

Analytical Results Report TOC

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1. ECDMS Analytical Results Report 7/24/2004

Catalog Number	Purchase Order Number	Lab ID	Catalog Submitter	ECDMS User ID
2020123	94420-04-Y372	TERL	Lusk, Joel - Albuquerque, NM	r2alfo

Catalog Title	Navajo Nation Lake Fish & Water Quality
Lab Name:	Trace Element Research Laboratory
Regional Study ID:	NavFish2004
Regional Study Title:	Navajo Nation Lake Fish and Water Quality Monitoring Project

Notes, Symbols and Abbreviations Used	
Based on the report options selected the report should be printed in landscape mode	
Notes, Symbols and Abbreviations Used	
The following may appear before a reported result (e.g. < 1234).	
< - Less than symbol indicates that the actual result is less than the reported detection limit.	
> - Greater than symbol indicates that the actual result is greater than the reported result.	
All results are reported as 3 significant digits.	
All results are reported as parts per million (ppm), or percent, unless otherwise noted.	

1. Integrity Report

Lab Receipt Date	04/06/2004	Lab Approval Date	04/06/2004
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Catalog Problems
No problems reported
Problem Resolution

2. Bulk Data

Sample Number	Sample Matrix	Sample Weight (grams)	Percent Moisture
T3042029	Fillets without Skin	310	77.3
T3042030	Fillets without Skin	206	77.6
T3042031	Fillets without Skin	276	77.9
T3042032	Fillets without Skin	158	78.1
T3042033	Fillets without Skin	118	79.5
T3042034	Fillets without Skin	134	78.4
T3042035	Fillets without Skin	59.75	77.3
T3042036	Fillets without Skin	57.045	77.2
T3042037	Fillets without Skin	214	82.5
T3042038	Fillets without Skin	220	81.6
T3042039	Fillets without Skin	314	81.3
T3042040	Fillets without Skin	306	81.2
T3042041	Fillets without Skin	308	81.4
T3042042	Fillets without Skin	202	82.9
T3042043	Fillets without Skin	422	80.0
T3042044	Fillets without Skin	238	83.3
T3042045	Offal	2652	73.5
T3042046	Offal	1634	72.1
T3042047	Offal	2793	74.7
T3042048	Offal	1166	76.0
T3042049	Offal	726	77.7
T3042050	Offal	764	75.6
T3042051	Offal	382	73.9
T3042052	Offal	320	74.2
T3042053	Offal	4100	80.0
T3042054	Offal	4280	72.9
T3042055	Offal	4860	77.5
T3042056	Offal	3996	76.0
T3042057	Offal	2904	70.7
T3042058	Offal	1632	76.8
T3042059	Offal	3044	71.6

Sample Number	Sample Matrix	Sample Weight (grams)	Percent Moisture
T3042060	Offal	2114	75.1
T3042001	Water	500	
T3042002	Water	500	
T3042003	Water	500	
T3042004	Water	500	
T3042005	Water	500	
T3042006	Water	500	
T3042007	Water	500	
T3042008	Water	500	
T3042009	Water	500	
T3042010	Water	500	
T3042011	Water	500	
T3042012	Water	500	
T3042013	Water	500	
T3042014	Water	500	
T3042015	Water	500	
T3042016	Water	500	
T3042017	Water	500	
T3042018	Water	500	
T3042019	Water	500	
T3042020	Water	500	
T3042021	Water	500	
T3042022	Water	500	
T3042023	Water	500	
T3042024	Water	500	
T3042025	Water	500	
T3042026	Water	500	
T3042027	Water	500	
T3042028	Water	500	

4. Contaminant Concentrations

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
Silver						
	T3042017	Water			< 0.0100	0.0100
	T3042018	Water			< 0.0100	0.0100
	T3042019	Water			< 0.0100	0.0100
	T3042020	Water			< 0.0100	0.0100
	T3042021	Water			< 0.0100	0.0100
	T3042022	Water			< 0.0100	0.0100
	T3042023	Water			< 0.0100	0.0100
	T3042024	Water			< 0.0100	0.0100
	T3042025	Water			< 0.0100	0.0100
	T3042026	Water			< 0.0100	0.0100
	T3042027	Water			< 0.0100	0.0100
	T3042028	Water			< 0.0100	0.0100
Aluminum						
	T3042029	Fillets without Skin	< 4.71	4.71	< 1.07	1.07
	T3042030	Fillets without Skin	< 4.97	4.97	< 1.11	1.11
	T3042031	Fillets without Skin	< 4.56	4.56	< 1.01	1.01
	T3042032	Fillets without Skin	56.7	4.89	12.4	1.07
	T3042033	Fillets without Skin	< 4.85	4.85	< 0.994	0.994
	T3042034	Fillets without Skin	< 4.68	4.68	< 1.01	1.01
	T3042035	Fillets without Skin	10.5	4.80	2.38	1.09
	T3042036	Fillets without Skin	< 4.80	4.80	< 1.09	1.09

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
		Skin				
	T3042037	Fillets without Skin	< 4.68	4.68	< 0.819	0.819
	T3042038	Fillets without Skin	5.68	4.74	1.05	0.872
	T3042039	Fillets without Skin	21.7	4.83	4.06	0.903
	T3042040	Fillets without Skin	12.9	4.77	2.43	0.897
	T3042041	Fillets without Skin	7.90	4.84	1.47	0.900
	T3042042	Fillets without Skin	5.62	4.67	0.961	0.799
	T3042043	Fillets without Skin	< 4.83	4.83	< 0.966	0.966
	T3042044	Fillets without Skin	19.7	4.71	3.29	0.787
	T3042045	Offal	26.8	4.62	7.10	1.22
	T3042046	Offal	30.3	4.56	8.45	1.27
	T3042047	Offal	33.4	4.67	8.45	1.18
	T3042048	Offal	22.4	4.72	5.38	1.13
	T3042049	Offal	22.5	4.62	5.02	1.03
	T3042050	Offal	18.5	4.61	4.51	1.12
	T3042051	Offal	24.0	3.63	6.26	0.947
	T3042052	Offal	12.5	4.65	3.22	1.20
	T3042053	Offal	153	4.53	30.6	0.906
	T3042054	Offal	510.	3.27	138	0.886
	T3042055	Offal	65.1	4.09	14.6	0.920
	T3042056	Offal	70.1	4.57	16.8	1.10
	T3042057	Offal	17.4	3.10	5.10	0.908
	T3042058	Offal	49.7	4.13	11.5	0.958

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042059	Offal	31.0	3.36	8.80	0.954
	T3042060	Offal	49.7	3.77	12.4	0.939
	T3042017	Water			0.143	0.0500
	T3042018	Water			0.153	0.0500
	T3042019	Water			< 0.0500	0.0500
	T3042020	Water			0.127	0.0500
	T3042021	Water			0.236	0.0500
	T3042022	Water			< 0.0500	0.0500
	T3042023	Water			0.0800	0.0500
	T3042024	Water			0.166	0.0500
	T3042025	Water			< 0.0500	0.0500
	T3042026	Water			< 0.0500	0.0500
	T3042027	Water			< 0.0500	0.0500
	T3042028	Water			< 0.0500	0.0500

Arsenic

	T3042029	Fillets without Skin	0.363	0.188	0.0824	0.0427
	T3042030	Fillets without Skin	0.483	0.199	0.108	0.0446
	T3042031	Fillets without Skin	0.301	0.182	0.0665	0.0402
	T3042032	Fillets without Skin	0.667	0.196	0.146	0.0429
	T3042033	Fillets without Skin	1.01	0.194	0.207	0.0398
	T3042034	Fillets without Skin	0.830	0.187	0.179	0.0404
	T3042035	Fillets without Skin	1.03	0.192	0.234	0.0436
	T3042036	Fillets without Skin	0.511	0.192	0.117	0.0438

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042037	Fillets without Skin	0.295	0.187	0.0516	0.0327
	T3042038	Fillets without Skin	0.335	0.189	0.0616	0.0348
	T3042039	Fillets without Skin	0.279	0.193	0.0522	0.0361
	T3042040	Fillets without Skin	0.255	0.191	0.0479	0.0359
	T3042041	Fillets without Skin	< 0.194	0.194	< 0.0361	0.0361
	T3042042	Fillets without Skin	0.216	0.187	0.0369	0.0320
	T3042043	Fillets without Skin	0.408	0.193	0.0816	0.0386
	T3042044	Fillets without Skin	0.246	0.188	0.0411	0.0314
	T3042045	Offal	< 1.85	1.85	< 0.490	0.490
	T3042046	Offal	< 1.82	1.82	< 0.508	0.508
	T3042047	Offal	< 1.87	1.87	< 0.473	0.473
	T3042048	Offal	< 1.89	1.89	< 0.454	0.454
	T3042049	Offal	< 1.85	1.85	< 0.413	0.413
	T3042050	Offal	< 1.85	1.85	< 0.451	0.451
	T3042051	Offal	1.49	1.45	0.389	0.378
	T3042052	Offal	< 1.86	1.86	< 0.480	0.480
	T3042053	Offal	< 1.81	1.81	< 0.362	0.362
	T3042054	Offal	1.33	1.31	0.360	0.355
	T3042055	Offal	< 1.63	1.63	< 0.367	0.367
	T3042056	Offal	< 1.83	1.83	< 0.439	0.439
	T3042057	Offal	< 1.24	1.24	< 0.363	0.363
	T3042058	Offal	< 1.65	1.65	< 0.383	0.383
	T3042059	Offal	< 1.34	1.34	< 0.381	0.381

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042060	Offal	< 1.51	1.51	< 0.376	0.376
	T3042017	Water			0.00210	0.000200
	T3042018	Water			0.00310	0.000200
	T3042019	Water			< 0.000200	0.000200
	T3042020	Water			0.00560	0.000200
	T3042021	Water			0.00560	0.000200
	T3042022	Water			< 0.000200	0.000200
	T3042023	Water			0.00820	0.000200
	T3042024	Water			0.00830	0.000200
	T3042025	Water			< 0.000200	0.000200
	T3042026	Water			0.00630	0.000200
	T3042027	Water			0.00590	0.000200
	T3042028	Water			< 0.000200	0.000200

Boron						
	T3042029	Fillets without Skin	< 0.942	0.942	< 0.214	0.214
	T3042030	Fillets without Skin	< 0.994	0.994	< 0.223	0.223
	T3042031	Fillets without Skin	< 0.912	0.912	< 0.202	0.202
	T3042032	Fillets without Skin	< 0.978	0.978	< 0.214	0.214
	T3042033	Fillets without Skin	< 0.969	0.969	< 0.199	0.199
	T3042034	Fillets without Skin	< 0.937	0.937	< 0.202	0.202
	T3042035	Fillets without Skin	< 0.959	0.959	< 0.218	0.218
	T3042036	Fillets without Skin	< 0.959	0.959	< 0.219	0.219
	T3042037	Fillets without Skin	< 0.937	0.937	< 0.164	0.164

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042038	Fillets without Skin	< 0.947	0.947	< 0.174	0.174
	T3042039	Fillets without Skin	< 0.965	0.965	< 0.180	0.180
	T3042040	Fillets without Skin	< 0.955	0.955	< 0.180	0.180
	T3042041	Fillets without Skin	< 0.968	0.968	< 0.180	0.180
	T3042042	Fillets without Skin	1.01	0.933	0.173	0.160
	T3042043	Fillets without Skin	< 0.967	0.967	< 0.193	0.193
	T3042044	Fillets without Skin	< 0.942	0.942	< 0.157	0.157
	T3042045	Offal	< 0.924	0.924	< 0.245	0.245
	T3042046	Offal	< 0.912	0.912	< 0.254	0.254
	T3042047	Offal	< 0.935	0.935	< 0.237	0.237
	T3042048	Offal	< 0.945	0.945	< 0.227	0.227
	T3042049	Offal	< 0.924	0.924	< 0.206	0.206
	T3042050	Offal	< 0.923	0.923	< 0.225	0.225
	T3042051	Offal	< 0.726	0.726	< 0.189	0.189
	T3042052	Offal	< 0.929	0.929	< 0.240	0.240
	T3042053	Offal	3.77	0.905	0.754	0.181
	T3042054	Offal	5.76	0.654	1.56	0.177
	T3042055	Offal	1.30	0.817	0.292	0.184
	T3042056	Offal	0.946	0.915	0.227	0.220
	T3042057	Offal	0.971	0.620	0.285	0.182
	T3042058	Offal	1.95	0.826	0.452	0.192
	T3042059	Offal	< 0.672	0.672	< 0.191	0.191
	T3042060	Offal	1.47	0.754	0.366	0.188
	T3042017	Water			0.0100	0.0100

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042018	Water			0.0100	0.0100
	T3042019	Water			< 0.0100	0.0100
	T3042020	Water			0.0800	0.0100
	T3042021	Water			0.0800	0.0100
	T3042022	Water			< 0.0100	0.0100
	T3042023	Water			0.130	0.0100
	T3042024	Water			0.134	0.0100
	T3042025	Water			< 0.0100	0.0100
	T3042026	Water			0.634	0.0100
	T3042027	Water			0.652	0.0100
	T3042028	Water			< 0.0100	0.0100

Barium

	T3042029	Fillets without Skin	< 0.0940	0.0940	< 0.0213	0.0213
	T3042030	Fillets without Skin	< 0.0990	0.0990	< 0.0222	0.0222
	T3042031	Fillets without Skin	< 0.0910	0.0910	< 0.0201	0.0201
	T3042032	Fillets without Skin	0.176	0.0980	0.0385	0.0215
	T3042033	Fillets without Skin	0.301	0.0970	0.0617	0.0199
	T3042034	Fillets without Skin	0.806	0.0940	0.174	0.0203
	T3042035	Fillets without Skin	0.269	0.0960	0.0611	0.0218
	T3042036	Fillets without Skin	0.115	0.0960	0.0262	0.0219
	T3042037	Fillets without Skin	0.487	0.0940	0.0852	0.0164
	T3042038	Fillets without Skin	0.275	0.0950	0.0506	0.0175

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042039	Fillets without Skin	0.193	0.0970	0.0361	0.0181
	T3042040	Fillets without Skin	0.344	0.0950	0.0647	0.0179
	T3042041	Fillets without Skin	0.135	0.0970	0.0251	0.0180
	T3042042	Fillets without Skin	0.112	0.0930	0.0192	0.0159
	T3042043	Fillets without Skin	< 0.0970	0.0970	< 0.0194	0.0194
	T3042044	Fillets without Skin	0.697	0.0940	0.116	0.0157
	T3042045	Offal	9.24	0.0920	2.45	0.0244
	T3042046	Offal	4.40	0.0910	1.23	0.0254
	T3042047	Offal	14.2	0.0930	3.59	0.0235
	T3042048	Offal	4.07	0.0940	0.977	0.0226
	T3042049	Offal	6.92	0.0920	1.54	0.0205
	T3042050	Offal	10.3	0.0920	2.51	0.0224
	T3042051	Offal	6.19	0.0730	1.62	0.0191
	T3042052	Offal	4.49	0.0930	1.16	0.0240
	T3042053	Offal	129	0.0910	25.8	0.0182
	T3042054	Offal	46.9	0.0650	12.7	0.0176
	T3042055	Offal	52.1	0.0820	11.7	0.0184
	T3042056	Offal	27.1	0.0910	6.50	0.0218
	T3042057	Offal	4.01	0.0620	1.17	0.0182
	T3042058	Offal	6.13	0.0830	1.42	0.0193
	T3042059	Offal	3.24	0.0670	0.920	0.0190
	T3042060	Offal	2.64	0.0750	0.657	0.0187
	T3042017	Water			0.0490	0.00100
	T3042018	Water			0.0500	0.00100
	T3042019	Water			< 0.00100	0.00100

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042020	Water			0.160	0.00100
	T3042021	Water			0.168	0.00100
	T3042022	Water			< 0.00100	0.00100
	T3042023	Water			0.0900	0.00100
	T3042024	Water			0.0930	0.00100
	T3042025	Water			< 0.00100	0.00100
	T3042026	Water			0.132	0.00100
	T3042027	Water			0.136	0.00100
	T3042028	Water			< 0.00100	0.00100

Beryllium

	T3042029	Fillets without Skin	< 0.0471	0.0471	< 0.0107	0.0107
	T3042030	Fillets without Skin	< 0.0497	0.0497	< 0.0111	0.0111
	T3042031	Fillets without Skin	< 0.0456	0.0456	< 0.0101	0.0101
	T3042032	Fillets without Skin	< 0.0489	0.0489	< 0.0107	0.0107
	T3042033	Fillets without Skin	< 0.0485	0.0485	< 0.00994	0.00994
	T3042034	Fillets without Skin	< 0.0468	0.0468	< 0.0101	0.0101
	T3042035	Fillets without Skin	< 0.0480	0.0480	< 0.0109	0.0109
	T3042036	Fillets without Skin	< 0.0480	0.0480	< 0.0109	0.0109
	T3042037	Fillets without Skin	< 0.0468	0.0468	< 0.00819	0.00819
	T3042038	Fillets without Skin	< 0.0474	0.0474	< 0.00872	0.00872
	T3042039	Fillets without Skin	< 0.0483	0.0483	< 0.00903	0.00903

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042040	Fillets without Skin	< 0.0477	0.0477	< 0.00897	0.00897
	T3042041	Fillets without Skin	< 0.0484	0.0484	< 0.00900	0.00900
	T3042042	Fillets without Skin	< 0.0467	0.0467	< 0.00799	0.00799
	T3042043	Fillets without Skin	< 0.0483	0.0483	< 0.00966	0.00966
	T3042044	Fillets without Skin	< 0.0471	0.0471	< 0.00787	0.00787
	T3042045	Offal	< 0.0462	0.0462	< 0.0122	0.0122
	T3042046	Offal	< 0.0456	0.0456	< 0.0127	0.0127
	T3042047	Offal	< 0.0467	0.0467	< 0.0118	0.0118
	T3042048	Offal	< 0.0472	0.0472	< 0.0113	0.0113
	T3042049	Offal	< 0.0462	0.0462	< 0.0103	0.0103
	T3042050	Offal	< 0.0461	0.0461	< 0.0112	0.0112
	T3042051	Offal	< 0.0363	0.0363	< 0.00947	0.00947
	T3042052	Offal	< 0.0465	0.0465	< 0.0120	0.0120
	T3042053	Offal	< 0.0453	0.0453	< 0.00906	0.00906
	T3042054	Offal	0.0387	0.0327	0.0105	0.00886
	T3042055	Offal	0.0409	0.0409	0.00920	0.00920
	T3042056	Offal	< 0.0457	0.0457	< 0.0110	0.0110
	T3042057	Offal	< 0.0310	0.0310	< 0.00908	0.00908
	T3042058	Offal	< 0.0413	0.0413	< 0.00958	0.00958
	T3042059	Offal	0.0339	0.0336	0.00963	0.00954
	T3042060	Offal	< 0.0377	0.0377	< 0.00939	0.00939
	T3042017	Water			< 0.000500	0.000500
	T3042018	Water			< 0.000500	0.000500
	T3042019	Water			< 0.000500	0.000500
	T3042020	Water			< 0.000500	0.000500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042021	Water			< 0.000500	0.000500
	T3042022	Water			< 0.000500	0.000500
	T3042023	Water			< 0.000500	0.000500
	T3042024	Water			< 0.000500	0.000500
	T3042025	Water			< 0.000500	0.000500
	T3042026	Water			< 0.000500	0.000500
	T3042027	Water			< 0.000500	0.000500
	T3042028	Water			< 0.000500	0.000500

Calcium						
	T3042029	Fillets without Skin	679	4.71	154	1.07
	T3042030	Fillets without Skin	828	4.97	185	1.11
	T3042031	Fillets without Skin	588	4.56	130.	1.01
	T3042032	Fillets without Skin	1450	4.89	318	1.07
	T3042033	Fillets without Skin	1820	4.85	373	0.994
	T3042034	Fillets without Skin	3090	4.68	667	1.01
	T3042035	Fillets without Skin	1940	4.80	440.	1.09
	T3042036	Fillets without Skin	818	4.80	187	1.09
	T3042037	Fillets without Skin	373	4.68	65.3	0.819
	T3042038	Fillets without Skin	409	4.74	75.3	0.872
	T3042039	Fillets without Skin	358	4.83	66.9	0.903
	T3042040	Fillets without Skin	481	4.77	90.4	0.897

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042041	Fillets without Skin	559	4.84	104	0.900
	T3042042	Fillets without Skin	467	4.67	79.9	0.799
	T3042043	Fillets without Skin	1210	4.83	242	0.966
	T3042044	Fillets without Skin	844	4.71	141	0.787
	T3042045	Offal	22200	4.62	5880	1.22
	T3042046	Offal	22800	4.56	6360	1.27
	T3042047	Offal	28900	4.67	7310	1.18
	T3042048	Offal	24500	4.72	5880	1.13
	T3042049	Offal	31200	4.62	6960	1.03
	T3042050	Offal	25300	4.61	6170	1.12
	T3042051	Offal	28300	3.63	7390	0.947
	T3042052	Offal	22200	4.65	5730	1.20
	T3042053	Offal	51800	4.53	10400	0.906
	T3042054	Offal	47700	3.27	12900	0.886
	T3042055	Offal	89500	4.09	20100	0.920
	T3042056	Offal	65500	4.57	15700	1.10
	T3042057	Offal	55700	3.10	16300	0.908
	T3042058	Offal	65300	4.13	15100	0.958
	T3042059	Offal	83800	3.36	23800	0.954
	T3042060	Offal	34400	3.77	8570	0.939
	T3042017	Water			23.8	0.0200
	T3042018	Water			24.3	0.0200
	T3042019	Water			0.0400	0.0200
	T3042020	Water			29.6	0.0200
	T3042021	Water			30.9	0.0200
	T3042022	Water			0.0800	0.0200

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042023	Water			22.7	0.0200
	T3042024	Water			23.0	0.0200
	T3042025	Water			0.0300	0.0200
	T3042026	Water			98.4	0.0200
	T3042027	Water			101	0.0200
	T3042028	Water			0.0700	0.0200

Cadmium						
	T3042029	Fillets without Skin	< 0.0471	0.0471	< 0.0107	0.0107
	T3042030	Fillets without Skin	< 0.0497	0.0497	< 0.0111	0.0111
	T3042031	Fillets without Skin	< 0.0456	0.0456	< 0.0101	0.0101
	T3042032	Fillets without Skin	< 0.0489	0.0489	< 0.0107	0.0107
	T3042033	Fillets without Skin	< 0.0485	0.0485	< 0.00994	0.00994
	T3042034	Fillets without Skin	< 0.0468	0.0468	< 0.0101	0.0101
	T3042035	Fillets without Skin	< 0.0480	0.0480	< 0.0109	0.0109
	T3042036	Fillets without Skin	< 0.0480	0.0480	< 0.0109	0.0109
	T3042037	Fillets without Skin	< 0.0468	0.0468	< 0.00819	0.00819
	T3042038	Fillets without Skin	< 0.0474	0.0474	< 0.00872	0.00872
	T3042039	Fillets without Skin	< 0.0483	0.0483	< 0.00903	0.00903
	T3042040	Fillets without Skin	< 0.0477	0.0477	< 0.00897	0.00897
	T3042041	Fillets without Skin	< 0.0484	0.0484	< 0.00900	0.00900

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042042	Fillets without Skin	< 0.0467	0.0467	< 0.00799	0.00799
	T3042043	Fillets without Skin	< 0.0483	0.0483	< 0.00966	0.00966
	T3042044	Fillets without Skin	< 0.0471	0.0471	< 0.00787	0.00787
	T3042045	Offal	< 0.0462	0.0462	< 0.0122	0.0122
	T3042046	Offal	< 0.0456	0.0456	< 0.0127	0.0127
	T3042047	Offal	< 0.0467	0.0467	< 0.0118	0.0118
	T3042048	Offal	< 0.0472	0.0472	< 0.0113	0.0113
	T3042049	Offal	< 0.0462	0.0462	< 0.0103	0.0103
	T3042050	Offal	< 0.0461	0.0461	< 0.0112	0.0112
	T3042051	Offal	< 0.0363	0.0363	< 0.00947	0.00947
	T3042052	Offal	< 0.0465	0.0465	< 0.0120	0.0120
	T3042053	Offal	0.597	0.0453	0.119	0.00906
	T3042054	Offal	0.0922	0.0327	0.0250	0.00886
	T3042055	Offal	0.0480	0.0409	0.0108	0.00920
	T3042056	Offal	0.0540	0.0457	0.0130	0.0110
	T3042057	Offal	< 0.0310	0.0310	< 0.00908	0.00908
	T3042058	Offal	< 0.0413	0.0413	< 0.00958	0.00958
	T3042059	Offal	0.0366	0.0336	0.0104	0.00954
	T3042060	Offal	< 0.0377	0.0377	< 0.00939	0.00939
	T3042017	Water			< 0.0000500	0.0000500
	T3042018	Water			< 0.0000500	0.0000500
	T3042019	Water			< 0.0000500	0.0000500
	T3042020	Water			< 0.0000500	0.0000500
	T3042021	Water			< 0.0000500	0.0000500
	T3042022	Water			< 0.0000500	0.0000500
	T3042023	Water			< 0.0000500	0.0000500
	T3042024	Water			< 0.0000500	0.0000500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042025	Water			< 0.0000500	0.0000500
	T3042026	Water			< 0.0000500	0.0000500
	T3042027	Water			< 0.0000500	0.0000500
	T3042028	Water			< 0.0000500	0.0000500
Cobalt						
	T3042029	Fillets without Skin	< 0.471	0.471	< 0.107	0.107
	T3042030	Fillets without Skin	< 0.497	0.497	< 0.111	0.111
	T3042031	Fillets without Skin	< 0.456	0.456	< 0.101	0.101
	T3042032	Fillets without Skin	< 0.489	0.489	< 0.107	0.107
	T3042033	Fillets without Skin	< 0.485	0.485	< 0.0994	0.0994
	T3042034	Fillets without Skin	< 0.468	0.468	< 0.101	0.101
	T3042035	Fillets without Skin	< 0.480	0.480	< 0.109	0.109
	T3042036	Fillets without Skin	< 0.480	0.480	< 0.109	0.109
	T3042037	Fillets without Skin	< 0.468	0.468	< 0.0819	0.0819
	T3042038	Fillets without Skin	< 0.474	0.474	< 0.0872	0.0872
	T3042039	Fillets without Skin	< 0.483	0.483	< 0.0903	0.0903
	T3042040	Fillets without Skin	< 0.477	0.477	< 0.0897	0.0897
	T3042041	Fillets without Skin	< 0.484	0.484	< 0.0900	0.0900
	T3042042	Fillets without Skin	< 0.467	0.467	< 0.0799	0.0799

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042043	Fillets without Skin	< 0.483	0.483	< 0.0966	0.0966
	T3042044	Fillets without Skin	< 0.471	0.471	< 0.0787	0.0787
	T3042045	Offal	< 0.462	0.462	< 0.122	0.122
	T3042046	Offal	< 0.456	0.456	< 0.127	0.127
	T3042047	Offal	< 0.467	0.467	< 0.118	0.118
	T3042048	Offal	< 0.472	0.472	< 0.113	0.113
	T3042049	Offal	< 0.462	0.462	< 0.103	0.103
	T3042050	Offal	< 0.461	0.461	< 0.112	0.112
	T3042051	Offal	< 0.363	0.363	< 0.0947	0.0947
	T3042052	Offal	< 0.465	0.465	< 0.120	0.120
	T3042053	Offal	0.701	0.453	0.140	0.0906
	T3042054	Offal	< 0.327	0.327	< 0.0886	0.0886
	T3042055	Offal	< 0.409	0.409	< 0.0920	0.0920
	T3042056	Offal	< 0.457	0.457	< 0.110	0.110
	T3042057	Offal	< 0.310	0.310	< 0.0908	0.0908
	T3042058	Offal	< 0.413	0.413	< 0.0958	0.0958
	T3042059	Offal	< 0.336	0.336	< 0.0954	0.0954
	T3042060	Offal	< 0.377	0.377	< 0.0939	0.0939
	T3042017	Water			< 0.00500	0.00500
	T3042018	Water			< 0.00500	0.00500
	T3042019	Water			< 0.00500	0.00500
	T3042020	Water			< 0.00500	0.00500
	T3042021	Water			< 0.00500	0.00500
	T3042022	Water			< 0.00500	0.00500
	T3042023	Water			< 0.00500	0.00500
	T3042024	Water			< 0.00500	0.00500
	T3042025	Water			< 0.00500	0.00500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042026	Water			< 0.00500	0.00500
	T3042027	Water			< 0.00500	0.00500
	T3042028	Water			< 0.00500	0.00500

Chromium

	T3042029	Fillets without Skin	< 0.471	0.471	< 0.107	0.107
	T3042030	Fillets without Skin	< 0.497	0.497	< 0.111	0.111
	T3042031	Fillets without Skin	< 0.456	0.456	< 0.101	0.101
	T3042032	Fillets without Skin	< 0.489	0.489	< 0.107	0.107
	T3042033	Fillets without Skin	< 0.485	0.485	< 0.0994	0.0994
	T3042034	Fillets without Skin	< 0.468	0.468	< 0.101	0.101
	T3042035	Fillets without Skin	< 0.480	0.480	< 0.109	0.109
	T3042036	Fillets without Skin	< 0.480	0.480	< 0.109	0.109
	T3042037	Fillets without Skin	< 0.468	0.468	< 0.0819	0.0819
	T3042038	Fillets without Skin	< 0.474	0.474	< 0.0872	0.0872
	T3042039	Fillets without Skin	< 0.483	0.483	< 0.0903	0.0903
	T3042040	Fillets without Skin	< 0.477	0.477	< 0.0897	0.0897
	T3042041	Fillets without Skin	< 0.484	0.484	< 0.0900	0.0900
	T3042042	Fillets without Skin	< 0.467	0.467	< 0.0799	0.0799
	T3042043	Fillets without Skin	< 0.483	0.483	< 0.0966	0.0966

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
		Skin				
	T3042044	Fillets without Skin	< 0.471	0.471	< 0.0787	0.0787
	T3042045	Offal	0.709	0.462	0.188	0.122
	T3042046	Offal	0.819	0.456	0.229	0.127
	T3042047	Offal	< 0.467	0.467	< 0.118	0.118
	T3042048	Offal	0.584	0.472	0.140	0.113
	T3042049	Offal	< 0.462	0.462	< 0.103	0.103
	T3042050	Offal	0.480	0.461	0.117	0.112
	T3042051	Offal	0.857	0.363	0.224	0.0947
	T3042052	Offal	1.16	0.465	0.299	0.120
	T3042053	Offal	2.66	0.453	0.532	0.0906
	T3042054	Offal	2.18	0.327	0.591	0.0886
	T3042055	Offal	2.25	0.409	0.506	0.0920
	T3042056	Offal	2.31	0.457	0.554	0.110
	T3042057	Offal	2.68	0.310	0.785	0.0908
	T3042058	Offal	1.77	0.413	0.411	0.0958
	T3042059	Offal	4.70	0.336	1.33	0.0954
	T3042060	Offal	1.54	0.377	0.383	0.0939
	T3042017	Water			< 0.00500	0.00500
	T3042018	Water			< 0.00500	0.00500
	T3042019	Water			< 0.00500	0.00500
	T3042020	Water			< 0.00500	0.00500
	T3042021	Water			< 0.00500	0.00500
	T3042022	Water			< 0.00500	0.00500
	T3042023	Water			< 0.00500	0.00500
	T3042024	Water			< 0.00500	0.00500
	T3042025	Water			< 0.00500	0.00500
	T3042026	Water			< 0.00500	0.00500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042027	Water			< 0.00500	0.00500
	T3042028	Water			< 0.00500	0.00500

Copper

	T3042029	Fillets without Skin	1.50	0.471	0.340	0.107
	T3042030	Fillets without Skin	1.22	0.497	0.273	0.111
	T3042031	Fillets without Skin	1.56	0.456	0.345	0.101
	T3042032	Fillets without Skin	1.57	0.489	0.344	0.107
	T3042033	Fillets without Skin	1.52	0.485	0.312	0.0994
	T3042034	Fillets without Skin	1.72	0.468	0.372	0.101
	T3042035	Fillets without Skin	1.82	0.480	0.413	0.109
	T3042036	Fillets without Skin	1.30	0.480	0.296	0.109
	T3042037	Fillets without Skin	1.10	0.468	0.192	0.0819
	T3042038	Fillets without Skin	1.05	0.474	0.193	0.0872
	T3042039	Fillets without Skin	1.17	0.483	0.219	0.0903
	T3042040	Fillets without Skin	1.18	0.477	0.222	0.0897
	T3042041	Fillets without Skin	1.25	0.484	0.232	0.0900
	T3042042	Fillets without Skin	1.33	0.467	0.227	0.0799
	T3042043	Fillets without Skin	1.08	0.483	0.216	0.0966

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042044	Fillets without Skin	1.34	0.471	0.224	0.0787
	T3042045	Offal	2.87	0.462	0.761	0.122
	T3042046	Offal	3.86	0.456	1.08	0.127
	T3042047	Offal	4.14	0.467	1.05	0.118
	T3042048	Offal	2.71	0.472	0.650	0.113
	T3042049	Offal	2.66	0.462	0.593	0.103
	T3042050	Offal	3.60	0.461	0.878	0.112
	T3042051	Offal	2.94	0.363	0.767	0.0947
	T3042052	Offal	2.28	0.465	0.588	0.120
	T3042053	Offal	2.17	0.453	0.434	0.0906
	T3042054	Offal	2.92	0.327	0.791	0.0886
	T3042055	Offal	1.45	0.409	0.326	0.0920
	T3042056	Offal	2.04	0.457	0.490	0.110
	T3042057	Offal	1.30	0.310	0.381	0.0908
	T3042058	Offal	2.14	0.413	0.496	0.0958
	T3042059	Offal	1.32	0.336	0.375	0.0954
	T3042060	Offal	1.80	0.377	0.448	0.0939
	T3042017	Water			< 0.00500	0.00500
	T3042018	Water			< 0.00500	0.00500
	T3042019	Water			< 0.00500	0.00500
	T3042020	Water			< 0.00500	0.00500
	T3042021	Water			< 0.00500	0.00500
	T3042022	Water			< 0.00500	0.00500
	T3042023	Water			< 0.00500	0.00500
	T3042024	Water			< 0.00500	0.00500
	T3042025	Water			< 0.00500	0.00500
	T3042026	Water			< 0.00500	0.00500
	T3042027	Water			< 0.00500	0.00500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042028	Water			< 0.00500	0.00500
Iron						
	T3042029	Fillets without Skin	14.6	0.942	3.31	0.214
	T3042030	Fillets without Skin	18.7	0.994	4.19	0.223
	T3042031	Fillets without Skin	17.2	0.912	3.80	0.202
	T3042032	Fillets without Skin	16.7	0.978	3.66	0.214
	T3042033	Fillets without Skin	29.4	0.969	6.03	0.199
	T3042034	Fillets without Skin	15.1	0.937	3.26	0.202
	T3042035	Fillets without Skin	12.4	0.959	2.81	0.218
	T3042036	Fillets without Skin	11.6	0.959	2.64	0.219
	T3042037	Fillets without Skin	20.8	0.937	3.64	0.164
	T3042038	Fillets without Skin	22.4	0.947	4.12	0.174
	T3042039	Fillets without Skin	16.0	0.965	2.99	0.180
	T3042040	Fillets without Skin	27.4	0.955	5.15	0.180
	T3042041	Fillets without Skin	16.5	0.968	3.07	0.180
	T3042042	Fillets without Skin	15.4	0.933	2.63	0.160
	T3042043	Fillets without Skin	8.49	0.967	1.70	0.193
	T3042044	Fillets without Skin	37.6	0.942	6.28	0.157

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042045	Offal	117	0.924	31.0	0.245
	T3042046	Offal	93.9	0.912	26.2	0.254
	T3042047	Offal	147	0.935	37.2	0.237
	T3042048	Offal	95.5	0.945	22.9	0.227
	T3042049	Offal	67.5	0.924	15.1	0.206
	T3042050	Offal	62.9	0.923	15.3	0.225
	T3042051	Offal	55.9	0.726	14.6	0.189
	T3042052	Offal	46.7	0.929	12.0	0.240
	T3042053	Offal	243	0.905	48.6	0.181
	T3042054	Offal	466	0.654	126	0.177
	T3042055	Offal	141	0.817	31.7	0.184
	T3042056	Offal	184	0.915	44.2	0.220
	T3042057	Offal	74.0	0.620	21.7	0.182
	T3042058	Offal	139	0.826	32.2	0.192
	T3042059	Offal	78.3	0.672	22.2	0.191
	T3042060	Offal	113	0.754	28.1	0.188
	T3042017	Water			0.0800	0.0100
	T3042018	Water			0.0800	0.0100
	T3042019	Water			< 0.0100	0.0100
	T3042020	Water			0.0500	0.0100
	T3042021	Water			0.0900	0.0100
	T3042022	Water			< 0.0100	0.0100
	T3042023	Water			0.0400	0.0100
	T3042024	Water			0.0800	0.0100
	T3042025	Water			0.0100	0.0100
	T3042026	Water			< 0.0100	0.0100
	T3042027	Water			< 0.0100	0.0100
	T3042028	Water			< 0.0100	0.0100
Mercury						

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042029	Fillets without Skin	0.489	0.00848	0.111	0.00192
	T3042030	Fillets without Skin	0.327	0.00895	0.0732	0.00200
	T3042031	Fillets without Skin	0.593	0.00821	0.131	0.00181
	T3042032	Fillets without Skin	0.184	0.00881	0.0403	0.00193
	T3042033	Fillets without Skin	0.277	0.00873	0.0568	0.00179
	T3042034	Fillets without Skin	0.297	0.00843	0.0642	0.00182
	T3042035	Fillets without Skin	0.332	0.00863	0.0754	0.00196
	T3042036	Fillets without Skin	0.392	0.00863	0.0894	0.00197
	T3042037	Fillets without Skin	2.53	0.00843	0.443	0.00148
	T3042038	Fillets without Skin	1.74	0.00852	0.320	0.00157
	T3042039	Fillets without Skin	2.12	0.00869	0.396	0.00162
	T3042040	Fillets without Skin	1.96	0.00859	0.368	0.00161
	T3042041	Fillets without Skin	0.0571	0.00871	0.0106	0.00162
	T3042042	Fillets without Skin	0.0437	0.00840	0.00747	0.00144
	T3042043	Fillets without Skin	0.0774	0.00870	0.0155	0.00174
	T3042044	Fillets without Skin	0.0488	0.00848	0.00815	0.00142
	T3042045	Offal	0.343	0.00831	0.0909	0.00220
	T3042046	Offal	0.243	0.00821	0.0678	0.00229

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042047	Offal	0.414	0.00841	0.105	0.00213
	T3042048	Offal	0.137	0.00850	0.0329	0.00204
	T3042049	Offal	0.201	0.00832	0.0448	0.00186
	T3042050	Offal	0.213	0.00831	0.0520	0.00203
	T3042051	Offal	0.252	0.00654	0.0658	0.00171
	T3042052	Offal	0.262	0.00836	0.0676	0.00216
	T3042053	Offal	1.08	0.00815	0.216	0.00163
	T3042054	Offal	0.783	0.00589	0.212	0.00160
	T3042055	Offal	1.16	0.00736	0.261	0.00166
	T3042056	Offal	0.773	0.00823	0.186	0.00198
	T3042057	Offal	0.0241	0.00587	0.00706	0.00172
	T3042058	Offal	0.0215	0.00743	0.00499	0.00172
	T3042059	Offal	0.0358	0.00605	0.0102	0.00172
	T3042060	Offal	0.0195	0.00678	0.00486	0.00169
	T3042017	Water			0.00000190	0.000000500
	T3042018	Water			0.00000189	0.000000500
	T3042019	Water			< 0.000000500	0.000000500
	T3042020	Water			0.00000178	0.000000500
	T3042021	Water			0.00000178	0.000000500
	T3042022	Water			0.00000114	0.000000500
	T3042023	Water			0.00000366	0.000000500
	T3042024	Water			0.00000359	0.000000500
	T3042025	Water			< 0.000000500	0.000000500
	T3042026	Water			< 0.000000500	0.000000500
	T3042027	Water			< 0.000000500	0.000000500
	T3042028	Water			< 0.000000500	0.000000500
Potassium						
	T3042029	Fillets without Skin	15200	9.42	3450	2.14

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042030	Fillets without Skin	15900	9.94	3560	2.23
	T3042031	Fillets without Skin	15300	9.12	3380	2.02
	T3042032	Fillets without Skin	15900	9.78	3480	2.14
	T3042033	Fillets without Skin	17400	9.69	3570	1.99
	T3042034	Fillets without Skin	16200	9.37	3500	2.02
	T3042035	Fillets without Skin	15600	9.59	3540	2.18
	T3042036	Fillets without Skin	15600	9.59	3560	2.19
	T3042037	Fillets without Skin	16300	9.37	2850	1.64
	T3042038	Fillets without Skin	15100	9.47	2780	1.74
	T3042039	Fillets without Skin	15800	9.65	2950	1.80
	T3042040	Fillets without Skin	15800	9.55	2970	1.80
	T3042041	Fillets without Skin	14900	9.68	2770	1.80
	T3042042	Fillets without Skin	15900	9.33	2720	1.60
	T3042043	Fillets without Skin	14700	9.67	2940	1.93
	T3042044	Fillets without Skin	16900	9.42	2820	1.57
	T3042045	Offal	10000	9.24	2650	2.45
	T3042046	Offal	9600	9.12	2680	2.54
	T3042047	Offal	10300	9.35	2610	2.37

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042048	Offal	11200	9.45	2690	2.27
	T3042049	Offal	12100	9.24	2700	2.06
	T3042050	Offal	11100	9.23	2710	2.25
	T3042051	Offal	10100	7.26	2640	1.89
	T3042052	Offal	10400	9.29	2680	2.40
	T3042053	Offal	9440	9.05	1890	1.81
	T3042054	Offal	7550	6.54	2050	1.77
	T3042055	Offal	10000	8.17	2250	1.84
	T3042056	Offal	8030	9.15	1930	2.20
	T3042057	Offal	7320	6.20	2140	1.82
	T3042058	Offal	9830	8.26	2280	1.92
	T3042059	Offal	8820	6.72	2500	1.91
	T3042060	Offal	7500	7.54	1870	1.88
	T3042017	Water			1.46	0.100
	T3042018	Water			1.48	0.100
	T3042019	Water			< 0.100	0.100
	T3042020	Water			2.68	0.100
	T3042021	Water			2.80	0.100
	T3042022	Water			< 0.100	0.100
	T3042023	Water			4.51	0.100
	T3042024	Water			4.57	0.100
	T3042025	Water			< 0.100	0.100
	T3042026	Water			7.28	0.100
	T3042027	Water			7.49	0.100
	T3042028	Water			< 0.100	0.100
Magnesium						
	T3042029	Filletts without Skin	1160	0.940	263	0.213
	T3042030	Filletts without	1220	0.990	273	0.222

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
		Skin				
	T3042031	Fillets without Skin	1130	0.910	250.	0.201
	T3042032	Fillets without Skin	1230	0.980	269	0.215
	T3042033	Fillets without Skin	1270	0.970	260.	0.199
	T3042034	Fillets without Skin	1270	0.940	274	0.203
	T3042035	Fillets without Skin	1290	0.960	293	0.218
	T3042036	Fillets without Skin	1280	0.960	292	0.219
	T3042037	Fillets without Skin	1050	0.940	184	0.164
	T3042038	Fillets without Skin	1040	0.950	191	0.175
	T3042039	Fillets without Skin	1060	0.970	198	0.181
	T3042040	Fillets without Skin	1070	0.950	201	0.179
	T3042041	Fillets without Skin	1090	0.970	203	0.180
	T3042042	Fillets without Skin	1110	0.930	190.	0.159
	T3042043	Fillets without Skin	1290	0.970	258	0.194
	T3042044	Fillets without Skin	1210	0.940	202	0.157
	T3042045	Offal	1010	0.920	268	0.244
	T3042046	Offal	950.	0.910	265	0.254
	T3042047	Offal	1190	0.930	301	0.235
	T3042048	Offal	1110	0.940	266	0.226

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042049	Offal	1220	0.920	272	0.205
	T3042050	Offal	1150	0.920	281	0.224
	T3042051	Offal	1240	0.730	324	0.191
	T3042052	Offal	1040	0.930	268	0.240
	T3042053	Offal	1420	0.910	284	0.182
	T3042054	Offal	1430	0.650	388	0.176
	T3042055	Offal	1980	0.820	446	0.184
	T3042056	Offal	1510	0.910	362	0.218
	T3042057	Offal	1510	0.620	442	0.182
	T3042058	Offal	1910	0.830	443	0.193
	T3042059	Offal	2270	0.670	645	0.190
	T3042060	Offal	1180	0.750	294	0.187
	T3042017	Water			2.87	0.0100
	T3042018	Water			2.88	0.0100
	T3042019	Water			< 0.0100	0.0100
	T3042020	Water			13.6	0.0100
	T3042021	Water			14.1	0.0100
	T3042022	Water			0.0100	0.0100
	T3042023	Water			9.29	0.0100
	T3042024	Water			9.39	0.0100
	T3042025	Water			< 0.0100	0.0100
	T3042026	Water			35.8	0.0100
	T3042027	Water			36.7	0.0100
	T3042028	Water			0.0200	0.0100
Manganese						
	T3042029	Fillets without Skin	0.556	0.188	0.126	0.0427
	T3042030	Fillets without Skin	0.616	0.199	0.138	0.0446

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042031	Fillets without Skin	0.511	0.182	0.113	0.0402
	T3042032	Fillets without Skin	0.841	0.196	0.184	0.0429
	T3042033	Fillets without Skin	0.717	0.194	0.147	0.0398
	T3042034	Fillets without Skin	0.768	0.187	0.166	0.0404
	T3042035	Fillets without Skin	0.844	0.192	0.192	0.0436
	T3042036	Fillets without Skin	0.652	0.192	0.149	0.0438
	T3042037	Fillets without Skin	0.778	0.187	0.136	0.0327
	T3042038	Fillets without Skin	0.625	0.189	0.115	0.0348
	T3042039	Fillets without Skin	0.531	0.193	0.0993	0.0361
	T3042040	Fillets without Skin	0.725	0.191	0.136	0.0359
	T3042041	Fillets without Skin	0.735	0.194	0.137	0.0361
	T3042042	Fillets without Skin	0.672	0.187	0.115	0.0320
	T3042043	Fillets without Skin	0.300	0.193	0.0600	0.0386
	T3042044	Fillets without Skin	1.47	0.188	0.245	0.0314
	T3042045	Offal	36.4	0.185	9.65	0.0490
	T3042046	Offal	10.0	0.182	2.79	0.0508
	T3042047	Offal	55.4	0.187	14.0	0.0473
	T3042048	Offal	10.2	0.189	2.45	0.0454
	T3042049	Offal	5.47	0.185	1.22	0.0413

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042050	Offal	5.01	0.185	1.22	0.0451
	T3042051	Offal	5.24	0.145	1.37	0.0378
	T3042052	Offal	3.79	0.186	0.978	0.0480
	T3042053	Offal	76.9	0.181	15.4	0.0362
	T3042054	Offal	46.7	0.131	12.7	0.0355
	T3042055	Offal	44.7	0.163	10.1	0.0367
	T3042056	Offal	30.2	0.183	7.25	0.0439
	T3042057	Offal	11.6	0.124	3.40	0.0363
	T3042058	Offal	26.4	0.165	6.12	0.0383
	T3042059	Offal	6.93	0.134	1.97	0.0381
	T3042060	Offal	5.77	0.151	1.44	0.0376
	T3042017	Water			0.0110	0.00200
	T3042018	Water			0.0120	0.00200
	T3042019	Water			< 0.00200	0.00200
	T3042020	Water			0.00300	0.00200
	T3042021	Water			0.00400	0.00200
	T3042022	Water			< 0.00200	0.00200
	T3042023	Water			< 0.00200	0.00200
	T3042024	Water			0.00200	0.00200
	T3042025	Water			< 0.00200	0.00200
	T3042026	Water			< 0.00200	0.00200
	T3042027	Water			< 0.00200	0.00200
	T3042028	Water			< 0.00200	0.00200
Molybdenum						
	T3042029	Fillets without Skin	< 0.942	0.942	< 0.214	0.214
	T3042030	Fillets without Skin	< 0.994	0.994	< 0.223	0.223
	T3042031	Fillets without Skin	< 0.912	0.912	< 0.202	0.202

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042032	Fillets without Skin	< 0.978	0.978	< 0.214	0.214
	T3042033	Fillets without Skin	< 0.969	0.969	< 0.199	0.199
	T3042034	Fillets without Skin	< 0.937	0.937	< 0.202	0.202
	T3042035	Fillets without Skin	< 0.959	0.959	< 0.218	0.218
	T3042036	Fillets without Skin	< 0.959	0.959	< 0.219	0.219
	T3042037	Fillets without Skin	< 0.937	0.937	< 0.164	0.164
	T3042038	Fillets without Skin	< 0.947	0.947	< 0.174	0.174
	T3042039	Fillets without Skin	< 0.965	0.965	< 0.180	0.180
	T3042040	Fillets without Skin	< 0.955	0.955	< 0.180	0.180
	T3042041	Fillets without Skin	< 0.968	0.968	< 0.180	0.180
	T3042042	Fillets without Skin	< 0.933	0.933	< 0.160	0.160
	T3042043	Fillets without Skin	< 0.967	0.967	< 0.193	0.193
	T3042044	Fillets without Skin	< 0.942	0.942	< 0.157	0.157
	T3042045	Offal	< 0.924	0.924	< 0.245	0.245
	T3042046	Offal	< 0.912	0.912	< 0.254	0.254
	T3042047	Offal	< 0.935	0.935	< 0.237	0.237
	T3042048	Offal	< 0.945	0.945	< 0.227	0.227
	T3042049	Offal	< 0.924	0.924	< 0.206	0.206
	T3042050	Offal	< 0.923	0.923	< 0.225	0.225
	T3042051	Offal	< 0.726	0.726	< 0.189	0.189

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042052	Offal	< 0.929	0.929	< 0.240	0.240
	T3042053	Offal	< 0.905	0.905	< 0.181	0.181
	T3042054	Offal	< 0.654	0.654	< 0.177	0.177
	T3042055	Offal	< 0.817	0.817	< 0.184	0.184
	T3042056	Offal	< 0.915	0.915	< 0.220	0.220
	T3042057	Offal	< 0.620	0.620	< 0.182	0.182
	T3042058	Offal	< 0.826	0.826	< 0.192	0.192
	T3042059	Offal	< 0.672	0.672	< 0.191	0.191
	T3042060	Offal	< 0.754	0.754	< 0.188	0.188
	T3042017	Water			< 0.0100	0.0100
	T3042018	Water			< 0.0100	0.0100
	T3042019	Water			< 0.0100	0.0100
	T3042020	Water			< 0.0100	0.0100
	T3042021	Water			< 0.0100	0.0100
	T3042022	Water			< 0.0100	0.0100
	T3042023	Water			< 0.0100	0.0100
	T3042024	Water			< 0.0100	0.0100
	T3042025	Water			< 0.0100	0.0100
	T3042026	Water			< 0.0100	0.0100
	T3042027	Water			0.0100	0.0100
	T3042028	Water			< 0.0100	0.0100

Sodium						
	T3042029	Fillets without Skin	925	188	210.	42.7
	T3042030	Fillets without Skin	1130	199	253	44.6
	T3042031	Fillets without Skin	1070	182	236	40.2
	T3042032	Fillets without Skin	1210	196	265	42.9

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042033	Fillets without Skin	1310	194	269	39.8
	T3042034	Fillets without Skin	1240	187	268	40.4
	T3042035	Fillets without Skin	1190	192	270.	43.6
	T3042036	Fillets without Skin	1150	192	262	43.8
	T3042037	Fillets without Skin	2110	187	369	32.7
	T3042038	Fillets without Skin	1810	189	333	34.8
	T3042039	Fillets without Skin	1790	193	335	36.1
	T3042040	Fillets without Skin	1890	191	355	35.9
	T3042041	Fillets without Skin	1720	194	320.	36.1
	T3042042	Fillets without Skin	2060	187	352	32.0
	T3042043	Fillets without Skin	1450	193	290.	38.6
	T3042044	Fillets without Skin	1950	188	326	31.4
	T3042045	Offal	3520	185	933	49.0
	T3042046	Offal	3310	182	923	50.8
	T3042047	Offal	3830	187	969	47.3
	T3042048	Offal	4060	189	974	45.4
	T3042049	Offal	5040	185	1120	41.3
	T3042050	Offal	4290	185	1050	45.1
	T3042051	Offal	3520	145	919	37.8
	T3042052	Offal	3420	186	882	48.0
	T3042053	Offal	7690	181	1540	36.2

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042054	Offal	4930	131	1340	35.5
	T3042055	Offal	6210	163	1400	36.7
	T3042056	Offal	6300	183	1510	43.9
	T3042057	Offal	4660	124	1370	36.3
	T3042058	Offal	6020	165	1400	38.3
	T3042059	Offal	4820	134	1370	38.1
	T3042060	Offal	5120	151	1270	37.6
	T3042017	Water			3.00	2.00
	T3042018	Water			4.00	2.00
	T3042019	Water			< 2.00	2.00
	T3042020	Water			31.4	2.00
	T3042021	Water			33.6	2.00
	T3042022	Water			< 2.00	2.00
	T3042023	Water			65.0	2.00
	T3042024	Water			66.0	2.00
	T3042025	Water			< 2.00	2.00
	T3042026	Water			99.9	2.00
	T3042027	Water			106	2.00
	T3042028	Water			< 2.00	2.00

Nickel						
	T3042029	Fillets without Skin	< 0.471	0.471	< 0.107	0.107
	T3042030	Fillets without Skin	< 0.497	0.497	< 0.111	0.111
	T3042031	Fillets without Skin	< 0.456	0.456	< 0.101	0.101
	T3042032	Fillets without Skin	< 0.489	0.489	< 0.107	0.107
	T3042033	Fillets without Skin	< 0.485	0.485	< 0.0994	0.0994

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042034	Fillets without Skin	< 0.468	0.468	< 0.101	0.101
	T3042035	Fillets without Skin	< 0.480	0.480	< 0.109	0.109
	T3042036	Fillets without Skin	< 0.480	0.480	< 0.109	0.109
	T3042037	Fillets without Skin	< 0.468	0.468	< 0.0819	0.0819
	T3042038	Fillets without Skin	< 0.474	0.474	< 0.0872	0.0872
	T3042039	Fillets without Skin	< 0.483	0.483	< 0.0903	0.0903
	T3042040	Fillets without Skin	< 0.477	0.477	< 0.0897	0.0897
	T3042041	Fillets without Skin	< 0.484	0.484	< 0.0900	0.0900
	T3042042	Fillets without Skin	< 0.467	0.467	< 0.0799	0.0799
	T3042043	Fillets without Skin	< 0.483	0.483	< 0.0966	0.0966
	T3042044	Fillets without Skin	< 0.471	0.471	< 0.0787	0.0787
	T3042045	Offal	< 0.462	0.462	< 0.122	0.122
	T3042046	Offal	0.661	0.456	0.184	0.127
	T3042047	Offal	< 0.467	0.467	< 0.118	0.118
	T3042048	Offal	< 0.472	0.472	< 0.113	0.113
	T3042049	Offal	< 0.462	0.462	< 0.103	0.103
	T3042050	Offal	< 0.461	0.461	< 0.112	0.112
	T3042051	Offal	0.497	0.363	0.130	0.0947
	T3042052	Offal	0.737	0.465	0.190	0.120
	T3042053	Offal	1.84	0.453	0.368	0.0906
	T3042054	Offal	1.37	0.327	0.371	0.0886

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042055	Offal	1.08	0.409	0.243	0.0920
	T3042056	Offal	1.36	0.457	0.326	0.110
	T3042057	Offal	1.30	0.310	0.381	0.0908
	T3042058	Offal	1.15	0.413	0.267	0.0958
	T3042059	Offal	2.33	0.336	0.662	0.0954
	T3042060	Offal	0.970	0.377	0.242	0.0939
	T3042017	Water			< 0.00500	0.00500
	T3042018	Water			< 0.00500	0.00500
	T3042019	Water			< 0.00500	0.00500
	T3042020	Water			< 0.00500	0.00500
	T3042021	Water			< 0.00500	0.00500
	T3042022	Water			< 0.00500	0.00500
	T3042023	Water			< 0.00500	0.00500
	T3042024	Water			< 0.00500	0.00500
	T3042025	Water			< 0.00500	0.00500
	T3042026	Water			< 0.00500	0.00500
	T3042027	Water			< 0.00500	0.00500
	T3042028	Water			< 0.00500	0.00500

Phosphorus						
	T3042029	Fillets without Skin	11000	4.71	2500	1.07
	T3042030	Fillets without Skin	11500	4.97	2580	1.11
	T3042031	Fillets without Skin	10900	4.56	2410	1.01
	T3042032	Fillets without Skin	11700	4.89	2560	1.07
	T3042033	Fillets without Skin	12300	4.85	2520	0.994
	T3042034	Fillets without Skin	12400	4.68	2680	1.01

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042035	Fillets without Skin	11800	4.80	2680	1.09
	T3042036	Fillets without Skin	11400	4.80	2600	1.09
	T3042037	Fillets without Skin	10500	4.68	1840	0.819
	T3042038	Fillets without Skin	9840	4.74	1810	0.872
	T3042039	Fillets without Skin	10400	4.83	1940	0.903
	T3042040	Fillets without Skin	10400	4.77	1960	0.897
	T3042041	Fillets without Skin	9980	4.84	1860	0.900
	T3042042	Fillets without Skin	10600	4.67	1810	0.799
	T3042043	Fillets without Skin	9980	4.83	2000	0.966
	T3042044	Fillets without Skin	11200	4.71	1870	0.787
	T3042045	Offal	17500	4.62	4640	1.22
	T3042046	Offal	17800	4.56	4970	1.27
	T3042047	Offal	20500	4.67	5190	1.18
	T3042048	Offal	19700	4.72	4730	1.13
	T3042049	Offal	22900	4.62	5110	1.03
	T3042050	Offal	19700	4.61	4810	1.12
	T3042051	Offal	22000	3.63	5740	0.947
	T3042052	Offal	18500	4.65	4770	1.20
	T3042053	Offal	29500	4.53	5900	0.906
	T3042054	Offal	26100	3.27	7070	0.886
	T3042055	Offal	49100	4.09	11000	0.920
	T3042056	Offal	36400	4.57	8740	1.10

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042057	Offal	31900	3.10	9350	0.908
	T3042058	Offal	38000	4.13	8820	0.958
	T3042059	Offal	45300	3.36	12900	0.954
	T3042060	Offal	21200	3.77	5280	0.939
	T3042017	Water			0.0800	0.0500
	T3042018	Water			0.0800	0.0500
	T3042019	Water			< 0.0500	0.0500
	T3042020	Water			0.125	0.0500
	T3042021	Water			0.151	0.0500
	T3042022	Water			< 0.0500	0.0500
	T3042023	Water			0.103	0.0500
	T3042024	Water			0.112	0.0500
	T3042025	Water			< 0.0500	0.0500
	T3042026	Water			< 0.0500	0.0500
	T3042027	Water			< 0.0500	0.0500
	T3042028	Water			< 0.0500	0.0500

Lead

	T3042029	Fillets without Skin	0.234	0.0471	0.0531	0.0107
	T3042030	Fillets without Skin	0.215	0.0497	0.0482	0.0111
	T3042031	Fillets without Skin	0.182	0.0456	0.0402	0.0101
	T3042032	Fillets without Skin	0.223	0.0489	0.0488	0.0107
	T3042033	Fillets without Skin	0.201	0.0485	0.0412	0.00994
	T3042034	Fillets without Skin	0.183	0.0468	0.0395	0.0101
	T3042035	Fillets without Skin	0.188	0.0480	0.0427	0.0109

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042036	Fillets without Skin	0.172	0.0480	0.0392	0.0109
	T3042037	Fillets without Skin	0.152	0.0468	0.0266	0.00819
	T3042038	Fillets without Skin	0.159	0.0474	0.0293	0.00872
	T3042039	Fillets without Skin	0.153	0.0483	0.0286	0.00903
	T3042040	Fillets without Skin	0.159	0.0477	0.0299	0.00897
	T3042041	Fillets without Skin	0.144	0.0484	0.0268	0.00900
	T3042042	Fillets without Skin	0.121	0.0467	0.0207	0.00799
	T3042043	Fillets without Skin	0.128	0.0483	0.0256	0.00966
	T3042044	Fillets without Skin	0.234	0.0471	0.0391	0.00787
	T3042045	Offal	0.124	0.0462	0.0329	0.0122
	T3042046	Offal	0.138	0.0456	0.0385	0.0127
	T3042047	Offal	0.157	0.0467	0.0397	0.0118
	T3042048	Offal	0.110	0.0472	0.0264	0.0113
	T3042049	Offal	0.113	0.0462	0.0252	0.0103
	T3042050	Offal	0.113	0.0461	0.0276	0.0112
	T3042051	Offal	0.0841	0.0363	0.0220	0.00947
	T3042052	Offal	0.0767	0.0465	0.0198	0.0120
	T3042053	Offal	0.388	0.0453	0.0776	0.00906
	T3042054	Offal	0.569	0.0327	0.154	0.00886
	T3042055	Offal	0.315	0.0409	0.0709	0.00920
	T3042056	Offal	0.296	0.0457	0.0710	0.0110
	T3042057	Offal	0.306	0.0310	0.0897	0.00908
	T3042058	Offal	0.331	0.0413	0.0768	0.00958

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042059	Offal	0.121	0.0336	0.0344	0.00954
	T3042060	Offal	0.208	0.0377	0.0518	0.00939
	T3042017	Water			0.000180	0.0000500
	T3042018	Water			0.000140	0.0000500
	T3042019	Water			0.0000700	0.0000500
	T3042020	Water			0.0000900	0.0000500
	T3042021	Water			0.000100	0.0000500
	T3042022	Water			0.0000500	0.0000500
	T3042023	Water			0.0000700	0.0000500
	T3042024	Water			0.0000900	0.0000500
	T3042025	Water			< 0.0000500	0.0000500
	T3042026	Water			0.000150	0.0000500
	T3042027	Water			0.000150	0.0000500
	T3042028	Water			< 0.0000500	0.0000500

Sulfur						
	T3042029	Fillets without Skin	8340	9.40	1890	2.13
	T3042030	Fillets without Skin	8430	9.90	1890	2.22
	T3042031	Fillets without Skin	8270	9.10	1830	2.01
	T3042032	Fillets without Skin	8160	9.80	1790	2.15
	T3042033	Fillets without Skin	8350	9.70	1710	1.99
	T3042034	Fillets without Skin	8400	9.40	1810	2.03
	T3042035	Fillets without Skin	8220	9.60	1870	2.18
	T3042036	Fillets without Skin	8470	9.60	1930	2.19

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042037	Fillets without Skin	9690	9.40	1700	1.64
	T3042038	Fillets without Skin	9320	9.50	1710	1.75
	T3042039	Fillets without Skin	9850	9.70	1840	1.81
	T3042040	Fillets without Skin	9530	9.50	1790	1.79
	T3042041	Fillets without Skin	10800	9.70	2010	1.80
	T3042042	Fillets without Skin	11600	9.30	1980	1.59
	T3042043	Fillets without Skin	10800	9.70	2160	1.94
	T3042044	Fillets without Skin	12200	9.40	2040	1.57
	T3042045	Offal	7320	9.20	1940	2.44
	T3042046	Offal	6860	9.10	1910	2.54
	T3042047	Offal	7500	9.30	1900	2.35
	T3042048	Offal	7470	9.40	1790	2.26
	T3042049	Offal	8200	9.20	1830	2.05
	T3042050	Offal	7840	9.20	1910	2.24
	T3042051	Offal	7660	7.30	2000	1.91
	T3042052	Offal	7090	9.30	1830	2.40
	T3042053	Offal	6870	9.10	1370	1.82
	T3042054	Offal	6280	6.50	1700	1.76
	T3042055	Offal	6980	8.20	1570	1.84
	T3042056	Offal	5680	9.10	1360	2.18
	T3042057	Offal	6010	6.20	1760	1.82
	T3042058	Offal	7880	8.30	1830	1.93
	T3042059	Offal	8080	6.70	2290	1.90

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042060	Offal	6780	7.50	1690	1.87
	T3042017	Water			1.50	0.100
	T3042018	Water			1.60	0.100
	T3042019	Water			< 0.100	0.100
	T3042020	Water			6.20	0.100
	T3042021	Water			6.50	0.100
	T3042022	Water			< 0.100	0.100
	T3042023	Water			10.7	0.100
	T3042024	Water			11.0	0.100
	T3042025	Water			< 0.100	0.100
	T3042026	Water			138	0.100
	T3042027	Water			141	0.100
	T3042028	Water			< 0.100	0.100

Selenium						
	T3042029	Fillets without Skin	1.25	0.0235	0.284	0.00534
	T3042030	Fillets without Skin	1.14	0.0249	0.255	0.00557
	T3042031	Fillets without Skin	1.16	0.0228	0.256	0.00504
	T3042032	Fillets without Skin	1.23	0.0245	0.269	0.00536
	T3042033	Fillets without Skin	1.22	0.0242	0.250	0.00497
	T3042034	Fillets without Skin	1.09	0.0234	0.235	0.00506
	T3042035	Fillets without Skin	1.06	0.0240	0.241	0.00544
	T3042036	Fillets without Skin	1.17	0.0240	0.267	0.00547
	T3042037	Fillets without Skin	0.886	0.0234	0.155	0.00410

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042038	Fillets without Skin	0.849	0.0237	0.156	0.00436
	T3042039	Fillets without Skin	0.881	0.0241	0.165	0.00451
	T3042040	Fillets without Skin	0.848	0.0239	0.159	0.00449
	T3042041	Fillets without Skin	15.1	0.0242	2.81	0.00450
	T3042042	Fillets without Skin	21.0	0.140	3.59	0.0239
	T3042043	Fillets without Skin	17.2	0.145	3.44	0.0290
	T3042044	Fillets without Skin	23.1	0.141	3.86	0.0235
	T3042045	Offal	1.39	0.0231	0.368	0.00612
	T3042046	Offal	1.38	0.0228	0.385	0.00636
	T3042047	Offal	1.28	0.0234	0.324	0.00591
	T3042048	Offal	1.39	0.0236	0.334	0.00567
	T3042049	Offal	1.42	0.0231	0.317	0.00515
	T3042050	Offal	1.24	0.0231	0.303	0.00563
	T3042051	Offal	1.48	0.0182	0.386	0.00474
	T3042052	Offal	1.54	0.0232	0.397	0.00599
	T3042053	Offal	1.69	0.0226	0.338	0.00453
	T3042054	Offal	1.63	0.0164	0.442	0.00443
	T3042055	Offal	1.39	0.0204	0.313	0.00460
	T3042056	Offal	1.60	0.0229	0.384	0.00549
	T3042057	Offal	8.95	0.0155	2.62	0.00454
	T3042058	Offal	12.5	0.0206	2.90	0.00479
	T3042059	Offal	12.1	0.101	3.44	0.0287
	T3042060	Offal	12.0	0.0188	2.99	0.00469
	T3042017	Water			0.000480	0.000400

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042018	Water			0.000460	0.000400
	T3042019	Water			< 0.000400	0.000400
	T3042020	Water			0.000450	0.000400
	T3042021	Water			0.000470	0.000400
	T3042022	Water			< 0.000400	0.000400
	T3042023	Water			0.000520	0.000400
	T3042024	Water			0.000520	0.000400
	T3042025	Water			< 0.000400	0.000400
	T3042026	Water			0.00128	0.000400
	T3042027	Water			0.00130	0.000400
	T3042028	Water			0.000420	0.000400

Strontium

	T3042029	Fillets without Skin	0.603	0.0471	0.137	0.0107
	T3042030	Fillets without Skin	0.945	0.0497	0.212	0.0111
	T3042031	Fillets without Skin	0.511	0.0456	0.113	0.0101
	T3042032	Fillets without Skin	1.56	0.0489	0.342	0.0107
	T3042033	Fillets without Skin	3.57	0.0485	0.732	0.00994
	T3042034	Fillets without Skin	7.64	0.0468	1.65	0.0101
	T3042035	Fillets without Skin	3.04	0.0480	0.690	0.0109
	T3042036	Fillets without Skin	1.06	0.0480	0.242	0.0109
	T3042037	Fillets without Skin	1.74	0.0468	0.304	0.00819
	T3042038	Fillets without Skin	1.74	0.0474	0.320	0.00872

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042039	Fillets without Skin	1.37	0.0483	0.256	0.00903
	T3042040	Fillets without Skin	1.82	0.0477	0.342	0.00897
	T3042041	Fillets without Skin	2.60	0.0484	0.484	0.00900
	T3042042	Fillets without Skin	2.38	0.0467	0.407	0.00799
	T3042043	Fillets without Skin	5.63	0.0483	1.13	0.00966
	T3042044	Fillets without Skin	3.92	0.0471	0.655	0.00787
	T3042045	Offal	29.4	0.0462	7.79	0.0122
	T3042046	Offal	28.4	0.0456	7.92	0.0127
	T3042047	Offal	41.1	0.0467	10.4	0.0118
	T3042048	Offal	31.1	0.0472	7.46	0.0113
	T3042049	Offal	66.6	0.0462	14.9	0.0103
	T3042050	Offal	67.6	0.0461	16.5	0.0112
	T3042051	Offal	53.7	0.0363	14.0	0.00947
	T3042052	Offal	43.7	0.0465	11.3	0.0120
	T3042053	Offal	190.	0.0453	38.0	0.00906
	T3042054	Offal	185	0.0327	50.1	0.00886
	T3042055	Offal	293	0.0409	65.9	0.00920
	T3042056	Offal	231	0.0457	55.4	0.0110
	T3042057	Offal	280.	0.0310	82.0	0.00908
	T3042058	Offal	338	0.0413	78.4	0.00958
	T3042059	Offal	488	0.0336	139	0.00954
	T3042060	Offal	179	0.0377	44.6	0.00939
	T3042017	Water			0.120	0.000500
	T3042018	Water			0.125	0.000500
	T3042019	Water			< 0.000500	0.000500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042020	Water			0.414	0.000500
	T3042021	Water			0.438	0.000500
	T3042022	Water			< 0.000500	0.000500
	T3042023	Water			0.339	0.000500
	T3042024	Water			0.343	0.000500
	T3042025	Water			< 0.000500	0.000500
	T3042026	Water			1.66	0.000500
	T3042027	Water			1.76	0.000500
	T3042028	Water			0.000800	0.000500

Vanadium

	T3042029	Fillets without Skin	< 0.942	0.942	< 0.214	0.214
	T3042030	Fillets without Skin	< 0.994	0.994	< 0.223	0.223
	T3042031	Fillets without Skin	< 0.912	0.912	< 0.202	0.202
	T3042032	Fillets without Skin	< 0.978	0.978	< 0.214	0.214
	T3042033	Fillets without Skin	< 0.969	0.969	< 0.199	0.199
	T3042034	Fillets without Skin	< 0.937	0.937	< 0.202	0.202
	T3042035	Fillets without Skin	< 0.959	0.959	< 0.218	0.218
	T3042036	Fillets without Skin	< 0.959	0.959	< 0.219	0.219
	T3042037	Fillets without Skin	< 0.937	0.937	< 0.164	0.164
	T3042038	Fillets without Skin	< 0.947	0.947	< 0.174	0.174
	T3042039	Fillets without Skin	< 0.965	0.965	< 0.180	0.180

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042040	Fillets without Skin	< 0.955	0.955	< 0.180	0.180
	T3042041	Fillets without Skin	< 0.968	0.968	< 0.180	0.180
	T3042042	Fillets without Skin	< 0.933	0.933	< 0.160	0.160
	T3042043	Fillets without Skin	< 0.967	0.967	< 0.193	0.193
	T3042044	Fillets without Skin	< 0.942	0.942	< 0.157	0.157
	T3042045	Offal	< 0.924	0.924	< 0.245	0.245
	T3042046	Offal	< 0.912	0.912	< 0.254	0.254
	T3042047	Offal	< 0.935	0.935	< 0.237	0.237
	T3042048	Offal	< 0.945	0.945	< 0.227	0.227
	T3042049	Offal	< 0.924	0.924	< 0.206	0.206
	T3042050	Offal	< 0.923	0.923	< 0.225	0.225
	T3042051	Offal	< 0.726	0.726	< 0.189	0.189
	T3042052	Offal	< 0.929	0.929	< 0.240	0.240
	T3042053	Offal	1.82	0.905	0.364	0.181
	T3042054	Offal	2.34	0.654	0.634	0.177
	T3042055	Offal	1.58	0.817	0.356	0.184
	T3042056	Offal	1.48	0.915	0.355	0.220
	T3042057	Offal	1.04	0.620	0.305	0.182
	T3042058	Offal	0.897	0.826	0.208	0.192
	T3042059	Offal	< 0.672	0.672	< 0.191	0.191
	T3042060	Offal	< 0.754	0.754	< 0.188	0.188
	T3042017	Water			< 0.0100	0.0100
	T3042018	Water			< 0.0100	0.0100
	T3042019	Water			< 0.0100	0.0100
	T3042020	Water			< 0.0100	0.0100

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042021	Water			< 0.0100	0.0100
	T3042022	Water			< 0.0100	0.0100
	T3042023	Water			0.0100	0.0100
	T3042024	Water			0.0100	0.0100
	T3042025	Water			< 0.0100	0.0100
	T3042026	Water			< 0.0100	0.0100
	T3042027	Water			< 0.0100	0.0100
	T3042028	Water			< 0.0100	0.0100

Zinc

	T3042029	Fillets without Skin	13.3	0.471	3.02	0.107
	T3042030	Fillets without Skin	16.6	0.497	3.72	0.111
	T3042031	Fillets without Skin	14.8	0.456	3.27	0.101
	T3042032	Fillets without Skin	19.7	0.489	4.31	0.107
	T3042033	Fillets without Skin	16.3	0.485	3.34	0.0994
	T3042034	Fillets without Skin	16.0	0.468	3.46	0.101
	T3042035	Fillets without Skin	15.8	0.480	3.59	0.109
	T3042036	Fillets without Skin	17.7	0.480	4.04	0.109
	T3042037	Fillets without Skin	21.9	0.468	3.83	0.0819
	T3042038	Fillets without Skin	21.1	0.474	3.88	0.0872
	T3042039	Fillets without Skin	20.2	0.483	3.78	0.0903
	T3042040	Fillets without Skin	20.7	0.477	3.89	0.0897

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042041	Fillets without Skin	22.5	0.484	4.18	0.0900
	T3042042	Fillets without Skin	24.2	0.467	4.14	0.0799
	T3042043	Fillets without Skin	18.8	0.483	3.76	0.0966
	T3042044	Fillets without Skin	24.9	0.471	4.16	0.0787
	T3042045	Offal	83.0	0.462	22.0	0.122
	T3042046	Offal	86.6	0.456	24.2	0.127
	T3042047	Offal	102	0.467	25.8	0.118
	T3042048	Offal	102	0.472	24.5	0.113
	T3042049	Offal	131	0.462	29.2	0.103
	T3042050	Offal	103	0.461	25.1	0.112
	T3042051	Offal	87.8	0.363	22.9	0.0947
	T3042052	Offal	74.9	0.465	19.3	0.120
	T3042053	Offal	84.4	0.453	16.9	0.0906
	T3042054	Offal	66.7	0.327	18.1	0.0886
	T3042055	Offal	103	0.409	23.2	0.0920
	T3042056	Offal	90.1	0.457	21.6	0.110
	T3042057	Offal	82.5	0.310	24.2	0.0908
	T3042058	Offal	127	0.413	29.5	0.0958
	T3042059	Offal	64.0	0.336	18.2	0.0954
	T3042060	Offal	70.7	0.377	17.6	0.0939
	T3042017	Water			< 0.00500	0.00500
	T3042018	Water			< 0.00500	0.00500
	T3042019	Water			0.0260	0.00500
	T3042020	Water			< 0.00500	0.00500
	T3042021	Water			< 0.00500	0.00500
	T3042022	Water			0.0310	0.00500

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042023	Water			< 0.00500	0.00500
	T3042024	Water			< 0.00500	0.00500
	T3042025	Water			0.00800	0.00500
	T3042026	Water			< 0.00500	0.00500
	T3042027	Water			< 0.00500	0.00500
	T3042028	Water			0.0210	0.00500

Methyl Mercury

	T3042029	Fillets without Skin	0.482	0.00949	0.109	0.00215
	T3042030	Fillets without Skin	0.293	0.000800	0.0656	0.000179
	T3042031	Fillets without Skin	0.311	0.000900	0.0687	0.000199
	T3042032	Fillets without Skin	0.137	0.000850	0.0300	0.000186
	T3042033	Fillets without Skin	0.292	0.000870	0.0599	0.000178
	T3042034	Fillets without Skin	0.343	0.00417	0.0741	0.000901
	T3042035	Fillets without Skin	0.380	0.00449	0.0863	0.00102
	T3042036	Fillets without Skin	0.417	0.00442	0.0951	0.00101
	T3042037	Fillets without Skin	2.69	0.00958	0.471	0.00168
	T3042038	Fillets without Skin	1.64	0.00989	0.302	0.00182
	T3042039	Fillets without Skin	2.44	0.00941	0.456	0.00176
	T3042040	Fillets without Skin	1.87	0.0106	0.352	0.00199
	T3042041	Fillets without Skin	0.0591	0.00178	0.0110	0.000331

Analyte	Sample Number	Sample Matrix	Dry Weight (ppm)	DL Dry Weight (ppm)	Wet Weight (ppm)	DL Wet Weight (ppm)
	T3042042	Fillets without Skin	0.0349	0.00189	0.00597	0.000323
	T3042043	Fillets without Skin	0.0816	0.00170	0.0163	0.000340
	T3042044	Fillets without Skin	0.0441	0.00183	0.00736	0.000306
	T3042001	Water			0.0000000580	0.0000000110
	T3042002	Water			0.0000000710	0.0000000110
	T3042003	Water			0.0000000770	0.0000000110
	T3042004	Water			0.0000000880	0.0000000110
	T3042005	Water			0.000000134	0.0000000110
	T3042006	Water			0.000000143	0.0000000110
	T3042007	Water			0.000000159	0.0000000110
	T3042008	Water			0.000000159	0.0000000110
	T3042009	Water			0.000000418	0.0000000110
	T3042010	Water			0.000000152	0.0000000110
	T3042011	Water			0.0000000680	0.0000000110
	T3042012	Water			< 0.0000000110	0.0000000110
	T3042013	Water			0.0000000370	0.0000000110
	T3042014	Water			0.0000000170	0.0000000110
	T3042015	Water			0.0000000230	0.0000000110
	T3042016	Water			0.0000000200	0.0000000110

5. Procedural Blanks

Analyte	Lab Sample Number	Lab Sample Matrix	Result Total UG	** BEC (ppm/%)	Basis
Silver					
	Bla15819	Water	0.000606	< 0.000200	Wet
Aluminum					
	Bla15571	Animal Tissue	0.340	< 4.82	Dry
	Bla15576	Animal Tissue	0.767	< 4.11	Dry
	Bla15819	Water	-0.00660	< 0.00100	Wet
Arsenic					
	Bla15576	Animal Tissue	-0.00455	< 1.64	Dry
	Bla16043	Water	0.0000861	< 0.000200	Wet
	Bla16048	Animal Tissue	0.0288	< 0.193	Dry
Boron					
	Bla15571	Animal Tissue	0.0752	< 0.966	Dry
	Bla15576	Animal Tissue	0.0851	< 0.823	Dry
	Bla15819	Water	-0.0000564	< 0.000200	Wet
Barium					
	Bla15571	Animal Tissue	-0.00197	< 0.0981	Dry
	Bla15576	Animal Tissue	0.00572	< 0.0819	Dry
	Bla15819	Water	0.000	< 0.0000200	Wet
Beryllium					
	Bla15571	Animal Tissue	0.00196	< 0.0480	Dry
	Bla15576	Animal Tissue	0.00190	< 0.0410	Dry
	Bla15819	Water	0.000000300	< 0.0000100	Wet
Calcium					
	Bla15571	Animal Tissue	1.19	5.86	Dry
	Bla15576	Animal Tissue	0.595	< 4.10	Dry
	Bla15819	Water	0.00150	< 0.000400	Wet
Cadmium					
	Bla16043	Water	0.00000560	< 0.0000500	Wet
	Bla16048	Animal Tissue	0.00107	< 0.0482	Dry
	Bla16053	Animal Tissue	0.00123	< 0.0411	Dry

Analyte	Lab Sample Number	Lab Sample Matrix	Result Total UG	** BEC (ppm/%)	Basis
Cobalt					
	Bla15571	Animal Tissue	0.0393	< 0.480	Dry
	Bla15576	Animal Tissue	0.00358	< 0.410	Dry
	Bla15819	Water	0.00150	< 0.000100	Wet
Chromium					
	Bla15571	Animal Tissue	0.0294	< 0.480	Dry
	Bla15576	Animal Tissue	0.00366	< 0.410	Dry
	Bla15819	Water	-0.000513	< 0.000100	Wet
Copper					
	Bla15571	Animal Tissue	0.0314	< 0.480	Dry
	Bla15576	Animal Tissue	0.0571	< 0.410	Dry
	Bla15819	Water	-0.00120	< 0.000100	Wet
Iron					
	Bla15571	Animal Tissue	0.106	< 0.966	Dry
	Bla15576	Animal Tissue	0.0534	< 0.823	Dry
	Bla15819	Water	-0.00280	< 0.000200	Wet
Mercury					
	Bla15737	Animal Tissue	0.0000854	< 0.00868	Dry
	Bla15742	Animal Tissue	0.000113	< 0.00744	Dry
	Bla16021	Water	0.000000200	< 0.000000500	Wet
Potassium					
	Bla15571	Animal Tissue	0.679	< 9.66	Dry
	Bla15576	Animal Tissue	2.04	8.78	Dry
	Bla15819	Water	0.00770	< 0.00200	Wet
Magnesium					
	Bla15571	Animal Tissue	0.0433	< 0.981	Dry
	Bla15576	Animal Tissue	0.0687	< 0.819	Dry
	Bla15819	Water	-0.0000952	< 0.000200	Wet
Manganese					
	Bla15571	Animal Tissue	-0.00197	< 0.191	Dry
	Bla15576	Animal Tissue	0.00381	< 0.164	Dry
	Bla15819	Water	-0.000601	< 0.0000400	Wet
Molybdenum					

Analyte	Lab Sample Number	Lab Sample Matrix	Result Total UG	** BEC (ppm/%)	Basis
	Bla15571	Animal Tissue	0.0748	< 0.966	Dry
	Bla15576	Animal Tissue	0.0401	< 0.823	Dry
	Bla15819	Water	-0.00800	< 0.000200	Wet
Sodium					
	Bla15571	Animal Tissue	3.47	< 193	Dry
	Bla15576	Animal Tissue	0.732	< 165	Dry
	Bla15819	Water	0.0807	< 0.0400	Wet
Nickel					
	Bla15571	Animal Tissue	0.0492	< 0.480	Dry
	Bla15576	Animal Tissue	0.0344	< 0.410	Dry
	Bla15819	Water	-0.00101	< 0.000100	Wet
Phosphorus					
	Bla15571	Animal Tissue	-2.22	< 4.82	Dry
	Bla15576	Animal Tissue	-0.389	< 4.11	Dry
	Bla15819	Water	0.0629	0.00126	Wet
Lead					
	Bla16043	Water	-0.00000310	< 0.0000500	Wet
	Bla16048	Animal Tissue	0.0110	0.0540	Dry
	Bla16053	Animal Tissue	0.0125	0.0540	Dry
Sulfur					
	Bla15571	Animal Tissue	1.99	< 9.81	Dry
	Bla15576	Animal Tissue	2.36	10.2	Dry
	Bla15819	Water	-0.0648	< 0.00200	Wet
Selenium					
	Bla15396	Animal Tissue	0.0000234	< 0.0241	Dry
	Bla15401	Animal Tissue	-0.0000399	< 0.0206	Dry
	Bla16065	Water	0.000335	< 0.000400	Wet
Strontium					
	Bla15571	Animal Tissue	0.00197	< 0.0480	Dry
	Bla15576	Animal Tissue	0.00382	< 0.0410	Dry
	Bla15819	Water	-0.000105	< 0.0000100	Wet
Vanadium					
	Bla15571	Animal Tissue	-0.0000790	< 0.966	Dry

Analyte	Lab Sample Number	Lab Sample Matrix	Result Total UG	** BEC (ppm/%)	Basis
	Bla15576	Animal Tissue	-0.0173	< 0.823	Dry
	Bla15819	Water	-0.000189	< 0.000200	Wet
Zinc					
	Bla15571	Animal Tissue	0.0802	< 0.480	Dry
	Bla15576	Animal Tissue	0.0665	< 0.410	Dry
	Bla15819	Water	0.000709	< 0.000100	Wet
Methyl Mercury					
	Bla15970	Animal Tissue	0.000164	0.000803	Dry
	Bla16006	Water	0.000000300	< 0.000000100	Wet

** Blank Equivalent Concentration

6. Duplicates

Analyte	Sample Number	Sample Matrix	Basis	Initial Result (ppm/%)	Duplicate Result (ppm/%)	Average	Relative Percent Diff.
Silver							
	T3042023	Water	Wet	< 0.0100	< 0.0100	0.00500	0.000
Aluminum							
	T3042029	Fillets without Skin	Dry	< 4.71	< 4.86	2.39	3.13
	T3042045	Offal	Dry	26.8	25.0	25.9	6.95
	T3042023	Water	Wet	0.0800	0.0800	0.0800	0.000
Arsenic							
	T3042029	Fillets without Skin	Dry	0.363	0.305	0.334	17.4
	T3042045	Offal	Dry	< 1.85	< 1.85	0.925	0.000
	T3042023	Water	Wet	0.00820	0.00860	0.00840	4.76
Boron							
	T3042029	Fillets without Skin	Dry	< 0.942	< 0.972	0.478	3.13
	T3042045	Offal	Dry	< 0.924	< 0.925	0.462	0.110
	T3042023	Water	Wet	0.130	0.131	0.130	0.770
Barium							
	T3042029	Fillets without Skin	Dry	< 0.0940	< 0.0970	0.0478	3.14
	T3042045	Offal	Dry	9.24	9.28	9.26	0.430
	T3042023	Water	Wet	0.0900	0.0880	0.0890	2.25
Beryllium							
	T3042029	Fillets without Skin	Dry	< 0.0471	< 0.0486	0.0239	3.13
	T3042045	Offal	Dry	< 0.0462	< 0.0463	0.0231	0.220
	T3042023	Water	Wet	< 0.000500	< 0.000500	0.000250	0.000
Calcium							
	T3042029	Fillets without Skin	Dry	679	470.	574	36.4
	T3042045	Offal	Dry	22200	23700	23000	6.54

Analyte	Sample Number	Sample Matrix	Basis	Initial Result (ppm/%)	Duplicate Result (ppm/%)	Average	Relative Percent Diff.
	T3042023	Water	Wet	22.7	22.2	22.4	2.23
Cadmium							
	T3042029	Fillets without Skin	Dry	< 0.0471	< 0.0486	0.0239	3.13
	T3042045	Offal	Dry	< 0.0462	< 0.0463	0.0231	0.220
	T3042023	Water	Wet	< 0.0000500	< 0.0000500	0.0000250	0.000
Cobalt							
	T3042029	Fillets without Skin	Dry	< 0.471	< 0.486	0.239	3.13
	T3042045	Offal	Dry	< 0.462	< 0.463	0.231	0.220
	T3042023	Water	Wet	< 0.00500	< 0.00500	0.00250	0.000
Chromium							
	T3042029	Fillets without Skin	Dry	< 0.471	< 0.486	0.239	3.13
	T3042045	Offal	Dry	0.709	0.645	0.677	9.45
	T3042023	Water	Wet	< 0.00500	< 0.00500	0.00250	0.000
Copper							
	T3042029	Fillets without Skin	Dry	1.50	1.57	1.54	4.56
	T3042045	Offal	Dry	2.87	2.75	2.81	4.27
	T3042023	Water	Wet	< 0.00500	< 0.00500	0.00250	0.000
Iron							
	T3042029	Fillets without Skin	Dry	14.6	15.1	14.8	3.37
	T3042045	Offal	Dry	117	114	116	2.60
	T3042023	Water	Wet	0.0400	0.0400	0.0400	0.000
Mercury							
	T3042029	Fillets without Skin	Dry	0.489	0.494	0.492	1.02
	T3042045	Offal	Dry	0.343	0.352	0.348	2.59
	T3042026	Water	Wet	< 0.000000500	< 0.000000500	0.000000250	0.000
Potassium							
	T3042029	Fillets without Skin	Dry	15200	15600	15400	2.60

Analyte	Sample Number	Sample Matrix	Basis	Initial Result (ppm/%)	Duplicate Result (ppm/%)	Average	Relative Percent Diff.
		Skin					
	T3042045	Offal	Dry	10000	9740	9870	2.63
	T3042023	Water	Wet	4.51	4.47	4.49	0.890
Magnesium							
	T3042029	Fillets without Skin	Dry	1160	1190	1180	2.55
	T3042045	Offal	Dry	1010	1010	1010	0.000
	T3042023	Water	Wet	9.29	9.14	9.22	1.63
Manganese							
	T3042029	Fillets without Skin	Dry	0.556	0.515	0.536	7.66
	T3042045	Offal	Dry	36.4	36.9	36.6	1.36
	T3042023	Water	Wet	< 0.00200	< 0.00200	0.00100	0.000
Molybdenum							
	T3042029	Fillets without Skin	Dry	< 0.942	< 0.972	0.478	3.13
	T3042045	Offal	Dry	< 0.924	< 0.925	0.462	0.110
	T3042023	Water	Wet	< 0.0100	< 0.0100	0.00500	0.000
Sodium							
	T3042029	Fillets without Skin	Dry	925	877	901	5.33
	T3042045	Offal	Dry	3520	3510	3520	0.280
	T3042023	Water	Wet	65.0	64.9	65.0	0.150
Nickel							
	T3042029	Fillets without Skin	Dry	< 0.471	< 0.486	0.239	3.13
	T3042045	Offal	Dry	< 0.462	< 0.463	0.231	0.220
	T3042023	Water	Wet	< 0.00500	< 0.00500	0.00250	0.000
Phosphorus							
	T3042029	Fillets without Skin	Dry	11000	11100	11000	0.900
	T3042045	Offal	Dry	17500	18000	17800	2.82
	T3042023	Water	Wet	0.103	0.100	0.102	2.96

Analyte	Sample Number	Sample Matrix	Basis	Initial Result (ppm/%)	Duplicate Result (ppm/%)	Average	Relative Percent Diff.
Lead							
	T3042029	Filletts without Skin	Dry	0.234	0.291	0.262	21.7
	T3042045	Offal	Dry	0.124	0.120	0.122	3.28
	T3042023	Water	Wet	0.0000700	0.0000700	0.0000700	0.000
Sulfur							
	T3042029	Filletts without Skin	Dry	8340	8430	8380	1.07
	T3042045	Offal	Dry	7320	7170	7240	2.07
	T3042023	Water	Wet	10.7	10.7	10.7	0.000
Selenium							
	T3042029	Filletts without Skin	Dry	1.25	1.23	1.24	1.61
	T3042045	Offal	Dry	1.39	1.03	1.21	29.8
	T3042023	Water	Wet	0.000520	0.000540	0.000530	3.77
Strontium							
	T3042029	Filletts without Skin	Dry	0.603	0.321	0.462	61.0
	T3042045	Offal	Dry	29.4	30.7	30.0	4.33
	T3042023	Water	Wet	0.339	0.337	0.338	0.590
Vanadium							
	T3042029	Filletts without Skin	Dry	< 0.942	< 0.972	0.478	3.13
	T3042045	Offal	Dry	< 0.924	< 0.925	0.462	0.110
	T3042023	Water	Wet	0.0100	0.0100	0.0100	0.000
Zinc							
	T3042029	Filletts without Skin	Dry	13.3	13.5	13.4	1.49
	T3042045	Offal	Dry	83.0	83.4	83.2	0.480
	T3042023	Water	Wet	< 0.00500	< 0.00500	0.00250	0.000
Methyl Mercury							
	T3042029	Filletts without Skin	Dry	0.482	0.397	0.440	19.3

Analyte	Sample Number	Sample Matrix	Basis	Initial Result (ppm/%)	Duplicate Result (ppm/%)	Average	Relative Percent Diff.
	T3042001	Water	Wet	0.000000580	0.000000710	0.000000645	20.2
	T3042005	Water	Wet	0.00000134	0.00000125	0.00000130	6.95
	T3042009	Water	Wet	0.00000418	0.00000442	0.00000430	5.58
	T3042013	Water	Wet	0.000000370	0.000000200	0.000000285	59.6

7. Spike Recoveries

Analyte	Sample Number	Sample Matrix	Basis	Spike Level (ppm/%)	Amount Recovered (ppm/%)	*** Spike Background	Percent Recovery
Silver							
	T3042024	Water	Wet	0.0500	0.0450	10.0	90.0
Aluminum							
	T3042038	Filletts without Skin	Dry	193	191	34.0	98.9
	T3042053	Offal	Dry	191	220.	1.25	115
	T3042024	Water	Wet	1.00	0.964	6.02	96.4
Arsenic							
	T3042038	Filletts without Skin	Dry	19.3	18.6	57.7	96.0
	T3042053	Offal	Dry	19.1	18.6	21.1	97.2
	T3042024	Water	Wet	0.00400	0.00390	0.480	97.5
Boron							
	T3042038	Filletts without Skin	Dry	48.4	46.8	102	96.8
	T3042053	Offal	Dry	47.8	45.3	12.7	94.8
	T3042024	Water	Wet	0.500	0.505	3.73	101
Barium							
	T3042038	Filletts without Skin	Dry	9.67	10.0	35.2	104
	T3042053	Offal	Dry	9.56	29.0	0.0700	303
	T3042024	Water	Wet	0.500	0.532	5.38	106
Beryllium							
	T3042038	Filletts without Skin	Dry	0.967	1.03	40.8	106
	T3042053	Offal	Dry	0.956	1.02	42.2	106
	T3042024	Water	Wet	0.0100	0.0106	40.0	106
Calcium							
	T3042038	Filletts without Skin	Dry	967	1070	2.36	111
	T3042053	Offal	Dry	956	5600	0.0200	585

Analyte	Sample Number	Sample Matrix	Basis	Spike Level (ppm/%)	Amount Recovered (ppm/%)	*** Spike Background	Percent Recovery
	T3042024	Water	Wet	20.0	20.6	0.870	103
Cadmium							
	T3042038	Filletts without Skin	Dry	4.84	4.97	204	103
	T3042053	Offal	Dry	4.78	4.74	8.01	99.2
	T3042024	Water	Wet	0.00400	0.00408	160.	102
Cobalt							
	T3042038	Filletts without Skin	Dry	9.67	9.96	40.8	103
	T3042053	Offal	Dry	9.56	9.40	13.6	98.3
	T3042024	Water	Wet	0.100	0.0975	40.0	97.5
Chromium							
	T3042038	Filletts without Skin	Dry	19.3	20.0	81.6	103
	T3042053	Offal	Dry	19.1	18.8	7.19	98.5
	T3042024	Water	Wet	0.100	0.0935	40.0	93.5
Copper							
	T3042038	Filletts without Skin	Dry	19.3	20.2	18.4	104
	T3042053	Offal	Dry	19.1	19.7	8.82	103
	T3042024	Water	Wet	0.200	0.208	80.0	104
Iron							
	T3042038	Filletts without Skin	Dry	193	215	8.63	111
	T3042053	Offal	Dry	191	207	0.790	108
	T3042024	Water	Wet	2.00	2.13	25.0	106
Mercury							
	T3042038	Filletts without Skin	Dry	4.84	5.21	2.78	108
	T3042053	Offal	Dry	4.78	4.56	4.43	95.4
	T3042027	Water	Wet	0.0000400	0.0000452	160.	113
Potassium							
	T3042038	Filletts without Skin	Dry	9670	6900	0.640	71.4

Analyte	Sample Number	Sample Matrix	Basis	Spike Level (ppm/%)	Amount Recovered (ppm/%)	*** Spike Background	Percent Recovery
		Skin					
	T3042053	Offal	Dry	9560	7160	1.01	74.9
	T3042024	Water	Wet	5.00	5.73	1.09	115
Magnesium							
	T3042038	Filletts without Skin	Dry	967	1020	0.930	105
	T3042053	Offal	Dry	956	1030	0.670	108
	T3042024	Water	Wet	10.0	11.9	1.06	119
Manganese							
	T3042038	Filletts without Skin	Dry	48.4	52.5	77.4	109
	T3042053	Offal	Dry	47.8	56.1	0.620	117
	T3042024	Water	Wet	0.500	0.544	250.	109
Molybdenum							
	T3042038	Filletts without Skin	Dry	9.67	9.93	20.4	103
	T3042053	Offal	Dry	9.56	9.65	21.1	101
	T3042024	Water	Wet	0.500	0.481	100.	96.2
Sodium							
	T3042038	Filletts without Skin	Dry	4840	5030	2.67	104
	T3042053	Offal	Dry	4780	5310	0.620	111
	T3042024	Water	Wet	10.0	4.70	0.150	47.0
Nickel							
	T3042038	Filletts without Skin	Dry	9.67	9.86	40.8	102
	T3042053	Offal	Dry	9.56	9.16	5.20	95.8
	T3042024	Water	Wet	0.100	0.0965	40.0	96.5
Phosphorus							
	T3042038	Filletts without Skin	Dry	9670	9860	0.980	102
	T3042053	Offal	Dry	9560	10700	0.320	112
	T3042024	Water	Wet	0.500	0.487	4.46	97.4

Analyte	Sample Number	Sample Matrix	Basis	Spike Level (ppm/%)	Amount Recovered (ppm/%)	*** Spike Background	Percent Recovery
Lead							
	T3042038	Filletts without Skin	Dry	9.67	10.7	60.8	111
	T3042053	Offal	Dry	9.56	10.3	24.6	108
	T3042024	Water	Wet	0.00400	0.00424	44.4	106
Sulfur							
	T3042024	Water	Wet	10.0	9.30	0.910	93.0
Selenium							
	T3042038	Filletts without Skin	Dry	4.84	4.92	5.70	102
	T3042053	Offal	Dry	4.78	5.23	2.83	109
	T3042024	Water	Wet	0.0200	0.0174	38.5	87.1
Strontium							
	T3042038	Filletts without Skin	Dry	19.3	20.1	11.1	104
	T3042053	Offal	Dry	19.1	33.0	0.100	173
	T3042024	Water	Wet	0.200	0.226	0.580	113
Vanadium							
	T3042038	Filletts without Skin	Dry	19.3	20.2	40.8	105
	T3042053	Offal	Dry	19.1	19.5	10.5	102
	T3042024	Water	Wet	0.100	0.107	10.0	107
Zinc							
	T3042038	Filletts without Skin	Dry	96.7	96.9	4.58	100.
	T3042053	Offal	Dry	95.6	94.6	1.13	98.9
	T3042024	Water	Wet	1.00	1.04	400.	104
Methyl Mercury							
	T3042034	Filletts without Skin	Dry	2.70	2.68	7.88	99.0
	T3042003	Water	Wet	0.00000118	0.00000103	15.3	87.5
	T3042005	Water	Wet	0.00000118	0.00000108	8.81	91.2
	T3042009	Water	Wet	0.00000118	0.00000115	2.82	97.6

Analyte	Sample Number	Sample Matrix	Basis	Spike Level (ppm/%)	Amount Recovered (ppm/%)	*** Spike Background	Percent Recovery
	T3042013	Water	Wet	0.00000118	0.000000960	31.9	81.4

*** For a spike to be a valid measure of method accuracy, this ratio must be higher than 1.0.

8. Reference Materials

10. QAQC Summary

1. Procedural Blank Summary

Procedural Blank Summary of Blank Equivalent Concentration (BEC) Data

Within a lab sample matrix, there must be three or more Blank results for a given analyte in order to generate a report.

10.2. Duplicate Summary

Duplicate Summary of Relative Percent Difference (RPD) Data

Within a lab sample matrix and concentration range, there must be three or more Duplicate results for a given analyte in order to generate a report.

10.3. Spike Summary

Spike Summary of Percent Recovery (PR) Data

Within a lab sample matrix, there must be three or more Spike results for a given analyte in order to generate a report.

Analyte	Lab Sample Matrix	No. of Samples	Lowest PR	Highest PR	PR Mean	PR STD
Methyl Mercury	Water	4	81.36	97.63	89.43	6.81

PR = Percent Recovery STD = Standard Deviation

10.4. SRM Summary

Standard Reference Material Summary of Percent Recovery (PR) Data

Within an SRM ID, there must be three or more Recoveries for a given analyte in order to generate a report.

11. QA/QC Anomalies

1. Blank Frequency Anomalies

The required number of blank analyses were performed.

11.2. Duplicate Frequency Anomalies

The required number of duplicate analyses were performed.

11.3. Spike Frequency Anomalies

The required number of spike analyses were performed.

11.4. Reference Material Frequency Anomalies

The required number of Standard Reference Material analyses were performed.

11.5. Mass Spec Frequency Anomalies

No Carbamate, OC, or OP data exists in this set of results; therefore, the anomaly test was not performed.

11.6. Limit of Detection Anomalies

Limits of Detection were within the contract requirements with the following exceptions.

Analyte	Sample Number	Lab Matrix	* CRDL (ppm/%)	Basis	Acceptable To (ppm/%)	LOD (ppm/%)	See QA/QC Note No.
Arsenic	T3042046	Animal Tissue	0.5	Dry	1.50	1.82	1
Arsenic	T3042045	Animal Tissue	0.5	Dry	1.50	1.85	2
Arsenic	T3042047	Animal Tissue	0.5	Dry	1.50	1.87	3
Arsenic	T3042049	Animal Tissue	0.5	Dry	1.50	1.85	4

Limits of Detection were within the contract requirements with the following exceptions.

Analyte	Sample Number	Lab Matrix	* CRDL (ppm/%)	Basis	Acceptable To (ppm/%)	LOD (ppm/%)	See QA/QC Note No.
Arsenic	T3042052	Animal Tissue	0.5	Dry	1.50	1.86	5
Arsenic	T3042055	Animal Tissue	0.5	Dry	1.50	1.63	6
Arsenic	T3042060	Animal Tissue	0.5	Dry	1.50	1.51	7
Arsenic	T3042058	Animal Tissue	0.5	Dry	1.50	1.65	8
Arsenic	T3042056	Animal Tissue	0.5	Dry	1.50	1.83	9
Arsenic	T3042053	Animal Tissue	0.5	Dry	1.50	1.81	10
Arsenic	T3042050	Animal Tissue	0.5	Dry	1.50	1.85	11
Arsenic	T3042048	Animal Tissue	0.5	Dry	1.50	1.89	12
Cobalt	T3042029	Animal Tissue	0.05	Dry	0.150	0.471	13
Cobalt	T3042031	Animal Tissue	0.05	Dry	0.150	0.456	14
Cobalt	T3042032	Animal Tissue	0.05	Dry	0.150	0.489	15
Cobalt	T3042030	Animal Tissue	0.05	Dry	0.150	0.497	16
Cobalt	T3042033	Animal Tissue	0.05	Dry	0.150	0.485	17
Cobalt	T3042035	Animal Tissue	0.05	Dry	0.150	0.480	18
Cobalt	T3042037	Animal Tissue	0.05	Dry	0.150	0.468	19
Cobalt	T3042039	Animal Tissue	0.05	Dry	0.150	0.483	20
Cobalt	T3042057	Animal Tissue	0.05	Dry	0.150	0.310	21
Cobalt	T3042056	Animal Tissue	0.05	Dry	0.150	0.457	22
Cobalt	T3042055	Animal Tissue	0.05	Dry	0.150	0.409	23
Cobalt	T3042054	Animal Tissue	0.05	Dry	0.150	0.327	24
Cobalt	T3042052	Animal Tissue	0.05	Dry	0.150	0.465	25
Cobalt	T3042051	Animal Tissue	0.05	Dry	0.150	0.363	26
Cobalt	T3042050	Animal Tissue	0.05	Dry	0.150	0.461	27
Cobalt	T3042049	Animal Tissue	0.05	Dry	0.150	0.462	28
Cobalt	T3042048	Animal Tissue	0.05	Dry	0.150	0.472	29
Cobalt	T3042060	Animal Tissue	0.05	Dry	0.150	0.377	30
Cobalt	T3042059	Animal Tissue	0.05	Dry	0.150	0.336	31
Cobalt	T3042058	Animal Tissue	0.05	Dry	0.150	0.413	32
Cobalt	T3042047	Animal Tissue	0.05	Dry	0.150	0.467	33
Cobalt	T3042046	Animal Tissue	0.05	Dry	0.150	0.456	34
Cobalt	T3042045	Animal Tissue	0.05	Dry	0.150	0.462	35
Cobalt	T3042044	Animal Tissue	0.05	Dry	0.150	0.471	36

Limits of Detection were within the contract requirements with the following exceptions.

Analyte	Sample Number	Lab Matrix	* CRDL (ppm/%)	Basis	Acceptable To (ppm/%)	LOD (ppm/%)	See QA/QC Note No.
Cobalt	T3042043	Animal Tissue	0.05	Dry	0.150	0.483	37
Cobalt	T3042042	Animal Tissue	0.05	Dry	0.150	0.467	38
Cobalt	T3042041	Animal Tissue	0.05	Dry	0.150	0.484	39
Cobalt	T3042040	Animal Tissue	0.05	Dry	0.150	0.477	40
Cobalt	T3042038	Animal Tissue	0.05	Dry	0.150	0.474	41
Cobalt	T3042036	Animal Tissue	0.05	Dry	0.150	0.480	42
Cobalt	T3042034	Animal Tissue	0.05	Dry	0.150	0.468	43
Sodium	T3042019	Water	0.005	Wet	0.0150	2.00	44
Sodium	T3042022	Water	0.005	Wet	0.0150	2.00	45
Sodium	T3042025	Water	0.005	Wet	0.0150	2.00	46
Sodium	T3042028	Water	0.005	Wet	0.0150	2.00	47
Phosphorus	T3042019	Water	0.005	Wet	0.0150	0.0500	48
Phosphorus	T3042022	Water	0.005	Wet	0.0150	0.0500	49
Phosphorus	T3042025	Water	0.005	Wet	0.0150	0.0500	50
Phosphorus	T3042026	Water	0.005	Wet	0.0150	0.0500	51
Phosphorus	T3042027	Water	0.005	Wet	0.0150	0.0500	52
Phosphorus	T3042028	Water	0.005	Wet	0.0150	0.0500	53
Sulfur	T3042019	Water	0.005	Wet	0.0150	0.100	54
Sulfur	T3042022	Water	0.005	Wet	0.0150	0.100	55
Sulfur	T3042025	Water	0.005	Wet	0.0150	0.100	56
Sulfur	T3042028	Water	0.005	Wet	0.0150	0.100	57
Vanadium	T3042017	Water	0.001	Wet	0.00300	0.0100	58
Vanadium	T3042018	Water	0.001	Wet	0.00300	0.0100	59
Vanadium	T3042019	Water	0.001	Wet	0.00300	0.0100	60
Vanadium	T3042020	Water	0.001	Wet	0.00300	0.0100	61
Vanadium	T3042021	Water	0.001	Wet	0.00300	0.0100	62
Vanadium	T3042022	Water	0.001	Wet	0.00300	0.0100	63
Vanadium	T3042025	Water	0.001	Wet	0.00300	0.0100	64
Vanadium	T3042026	Water	0.001	Wet	0.00300	0.0100	65
Vanadium	T3042027	Water	0.001	Wet	0.00300	0.0100	66
Vanadium	T3042028	Water	0.001	Wet	0.00300	0.0100	67

* CRDL = Contract Required Detection Limit.

11.7. Blank Anomalies

Procedural Blank analyses were acceptable.

11.8. Duplicate Anomalies

All duplicate results were within normal limits with the following exceptions.

Analyte	Sample Number	Lab Matrix	LOD Mean	Initial Result ppm/%	Duplicate Result ppm/%	Relative Percent Diff.	See QA/QC Note No.
Calcium	T3042029	Animal Tissue	4.78	679	470.	36.4	68
Selenium	T3042045	Animal Tissue	0.0231	1.39	1.03	29.8	69
Strontium	T3042029	Animal Tissue	0.0479	0.603	0.321	61.0	70

11.9. Spike Anomalies

All spike results were within normal limits.

11.10. S.R.M. Anomalies

All SRM results were within normal limits with the following exceptions.

Analyte	S.R.M. ID	Certified Value	95% Confidence Interval	LOD (ppm/%)	Result (ppm/%)	% Recovery	See QA/QC Note No.
Strontium	NIST 2976	93.0	2.00	0.0458	67.8	72.9	71
Strontium	NIST 2976	93.0	2.00	0.0466	66.3	71.3	72

S.R.M Names

SRM ID	SRM Name
NIST 2976	Mussel Tissue

11.11. QA/QC Notes

QA/QC Note Number and Comments
1-12 LODs for arsenic were high due to an interference from CaCl. This should have no additional effect on the interpretation of the data.
13-67 These LODs were higher than the ECDMS default. They are acceptable.
68-70 The variability of these duplicate analyses was high. This should have no effect on the interpretation of the data.
71-72 Recovery of Sr from the SRM was slightly low. This should have no effect on the interpretation of the data.

12. Analytical Methods

Below are the analytical methods used by TERL to produce the results included in this report.

Method Codes:	001 005
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Lab Matrix	Analyte
Animal Tissue	Aluminum
	Boron
	Barium
	Beryllium
	Calcium
	Cobalt
	Chromium
	Copper
	Iron
	Potassium
	Magnesium
	Manganese
	Molybdenum
	Sodium
	Nickel
	Phosphorus
	Sulfur
	Strontium
	Vanadium
Zinc	

Method Code: 001

LABORATORY: Trace Element Research Laboratory

Digestion of biological tissue.

Liquid or solid biological tissue samples are wet digested with nitric acid and converted into acidic digest solutions for analysis by various atomic spectroscopy methods. When possible, tissue is freeze dried in order to minimize loss of analytes and to facilitate

subsequent sample preparation steps, and then homogenized to a fine powder by ball-milling in plastic containers. Approximately 0.20 to 0.25 g of powdered tissue is weighed into a Teflon reaction vessel and 3 ml of HNO₃ are added. The closed reaction vessel is heated in a 130 C oven until digestion is complete. Samples are then diluted to a final volume of 20 ml with quartz distilled water and stored in 1 oz. polyethylene bottles for later analysis by instrumental techniques.

Method Code: 005

LABORATORY: Trace Element Research Laboratory

Analysis of trace metals by inductively coupled plasma optical emission spectroscopy (ICP).

Liquid samples are nebulized and the resulting aerosol is transported to the plasma torch. Element-specific atomic-line emission spectra are produced by a inductively coupled argon plasma. The spectra are dispersed by a grating spectrometer, and the intensities of the lines are monitored by photomultiplier tubes or solid state detectors. Samples are quantitated by comparison with external standards. One or more internal standards may be incorporated to compensate for physical effects resulting from viscosity and varying levels of total dissolved solids in the samples. Background correction is required and is measured adjacent to analyte lines on samples during analysis.

Method Codes:

001 009

Lab Matrix	Analyte
Animal Tissue	Selenium

Method Code: 001

LABORATORY: Trace Element Research Laboratory

Digestion of biological tissue.

Liquid or solid biological tissue samples are wet digested with nitric acid and converted into acidic digest solutions for analysis by various atomic spectroscopy methods. When possible, tissue is freeze dried in order to minimize loss of analytes and to facilitate subsequent sample preparation steps, and then homogenized to a fine powder by ball-milling in plastic containers. Approximately 0.20 to 0.25 g of powdered tissue is weighed into a Teflon reaction vessel and 3 ml of HNO₃ are added. The closed reaction vessel is heated in a 130 C oven until digestion is complete. Samples are then diluted to a final volume of 20 ml with quartz distilled water and stored in 1 oz. polyethylene bottles for later analysis by instrumental techniques.

Method Code: 009

LABORATORY: Trace Element Research Laboratory

Analysis of trace metals by atomic fluorescence

spectroscopy (AFS).

Aqueous samples (including sample digests) are analyzed for mercury and hydride-forming elements (antimony, arsenic, and selenium) by atomic fluorescence. Analytes are introduced to the gas phase by reaction with a strong reducing agent (e.g. stannous chloride for mercury and sodium borohydride for the other elements), and free atoms are bombarded with light of element-specific wavelengths. Light that is released via atomic fluorescence is measured by a detector set at a right angle to the source. Because of the low background signal, AFS is extremely sensitive and is appropriate when other methods (e.g. GFAAS) lack the sensitivity to determine ambient concentrations. Spectral interferences are few, but the method is subject to chemical and matrix interferences that may impact the cold-vapor and hydride generation steps.

Method Codes:

001 016

Lab Matrix	Analyte
Animal Tissue	Arsenic
	Cadmium
	Lead

Method Code: 001

LABORATORY: Trace Element Research Laboratory

Digestion of biological tissue.

Liquid or solid biological tissue samples are wet digested with nitric acid and converted into acidic digest solutions for analysis by various atomic spectroscopy methods. When possible, tissue is freeze dried in order to minimize loss of analytes and to facilitate subsequent sample preparation steps, and then homogenized to a fine powder by ball-milling in plastic containers. Approximately 0.20 to 0.25 g of powdered tissue is weighed into a Teflon reaction vessel and 3 ml of HNO₃ are added. The closed reaction vessel is heated in a 130 C oven until digestion is complete. Samples are then diluted to a final volume of 20 ml with quartz distilled water and stored in 1 oz. polyethylene bottles for later analysis by instrumental techniques.

Method Code: 016

LABORATORY: Trace Element Research Laboratory

Analysis of trace metals in water samples by inductively coupled plasma-mass spectroscopy (ICP-MS).

Concentrations of trace elements in water samples are determined with an atomic spectroscopy method that relies on ionization of sample constituents in a high temperature argon plasma and separation of positively-charged ions on the basis of their mass:charge ratios (m:z) by a quadrupole mass spectrometer. The method offers extremely low detection limits but is subject to

interferences from atomic and molecular ions having values within 1 AMU of the target ions. Sample preconcentration and matrix elimination can sometimes eliminate these problems, along with those resulting from high total dissolved solids.

Method Codes:	003 007
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Lab Matrix	Analyte
Animal Tissue	Mercury

Method Code: 003

LABORATORY: Trace Element Research Laboratory

Digestion of water, soil, sediment, and biological tissue for mercury analysis.

Before samples are analyzed by the CVAAS method in use in this laboratory, the mercury is converted to the Hg²⁺ form. Mercury is digested by a modified version of EPA method 245.5 and 245.6. Sediment and tissue samples can be analyzed either freeze dried or on a wet basis. Sediment samples are homogenized by mixing before subsampling, while tissue samples are homogenized in the original sample containers either after freeze drying or with a Tekmar Tissumizer and subsampled. Samples are digested with nitric acid, sulfuric acid, potassium permanganate, and potassium persulfate in polypropylene tubes in a water bath at 90-95 C. Before analysis, hydroxylamine hydrochloride is added to reduce excess permanganate and the samples are brought to volume with distilled-deionized water.

Method Code: 007

LABORATORY: Trace Element Research Laboratory

Analysis of mercury by cold-vapor atomic absorption spectroscopy (CVAAS).

In this procedure, divalent mercury (Hg⁺⁺) in aqueous samples (digests of water, tissue or sediment samples) is reduced to the elemental state (Hg⁰) by a strong reducing agent (stannous chloride). Gaseous Hg⁰ enters the sweep gas and is introduced into an atomic absorption cell, where light produced by a mercury vapor lamp is absorbed by the free Hg atoms. Mercury in the sample is determined by comparing light absorption of the sample with that of external calibration standards.

Method Codes:	004 005
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Lab Matrix	Analyte
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Water	Silver
	Aluminum
	Boron
	Barium
	Beryllium
	Calcium
	Cobalt
	Chromium
	Copper
	Iron
	Potassium
	Magnesium
	Manganese
	Molybdenum
	Sodium
	Nickel
	Phosphorus
	Sulfur
	Strontium
	Vanadium
Zinc	

Method Code: 004

LABORATORY: Trace Element Research Laboratory

Digestion of water samples for "total recoverable" metals
(other than mercury).

Water samples are digested for two hours at 85 degrees Centigrade in polyethylene containers with ultrapure nitric and hydrochloric acids. Acid strength, on a vol:vol basis, is 1% HCl and 0.5% HNO₃. Sample aliquots for digestion are taken after vigorous shaking to assure resuspension of solids that may have settled. The original sample must have had preservative added (usually HNO₃) in order to ensure that metals do not adhere to the walls of the container.

Method Code: 005

LABORATORY: Trace Element Research Laboratory

Analysis of trace metals by inductively coupled plasma

optical emission spectroscopy (ICP).

Liquid samples are nebulized and the resulting aerosol is transported to the plasma torch. Element-specific atomic-line emission spectra are produced by an inductively coupled argon plasma. The spectra are dispersed by a grating spectrometer, and the intensities of the lines are monitored by photomultiplier tubes or solid state detectors. Samples are quantitated by comparison with external standards. One or more internal standards may be incorporated to compensate for physical effects resulting from viscosity and varying levels of total dissolved solids in the samples. Background correction is required and is measured adjacent to analyte lines on samples during analysis.

Method Codes:	004 009
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Lab Matrix	Analyte
Water	Selenium

Method Code: 004

LABORATORY: Trace Element Research Laboratory

Digestion of water samples for "total recoverable" metals
(other than mercury).

Water samples are digested for two hours at 85 degrees Centigrade in polyethylene containers with ultrapure nitric and hydrochloric acids. Acid strength, on a vol:vol basis, is 1% HCl and 0.5% HNO₃. Sample aliquots for digestion are taken after vigorous shaking to assure resuspension of solids that may have settled. The original sample must have had preservative added (usually HNO₃) in order to ensure that metals do not adhere to the walls of the container.

Method Code: 009

LABORATORY: Trace Element Research Laboratory

Analysis of trace metals by atomic fluorescence
spectroscopy (AFS).

Aqueous samples (including sample digests) are analyzed for mercury and hydride-forming elements (antimony, arsenic, and selenium) by atomic fluorescence. Analytes are introduced to the gas phase by reaction with a strong reducing agent (e.g. stannous chloride for mercury and sodium borohydride for the other elements), and free atoms are bombarded with light of element-specific wavelengths. Light that is released via atomic fluorescence is measured by a detector set at a right angle to the source. Because of the low background signal, AFS is extremely sensitive and is appropriate when other methods (e.g. GFAAS) lack the sensitivity to determine ambient concentrations. Spectral interferences are few, but the method is subject to chemical and matrix interferences that may impact the cold-vapor and hydride generation steps.

Method Codes:	004 016
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Lab Matrix	Analyte
Water	Arsenic
	Cadmium
	Lead

Method Code: 004

LABORATORY: Trace Element Research Laboratory

Digestion of water samples for "total recoverable" metals
(other than mercury).

Water samples are digested for two hours at 85 degrees Centigrade in polyethylene containers with ultrapure nitric and hydrochloric acids. Acid strength, on a vol:vol basis, is 1% HCl and 0.5% HNO₃. Sample aliquots for digestion are taken after vigorous shaking to assure resuspension of solids that may have settled. The original sample must have had preservative added (usually HNO₃) in order to ensure that metals do not adhere to the walls of the container.

Method Code: 016

LABORATORY: Trace Element Research Laboratory

Analysis of trace metals in water samples by inductively
coupled plasma-mass spectroscopy (ICP-MS).

Concentrations of trace elements in water samples are determined with an atomic spectroscopy method that relies on ionization of sample constituents in a high temperature argon plasma and separation of positively-charged ions on the basis of their mass:charge ratios (m:z) by a quadrupole mass spectrometer. The method offers extremely low detection limits but is subject to interferences from atomic and molecular ions having values within 1 AMU of the target ions. Sample preconcentration and matrix elimination can sometimes eliminate these problems, along with those resulting from high total dissolved solids.

Method Codes:	014
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Lab Matrix	Analyte
Animal Tissue	% Moisture

Method Code: 014

LABORATORY: Trace Element Research Laboratory

Moisture content of sediment, soil, and tissue samples.

Moisture content is determined by weight loss upon freeze-drying, and is expressed as weight percent of the original wet sample. Depending upon sample size, either the whole sample or a representative aliquot is frozen and then dried under vacuum until a constant weight is attained. Samples are prepared and dried using plastic materials, whenever possible, in order to minimize potential contamination artifacts that might impact subsequent trace element analysis.

Method Codes:

015

Lab Matrix

Analyte

Animal Tissue

Methyl Mercury

Method Code: 015

LABORATORY: Trace Element Research Laboratory

Preparation and analysis of tissue and sediment samples for methyl mercury (MeHg).

Methyl mercury and other alkyl mercury compounds are of concern because of their toxicities, and because they are commonly found in the environment. Bioaccumulation results in elevated concentrations in higher trophic levels, especially when lower trophic levels include fish. The procedure used to extract these compounds in the Trace Element Research Laboratory follows the method of Uthe et al. (JAOAC 55: 583-589, 1972), and measures the sum of all organo-mercury species extracted into the solvent. This determination is essentially equivalent to the GC method for analyzing MeHg in fish muscle tissue (where almost all of the organo mercury is present as MeHg). In other organs, such as kidneys, much of the organic mercury may be present as a form other than MeHg, and may not be measured by methods that employ detectors that are specific for halogenated compounds. Samples are analyzed either wet or after freeze-drying. Homogenized aliquots are extracted in to an organic solvent with potassium bromide and copper sulfate added to improve partitioning between phases. The organic phase is digested in combusted glass vials, using nitric and sulfuric acids and potassium permanganate, in order to convert all mercury species to ionic mercury and to remove traces of organic solvent that would otherwise impact the measurement. Analysis is based upon the cold vapor atomic absorption method, although cold vapor atomic fluorescence can be used when lower detection limits are required.

Method Codes:

025

Lab Matrix	Analyte
Water	Mercury

Method Code: 025
<p>LABORATORY: Trace Element Research Laboratory</p> <p>Determination of mercury in water</p> <p>Determination of mercury in water by purging, trapping, and atomic fluorescence. Total mercury is determined in water by oxidation with BrCl followed by reduction of Hg (II) to Hg(0) with SnCl₂. Hg(0)g is purged from the aqueous sample with argon and trapped on a gold column. The trapped Hg is released by heating and then analyzed by atomic fluorescence.</p>

Method Codes:	026
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Lab Matrix	Analyte
Water	Methyl Mercury
Animal Tissue	Methyl Mercury

Method Code: 026
<p>LABORATORY: Trace Element Research Laboratory</p> <p>Determination of methyl mercury in water</p> <p>Determination of methyl mercury in water by distillation, ethylation, trapping, gas chromatography, and atomic fluorescence. Methyl mercury in water is distilled to separate it from interfering species and then ethylated with sodium tetraethyl borate. Methyl ethyl mercury is trapped on a Tenax column and then separated on an isothermal GC column. Following pyrolysis of the separated species, Hg is detected by atomic fluorescence.</p>