

# Appendix K - Duplicate Samples

## Fish Samples

Sample ID	Year	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Te	Tl	Sn	Ti	U	V	Zn	Zr
VIC3-GR-T-3A	2005	9	<0.1	0.3	0.5	<0.02	<2	0.08	2140	0.4	<0.1	2.6	53	<0.1	1540	2.9	0.132	<0.1	<0.1	12000	21800	1.1	72	0.01	3080	3.44	<0.1	<0.02	<0.1	4.8	<0.04	<0.5	27.4	<3
VIC3-GR-T-3B		2.1	<0.1	0.2	0.2	<0.02	<2	<0.02	1530	0.2	<0.1	2.8	36	<0.1	1490	1.4	0.118	<0.1	<0.1	11400	21900	1.5	64	<0.01	3190	1.78	<0.1	<0.02	<0.1	4.5	<0.04	<0.5	24.5	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.01	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		-124.3	NC	PASS	-85.7	NC	NC	NC	-33.2	-66.7	NC	7.4	-38.2	NC	-3.3	-69.8	-11.2	NC	NC	-5.1	0.5	30.8	PASS	NC	3.5	-63.6	NC	NC	NC	PASS	NC	NC	-11.2	NC

## Lichen Samples

Sample ID	Year	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Te	Tl	Sn	Ti	U	V	Zn	Zr	
CLMI-DUST2-1A	2005	193	0.2	4.9	11.1	<0.02	<2	0.25	1290	0.3	0.3	1.2	431	2.1	423	155	<0.01	<0.1	0.7	542	1840	<0.2	71	0.15	8	3.64	<0.1	<0.02	<0.1	7.2	<0.04	0.9	25.3	<3	
CLMI-DUST2-1B		207	0.2	4.9	10.8	<0.02	<2	0.23	1140	0.3	0.2	1.2	447	2	397	136	<0.01	<0.1	0.7	546	1780	<0.2	62	0.16	8	2.87	<0.1	<0.02	<0.1	8.3	<0.04	1	23	<3	
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3	
RPD		7.0	PASS	PASS	-2.7	NC	NC	PASS	-12.3	PASS	PASS	PASS	3.6	PASS	-6.3	-13.1	NC	NC	PASS	0.7	-3.3	NC	PASS	6.5	PASS	-23.7	NC	NC	NC	NC	14.2	NC	PASS	-9.5	NC

CLMI-K3-2A	2005	323	1.9	16.9	8.3	<0.02	<2	0.41	2060	0.2	0.2	3.2	850	15	391	62	<0.01	<0.1	0.4	498	1480	<0.2	77	0.84	12	4.39	<0.1	<0.02	<0.1	12.8	<0.04	1.5	38	<3
CLMI-K3-2B		312	1.9	17.1	9.1	<0.02	<2	0.44	2020	0.3	0.2	3.1	818	15	406	78.9	<0.01	<0.1	0.4	485	1580	<0.2	78	0.82	12	4.67	<0.1	<0.02	<0.1	12.4	<0.04	1.5	38.7	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		-3.5	PASS	1.2	9.2	NC	NC	7.1	-2.0	PASS	PASS	PASS	-3.8	PASS	3.8	24.0	NC	NC	PASS	-0.6	6.5	NC	PASS	-2.4	PASS	6.2	NC	NC	NC	-3.2	NC	PASS	1.8	NC

## Plant Samples

Sample ID	Year	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Te	Tl	Sn	Ti	U	V	Zn	Zr
EMNI-D5-2A	2005	3.9	<0.1	<0.1	5.1	<0.02	12	0.07	905	<0.1	<0.1	3.5	13	<0.1	443	68.5	<0.01	<0.1	<0.1	776	10000	<0.2	80	<0.01	14	0.81	<0.1	<0.02	<0.1	0.7	<0.04	<0.5	7.3	<3
EMNI-D5-2B		5.3	<0.1	<0.1	6.4	<0.02	12	<0.02	898	0.3	<0.1	4.5	13	<0.1	441	76.5	<0.01	<0.1	<0.1	759	9450	<0.2	86	<0.01	18	1.11	<0.1	<0.02	<0.1	0.6	<0.04	<0.5	9.3	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		30.4	NC	NC	22.6	NC	PASS	NC	-0.8	NC	NC	25.0	PASS	NC	-0.5	11.0	NC	NC	NC	-2.2	-5.7	NC	7.2	NC	25.0	31.3	NC	NC	NC	PASS	NC	NC	24.1	NC

LELA-CP2-1A-a	2005	24.6	<0.1	<0.1	54.2	<0.02	13	<0.02	5090	<0.1	<0.1	3	40	<0.1	1200	923	<0.01	<0.1	0.2	1320	4080	<0.2	105	<0.01	2	8.05	<0.1	0.04	<0.1	0.9	<0.04	<0.5	27.5	<3
LELA-CP2-1A-b		27.6	<0.1	<0.1	57.6	<0.02	16	0.04	6690	<0.1	<0.1	2.9	55	<0.1	1220	1320	<0.01	<0.1	0.2	1450	4790	<0.2	114	<0.01	1	8.42	<0.1	0.05	<0.1	1.4	<0.04	<0.5	26.8	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		11.5	NC	NC	6.1	NC	20.7	NC	27.2	NC	NC	PASS	31.6	NC	1.7	35.4	NC	NC	PASS	9.4	16.0	NC	8.2	NC	PASS	4.5	NC	22.2	NC	43.5	NC	NC	-2.6	NC

LELA-DOMER7-1A	2005	16.7	0.1	1.7	37.8	<0.02	40	0.05	8970	<0.1	<0.1	3.3	122	0.7	2360	107	<0.01	<0.1	0.3	1460	4970	<0.2	82	0.02	6	13	<0.1	0.12	<0.1	1.8	<0.04	<0.5	30.2	<3
LELA-DOMER7-1B		16.1	0.1	1.7	33.6	<0.02	34	<0.02	7290	0.1	<0.1	3.2	106	0.9	2040	83.1	<0.01	<0.1	0.2	1310	4400	<0.2	77	0.01	7	12.6	<0.1	0.11	<0.1	1.4	<0.04	<0.5	35.1	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		-3.7	PASS	PASS	-11.8	NC	-16.2	NC	-20.7	NC	NC	PASS	-14.0	25.0	-14.5	-25.1	NC	NC	PASS	-10.8	-12.2	NC	-6.3	-66.7	PASS	-3.1	NC	PASS	NC	-25.0	NC	NC	15.0	NC

PIGL-P1-1A	2005	71.7	0.3	3.7	8.9	<0.02	<2	0.11	583	0.3	<0.1	1	231	4	39.1	14.8	<0.01	<0.1	<0.1	29.9	123	<0.2	207	0.06	4	2.45	<0.1	<0.02	<0.1	4.1	<0.04	1.2	8.8	<3
PIGL-P1-1B		40.9	0.2	1.8	15.7	<0.02	<2	0.09	1070	<0.1	<0.1	0.8	130	2.1	34	14	<0.01	<0.1	<0.1	28.5	192	<0.2	145	0.03	2	3.85	<0.1	<0.02	<0.1	2	<0.04	0.8	10.6	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		-54.7	PASS	-69.1	55.3	NC	NC	PASS	58.9	NC	NC	-22.2	-56.0	-62.3	-14.0	-5.6	NC	NC	NC	-4.8	43.8	NC	-35.2	-66.7	-66.7	44.4	NC	NC	NC	-68.9	NC	PASS	18.6	NC

ROAC-EM3-1A	2005	3.5	<0.1	<0.1	48.4	<0.02	6	0.07	10200	<0.1	<0.1	2.5	37	<0.1	2360	365	<0.01	<0.1	0.7	2320	13500	<0.2	123	<0.01	<1	51.2	<0.1	<0.02	<0.1	1.1	<0.04	<0.5	10.7	<3
ROAC-EM3-1B		3.5	<0.1	<0.1	46.3	<0.02	7	0.03	12000	<0.1	<0.1	3.2	48	<0.1	2530	403	<0.01	<0.1	0.9	2760	13300	<0.2	104	<0.01	5	53.3	<0.1	<0.02	<0.1	1.4	<0.04	<0.5	12.1	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		PASS	NC	NC	-4.4	NC	PASS	-80.0	16.2	NC	NC	24.6	25.9	NC	7.0	9.9	NC	NC	25.0	17.3	-1.5	NC	-16.7	NC	NC	4.0	NC	NC	NC	PASS	NC	NC	12.3	NC

RPD = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. RPD calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. RPD calculation is not defined for levels of less than the detection limit.

Sample ID	Year	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Te	Tl	Sn	Ti	U	V	Zn	Zr
SASP-H1-1A	2005	21.1	<0.1	1.8	65	<0.02	7	3.55	22700	<0.1	0.8	3.4	117	0.6	3900	423	<0.01	<0.1	1.4	973	7670	<0.2	106	0.01	3	79.7	<0.1	<0.02	<0.1	1.3	<0.04	<0.5	139	<3
SASP-H1-1B		21.4	<0.1	1.8	77.9	<0.02	7	3.87	21200	<0.1	0.9	4.3	112	0.6	3710	426	<0.01	0.1	1.2	1130	8380	<0.2	75	0.02	3	88.1	<0.1	<0.02	<0.1	1.5	<0.04	<0.5	204	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		PASS	NC	PASS	18.1	NC	PASS	8.6	-6.8	NC	PASS	23.4	PASS	PASS	-5.0	0.7	NC	NC	-15.4	14.9	8.8	NC	-34.3	66.7	PASS	10.0	NC	NC	NC	PASS	NC	NC	37.9	NC
VAVI-CP3-1	2005	18.2	<0.1	<0.1	17.4	<0.02	9	<0.02	1440	<0.1	<0.1	4.8	16	<0.1	701	239	<0.01	<0.1	0.4	1370	9390	<0.2	123	<0.01	2	3.89	<0.1	<0.02	<0.1	0.7	<0.04	<0.5	13.6	<3
VAVI-CP3-1B		17.4	<0.1	<0.1	10.5	<0.02	12	0.04	1920	<0.1	<0.1	5.7	23	<0.1	642	379	<0.01	<0.1	0.3	1390	8510	<0.2	105	<0.01	2	2	<0.1	<0.02	<0.1	1	<0.04	<0.5	14.8	<3
Detection Limit		0.5	0.1	0.1	0.1	0.02	2	0.02	1	0.1	0.1	0.1	5	0.1	0.5	0.1	0.01	0.1	0.1	0.5	1	0.2	10	0.01	1	0.05	0.1	0.02	0.1	0.3	0.04	0.5	0.5	3
RPD		-4.5	NC	NC	-49.5	NC	28.6	NC	28.6	NC	NC	17.1	35.9	NC	-8.8	45.3	NC	NC	PASS	1.4	-9.8	NC	-15.8	NC	PASS	-64.2	NC	NC	NC	PASS	NC	NC	8.5	NC

Sediment Samples

Sample ID; Laboratory	Year	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Sn	V	Zn	Al	B	Ca	Fe	Mg	Mn	P	K	Na	Sr	Ti	Zr
D5-1; CanTest	2005	<10	206	43	<1	1.7	13	4	7	25	<0.01	<4	6	<0.2	<2	<5	38	54	5060	<1	4110	15200	2210	159	803	396	165	16	262	1
D5-1; NorWest		1.5	186	50.4	0.19	<0.05	15.4	3.3	7.03	22.4	NA	0.1	8	0.96	<0.15	1	46.4	65.5	6150	NA	4600	19900	2480	195	724	593	208	23.6	172	2
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		NC	-10.2	15.8	NC	NC	16.9	PASS	PASS	PASS	NC	NC	PASS	NC	NC	NC	19.9	19.2	19.4	NC	11.3	26.8	11.5	20.3	-10.3	39.8	23.1	38.4	-41.5	PASS

D4-1; CanTest	2005	<10	38	55	<1	0.5	13	5	16	5	<0.01	<4	7	<0.2	<2	<5	30	46	6310	<1	5630	12800	2770	228	715	494	201	21	306	1
D4-1; NorWest		1.1	34.2	48.7	0.23	0.7	14	3.6	16.6	8.1	NA	0.2	9.2	0.84	<0.15	0.81	37.2	51.3	7500	NA	5670	16400	2880	276	568	786	285	31.4	343	2.3
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		NC	PASS	-12.2	NC	PASS	PASS	-32.6	PASS	PASS	NC	NC	27.2	NC	NC	NC	21.4	10.9	17.2	NC	0.7	24.7	3.9	19.0	-22.9	45.6	34.6	39.7	11.4	78.8

D3-1; CanTest	2005	<10	25	45	<1	<0.5	12	4	6	6	<0.01	<4	7	<0.2	<2	<5	28	44	5790	<1	6600	11500	2770	302	641	456	170	22	295	1
D3-1; NorWest		0.62	12.7	48	0.2	0.1	11.9	3.1	5.58	5.02	NA	0.2	8.2	0.67	<0.15	0.5	27.9	41.9	6990	NA	6490	12200	2960	354	491	713	268	31.9	296	2.2
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		NC	-65.3	6.5	NC	NC	PASS	PASS	PASS	PASS	NC	NC	PASS	NC	NC	NC	PASS	-4.9	18.8	NC	-1.7	5.9	6.6	15.9	-26.5	44.0	44.7	36.7	PASS	75.0

D2-1; CanTest	2005	<10	13	47	<1	<0.5	12	3	11	<5	<0.01	<4	6	<0.2	<2	<5	29	33	5450	<1	3350	11200	2290	95	721	412	138	15	293	1
D2-1; NorWest		<0.5	11	50.1	0.19	13.2	13.2	2.5	9.23	4.5	NA	0.2	7.4	0.4	<0.15	0.8	33.2	37.1	6680	NA	3390	13400	2570	107	504	686	223	22.4	292	2.1
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		NC	PASS	6.4	NC	NC	PASS	PASS	-17.5	NC	NC	NC	PASS	NC	NC	NC	13.5	11.7	20.3	NC	1.2	17.9	11.5	11.9	-35.4	49.9	47.1	39.6	PASS	71.0

D1-1; CanTest	2005	49	1180	88	<1	13.1	11	4	40	295	0.05	<4	6	0.2	7	<5	21	662	6370	<1	4450	14500	2740	305	683	556	127	18	273	1
D1-1; NorWest		57	1080	94.1	0.2	4.8	11.7	4	43.6	324	NA	0.3	7.7	0.61	<0.15	1.4	26.4	744	7840	NA	4480	18200	3210	385	556	930	205	26.5	248	1.9
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		PASS	-8.8	6.7	NC	-92.7	PASS	PASS	8.6	9.4	NC	NC	PASS	101.2	NC	NC	22.8	11.7	20.7	NC	0.7	22.6	15.8	23.2	-20.5	50.3	47.0	38.2	-9.6	PASS

V5-1; CanTest	2005	<10	<10	70	<1	<0.5	9	3	11	<5	<0.01	<4	4	<0.2	<2	<5	23	30	4980	<1	3030	9580	1900	139	734	304	121	15	238	<1
V5-1; NorWest		<0.5	5	71.9	0.19	0.1	10.3	2.6	10.6	6.04	NA	0.3	6	0.53	<0.15	0.61	26.1	35	6550	NA	3400	11400	2290	154	577	546	196	25.6	253	1.9
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		NC	NC	2.7	NC	NC	PASS	PASS	PASS	NC	NC	NC	PASS	NC	NC	NC	12.6	15.4	27.2	NC	11.5	17.3	18.6	10.2	-24.0	56.9	47.3	52.2	6.1	NC

V4-1; CanTest	2005	<10	<10	59	<1	<0.5	8	3	4	<5	<0.01	<4	4	<0.2	<2	<5	25	26	4070	<1	2650	10000	1620	172	614	269	107	13	233	<1
V4-1; NorWest		<0.5	7.69	57.5	0.15	<0.5	7.67	2.5	4.9	5.17	NA	0.3	4.7	0.6	<0.15	4.8	22.6	29.4	4090	NA	2070	9960	1490	233	334	430	122	15.8	181	1.8
Detection Limit		10	10	1	1	0.5	2	1	1	5	0.01	4	2	0.2	2	5	1	1	10	1	1	2	0.1	1	20	10	5	1	1	1
RPD		NC	NC	-2.6	NC	NC	PASS	PASS	PASS	NC	NC	NC	PASS	NC	NC	NC	-10.1	12.3	0.5	NC	-24.6	-0.4	-8.4	30.1	-59.1	46.1	13.1	19.4	-25.1	NC

RPD = Relative Percent Difference

PASS = Duplicate sample results were in the range of one to five times the detection limit. RPD calculation is not applicable in this range. Acceptance criteria is a maximum difference between the duplicates equivalent to the value of the detection limit.

NC = Not Calculated. Duplicate sample results were less than the detection limit. RPD calculation is not defined for levels of less than the detection limit.