593255	< 0.01	< 0.01	NA	< 0.01	96%	50%	140%	60%	50%	140%	67%	50%	140%
Benzo(ghi)perylene	1	8593255	< 0.01	< 0.01	NA	< 0.01	93%	50%	140%	87%	50%	140%	88%	50%	140%
Benzo(k)fluoranthene	1	8593255	< 0.01	< 0.01	NA	< 0.01	108%	50%	140%	56%	50%	140%	62%	50%	140%
Chrysene	1	8593255	< 0.01	< 0.01	NA	< 0.01	103%	50%	140%	65%	50%	140%	61%	50%	140%
Dibenzo(a,h)anthracene	1	8593255	< 0.01	< 0.01	NA	< 0.01	127%	50%	140%	81%	50%	140%	91%	50%	140%
Fluoranthene	1	8593255	< 0.01	< 0.01	NA	< 0.01	89%	50%	140%	59%	50%	140%	64%	50%	140%
Fluorene	1	8593255	< 0.01	< 0.01	NA	< 0.01	97%	50%	140%	68%	50%	140%	63%	50%	140%
Indeno(1,2,3-cd)pyrene	1	8593255	< 0.01	< 0.01	NA	< 0.01	107%	50%	140%	73%	50%	140%	88%	50%	140%
Naphthalene	1	8593255	< 0.01	< 0.01	NA	< 0.01	104%	50%	140%	66%	50%	140%	68%	50%	140%
Perylene	1	8593255	< 0.01	< 0.01	NA	< 0.01	116%	50%	140%	75%	50%	140%	89%	50%	140%
Phenanthrene	1	8593255	< 0.01	< 0.01	NA	< 0.01	101%	50%	140%	61%	50%	140%	64%	50%	140%
Pyrene	1	8593255	< 0.01	< 0.01	NA	< 0.01	91%	50%	140%	59%	50%	140%	65%	50%	140%
Quinoline	1	8593255	< 0.01	< 0.01	NA	< 0.01	91%	50%	140%	70%	50%	140%	61%	50%	140%
Comments: If Matrix spike value If RPD value is NA, the results of O. Reg. 153(511) - PHCs F1 - F	the duplicates							ribution	l.						

Э.	Reg.	153(511)	- PHCs F1	- F4 (Water)
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Benzene	8606660		< 0.20	< 0.20	NA	< 0.20	85%	50%	140%	92%	60%	130%	94%	50%	140%
Toluene	8606660		< 0.20	< 0.20	NA	< 0.20	87%	50%	140%	97%	60%	130%	97%	50%	140%
Ethylbenzene	8606660		< 0.10	< 0.10	NA	< 0.10	86%	50%	140%	96%	60%	130%	96%	50%	140%
Xylene Mixture	8606660		< 0.20	< 0.20	NA	< 0.20	89%	50%	140%	109%	60%	130%	106%	50%	140%
F1 (C6 to C10)	8606660		< 25	< 25	NA	< 25	82%	60%	140%	86%	60%	140%	90%	60%	140%
F2 (C10 to C16)		TW	< 100	< 100	NA	< 100	104%	60%	140%	63%	60%	140%	60%	60%	140%
F3 (C16 to C34)		TW	< 100	< 100	NA	< 100	99%	60%	140%	91%	60%	140%	65%	60%	140%
F4 (C34 to C50)		TW	< 100	< 100	NA	< 100	98%	60%	140%	88%	60%	140%	72%	60%	140%
Oil and Grease (+Total) - water															
Oil and Grease (animal/vegetable)		TW	< 0.5	< 0.5	NA	< 0.5	NA	70%	130%	111%	70%	130%	108%	70%	130%
Oil and Grease (mineral) in water		TW	< 0.5	< 0.5	NA	< 0.5	NA	70%	130%	77%	70%	130%	74%	70%	130%
Oil and Grease (Total) in water		TW	< 0.5	< 0.5	NA	< 0.5	NA	70%	130%	94%	70%	130%	91%	70%	130%

AGAT QUALITY ASSURANCE REPORT (V1)

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Quality Assurance

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

PROJECT: Alert Eureka

SAMPLING SITE:

AGAT WORK ORDER: 17T243248

ATTENTION TO: Cameron Chadwick

SAMPLED BY:Kelsey Davidson

	T	race	Orga	anics	Ana	lysis	(Cor	ntinu	ıed	l)					
RPT Date: Aug 09, 2017	E		REFEREN	NCE MATERIAL		METHOD BLANK SPIKE			MAT	KE					
PARAMETER	PAMETED Batch Sample Dup #4 Dup #2 PPD Blank		Method Blank	Measured	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits				
PARAMETER	ld ld	συρ #1 συρ #2 ΚΕΒ				Value	Lower	Upper	,	Lower	Upper	,	Lower	Upper	

Comments: Tap water analysis has been performed as QC sample testing for duplicate and matrix spike due to insufficient sample volume. When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

Certified By:

NPoprukolof



AGAT WORK ORDER: 17T243248

Quality Assurance

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

PROJECT: Alert Eureka ATTENTION TO: Cameron Chadwick SAMPLING SITE: SAMPLED BY:Kelsey Davidson

Water Analysis															
RPT Date: Aug 09, 2017							NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE	
Potob	Sample	Dun #1	Dun #2		Method Blank	Measured Value	Acceptable Limits			Acceptable Limits		Pacayary		ptable nits	
Batch	ld	Dup #1	Dup #2	KFD			Lower	Upper	Recovery	Lower	Upper	Recovery	Lower	Upper	
8601872		<5	<5	NA	< 5	103%	75%	125%							
8604909		1270	1270	0.0%	< 2	103%	80%	120%							
8604909		7.78	7.82	0.5%	NA	100%	90%	110%							
8603875 8	603875	70	73	4.2%	< 10	100%	80%	120%							
8604909		67	68	1.5%	< 5	98%	80%	120%							
8601062 8	601062	0.20	0.22	NA	< 0.10	90%	90%	110%	106%	90%	110%	106%	80%	120%	
8601062 8	601062	0.05	0.05	NA	< 0.05	98%	90%	110%	103%	90%	110%	102%	80%	120%	
8601062 8	601062	< 0.05	< 0.05	NA	< 0.05	NA	90%	110%	100%	90%	110%	102%	80%	120%	
8601062 8	601062	3.60	3.60	0.0%	< 0.10	99%	90%	110%	103%	90%	110%	100%	80%	120%	
8606324		2.69	2.70	0.4%	< 0.02	90%	90%	110%	102%	90%	110%	96%	80%	120%	
8603875 8	603875	<5	<5	NA	< 5	99%	80%	120%	93%	90%	110%	93%	70%	130%	
8602937		<1	<1	NA	< 1	98%	90%	110%	103%	90%	110%	101%	80%	120%	
8604909		86.8	86.8	0.0%	< 0.05	101%	90%	110%	101%	90%	110%	100%	70%	130%	
8604909		32.3	32.2	0.3%	< 0.05	100%	90%	110%	99%	90%	110%	101%	70%	130%	
8604909		110	109	0.9%	< 0.05	102%	90%	110%	102%	90%	110%	104%	70%	130%	
8604909		9.46	9.50	0.4%	< 0.05	99%	90%	110%	99%	90%	110%	104%	70%	130%	
8605159		< 0.015	< 0.015	NA	< 0.015	100%	90%	110%	101%	80%	120%	99%	70%	130%	
8605159		<0.010	<0.010	NA	< 0.010	97%	90%	110%	106%	80%	120%	103%	70%	130%	
8605159		< 0.015	< 0.015	NA	< 0.015	98%	90%	110%	102%	80%	120%	95%	70%	130%	
8605159		<0.015	<0.015	NA	< 0.015	102%	90%	110%	109%	80%	120%	101%	70%	130%	
8605159		0.773	0.838	8.1%	< 0.050	105%	90%	110%	113%	80%	120%	111%	70%	130%	
8605159		<0.5	<0.5	NA	< 0.5	95%	90%	110%	99%	80%	120%	92%	70%	130%	
8602554		<0.0002	<0.0002	NA	< 0.0002	99%	90%	110%	101%	90%	110%	99%	80%	120%	
8605159		0.025	0.026	NA	< 0.015	106%	90%	110%	111%	80%	120%	103%	70%	130%	
	8604909 8604909 8603875 8 8604909 8601062 8 8601062 8 8601062 8 8601062 8 860324 8603875 8 8602937 8604909 8604909 8604909 8604909 8605159 8605159 8605159 8605159 8605159 8605159	8601872 8604909 8604909 8603875 8603875 8604909 8601062 8601062 8601062 8601062 8601062 8601062 8601062 8601062 860324 8603875 8603875 8602937 8604909 8604909 8604909 8605159 8605159 8605159 8605159 8605159 8605159	Batch Sample Id Dup #1 8601872 <5	Batch Sample Id Dup #1 Dup #2 8601872 <5	Batch Sample Id Dup #1 Dup #2 RPD 8601872 <5	Batch Sample Id Dup #1 Dup #2 RPD Method Blank	Batch Sample Id Dup #1 Dup #2 RPD Method Blank Measured Value 8601872 <5	Batch Sample Id Dup #1 Dup #2 RPD Hethod Blank Measured Clir Lower	Batch Sample Id Dup #1 Dup #2 RPD Method Blank Measured Value Limits Lower Upper	Batch Sample Id Dup #1 Dup #2 RPD Method Blank Measured Value Limits Lower Upper Recovery	Batch Sample Id Dup #1 Dup #2 RPD Method Blank Measured Value Limits Lower Upper Lower Lower Upper Lower Upper Lower Upper Lower Upper Upper	Batch Sample Id Dup #1 Dup #2 RPD Method Blank Measured Value Limits Lower Upper Upper		Batch Sample Id Dup #1 Dup #2 RPD Method Blank Measure Id Measure Id Name Limits Lower Upper Limits Lower Upper Recovery Recovery	

Comments: NA signifies Not Applicable.

Duplicate Qualifier: As the measured result approaches the RL (Reporting Limit), the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.





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Method Summary

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

PROJECT: Alert Eureka

AGAT WORK ORDER: 17T243248

ATTENTION TO: Cameron Chadwick

SAMPLING SITE:

SAMPLED BY:Kelsey Davidson

DADAMETED	AGAT S.O.P	I ITEDATIDE DECEDENCE	ANALYTICAL TECHNIQUE					
PARAMETER	AGAT S.U.P	LITERATURE REFERENCE	ANALTHCAL TECHNIQUE					
Microbiology Analysis	MIC 02 7000	CM 0000 D	Marshuana Filtustian					
Fecal Coliform	MIC-93-7000	SM 9222 D	Membrane Filtration					
Trace Organics Analysis	VOL 04 5040	NOT BUG FOAGA	(D0 T) 0 0 (EID					
Benzene	VOL-91-5010	MOE PHC-E3421	(P&T)GC/FID					
Toluene	VOL-91-5010	MOE PHC-E3421	(P&T)GC/FID					
Ethylbenzene	VOL-91-5010	MOE PHC-E3421	(P&T)GC/FID					
Xylene Mixture	VOL-91-5010	MOE PHC-E3421	(P&T)GC/FID					
F1 (C6 to C10)	VOL-91-5010	MOE PHC-E3421	(P&T)GC/FID					
F1 (C6 to C10) minus BTEX	VOL-91-5010	MOE PHC-E3421	(P&T)GC/FID					
F2 (C10 to C16)	VOL-91-5010	MOE PHC-E3421	GC/FID					
F3 (C16 to C34)	VOL-91-5010	MOE PHC-E3421	GC/FID					
F4 (C34 to C50)	VOL-91-5010	MOE PHC-E3421	GC/FID					
Gravimetric Heavy Hydrocarbons	VOL-91-5010	MOE PHC-E3421	BALANCE					
Terphenyl	VOL-91-5010		GC/FID					
Oil and Grease (animal/vegetable)	VOL-91- 5011	SM 5520 & EPA SW846 3510C & EPA 1664	GRAVIMETRIC					
Oil and Grease (mineral) in water	VOL-91- 5011	SM 5520 & EPA SW846 3510C & EPA 1664	GRAVIMETRIC					
Oil and Grease (Total) in water	VOL-91- 5011	SM 5520 & EPA SW846 3510C & EPA 1664	GRAVIMETRIC					
1-Methylnaphthalene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
2-Methylnaphthalene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Acenaphthene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Acenaphthylene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Acridine	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Anthracene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Benzo(a)anthracene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Benzo(a)pyrene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Benzo(b)fluoranthene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Benzo(e)pyrene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Benzo(ghi)perylene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Benzo(k)fluoranthene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Chrysene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Dibenzo(a,h)anthracene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Fluoranthene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Fluorene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Indeno(1,2,3-cd)pyrene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Naphthalene								
-	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Perylene	ORG-120-5104 ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Phenanthrene		EPA SW846/3510/8270C	GC/MS					
Pyrene	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Quinoline	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Nitrobenzene-d5	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
2-Fluorobiphenyl	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					
Terphenyl-d14	ORG-120-5104	EPA SW846/3510/8270C	GC/MS					



Method Summary

CLIENT NAME: DEFENCE CONSTRUCTION CANADA

PROJECT: Alert Eureka

AGAT WORK ORDER: 17T243248

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE								
Water Analysis	-	-									
BOD (5)	INOR-93-6006	SM 5210 B	DO METER								
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE								
pH	INOR-93-6000	SM 4500-H+ B;SM 2310 B	PC TITRATE								
Total Suspended Solids	INOR-93-6028	SM 2540 D	BALANCE								
Total Hardness (as CaCO3)	MET-93-6105	EPA SW-846 6010C & 200.7 & SM 2340 B	ICP/OES								
Alkalinity (as CaCO3)	INOR-93-6000	SM 2320 B	PC TITRATE								
Chloride	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH								
Nitrate as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH								
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH								
Sulphate	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH								
Ammonia as N	INOR-93-6059	QuikChem 10-107-06-1-J & SM 4500 NH3-F	LACHAT FIA								
Chemical Oxygen Demand	INOR-93-6042	SM 5220 D	SPECTROPHOTOMETER								
Phenols	INOR-93-6050	MOE ROPHEN-E 3179 & SM 5530 D	TECHNICON AUTO ANALYZER								
Calcium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES								
Magnesium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES								
Sodium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES								
Potassium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES								
Total Arsenic	MET-93-6103	EPA SW-846 3010A & 6020A	ICP-MS								
Total Cadmium	MET-93-6103	EPA SW-846 3010A & 6020A	ICP-MS								
Total Chromium	MET-93-6103	EPA SW-846 3010A & 6020A	ICP-MS								
Total Copper	MET-93-6103	EPA SW-846 3010A & 6020A	ICP-MS								
Total Iron	MET-93-6103	EPA SW-846 3010A & 6020A	ICP-MS								
Total Lead	MET-93-6003	EPA SW-846 3010A & 6020A	ICP/MS								
Total Mercury	MET-93-6100	EPA SW-846 7470 & 245.1	CVAAS								
Total Nickel	MET-93-6103	EPA SW-846 3010A & 6020A	ICP-MS								

Short Holding Time Laboratories Make Phis

5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2

Laboratory Use Only

Ph: 905.712.5100 Fax: 905.712.5122

Chain of Custody Record If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)										er Quai ral Temi	ntity: peratures	\	7) [} _	
Report Information: Company:				R	Regulatory Requirements: No Regulatory Requirement (Please check all applicable boxes)				Custody Seal Intact: Yes No Notes:								
Phone: Reports to be sent to: 1. Email:					Regulation 153/04 Sewer Table Indicate One Sewer Ind/Com Storm Res/Park Storm Agriculture Il Texture (Check One) Region	Regulation CCME Prov. Water Objectives Other	Turnaround Time (TAT) Required: Regular TAT							is			
Email: Letter de de la constant				ä	☐Coarse Indicate One ☐Fine ☐MISA Indicate One.				Days Days Day OR Date Required (Rush Surcharges May App								
Project Information: Project: ALERT EUREKA Site Location: Sampled By: AGAT Quote #: Please note: If quotation number is not provided, client will be billed full price for analysis. Invoice Information: Company: Contact: Address: Email:			F	Is this submission for a Record of Site Condition? Yes No	Report Guidelin Certificate of An	Please provide prior notification for rush TAT *TAT is exclusive of weekends and statutory holidays For 'Same Day' analysis, please contact your AGAT CPM											
			В		s, Hg, CrVJ	L Hydrides) (Incl. Hydrides) (Incl. Hydrides)	TKN	MHT				□ B(a)P □PCBs		COD	1 Kalinite	7	
			0 P S SI	Paint Soil D Sediment	Field Filtered - Metals, Hg, CrVI	and InorganicsNas as □ 153 metals (exceeded to 153 metals 153 metal	an As Carlo Metals	OC BTEX	Fractions 1 to 4	PAHS	e Pesticides	□ vocs □ ABNs	sione	TSS, BODS	Loli Forms	- Anock	
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Special Instructions	Y/N	V	Full Metals Sc Regulation/Cu	Volatiles:	CCME	PAHS	Organo	TCLP: ☐ M&I Sewer Use	X Ph	O.E.	Y X	X
ALT 4	106/Fc 8	f 11115am	17	SW	Short Holding Tir	ome S											
					ex X 2												

Date TIII