Quality Analysis ... *Innovative Technologies*

Date Submitted: 15-Oct-18
Invoice No.: A18-15011-TD
Invoice Date: 30-Oct-18
Your Reference: BMK-2017

MacDonald Mines Exploration Ltd.
145 Wellington Street West
Suite 1001
Toronto ON M5J 1H8
Canada

ATTN: Vice President of Exploration Quentin Yarie (INV+CERT)

CERTIFICATE OF ANALYSIS

9 Rock samples were submitted for analysis.

The following analytical package(s) were requested: Code ME-MS61-RedPine Total Digestion ICP & ICP/MS

REPORT **A18-15011-TD**

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Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

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Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5
Method Code	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP
709694	0.45	7.40	319	20	0.79	1.73	2.77	1.14	6.16	8.8	26	0.08	990	1.00	14.9	< 0.05	3.2	0.043	0.02	2.4	2.6	0.61	276
709695	20.3	10.2	> 10000	20	0.54	13.3	0.27	0.39	7.76	168	119	0.07	> 10000	9.23	13.5	0.11	2.2	1.58	0.05	3.4	2.7	0.75	115
709696	16.7	6.13	> 10000	10	0.58	11.9	0.20	0.47	13.2	149	69	0.13	> 10000	10.0	13.4	0.17	2.1	1.30	0.03	4.4	3.6	0.79	135
709697	7.55	9.98	> 10000	20	0.65	10.4	0.24	0.26	11.8	103	42	< 0.05	> 10000	6.28	14.0	0.14	2.1	0.677	0.05	3.5	2.5	0.60	96
709698	0.12	6.37	91.0	90	0.28	0.41	5.31	0.65	9.24	44.9	249	0.59	73.7	6.60	11.1	0.26	0.7	0.042	0.33	4.2	16.8	6.31	1090
709699	1.01	4.91	1350	20	0.43	1.06	0.36	3.84	7.46	252	46	0.09	1250	1.23	9.83	0.07	1.8	0.068	0.03	2.6	2.2	0.55	121
709700	6.56	4.79	> 10000	20	0.36	60.4	0.26	0.72	3.07	> 10000	84	0.14	> 10000	7.90	8.84	0.18	1.1	0.299	0.02	1.3	4.0	0.77	138
709701	0.42	6.24	147	40	0.12	0.39	5.40	1.11	13.7	54.3	463	0.43	286	7.01	13.2	0.10	0.6	0.075	0.11	7.3	16.6	6.65	1150
709702	1.94	5.24	70.4	230	0.49	0.70	3.96	0.18	10.1	34.9	462	0.58	122	4.51	11.7	0.07	1.6	0.031	0.73	5.7	30.8	4.39	707

Analyte Symbol	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1	0.1
Method Code	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS
709694	0.17	5.69	3.6	9.8	130	5.0	0.3	< 0.002	0.09	0.42	8.0	< 1	2.8	50.6	0.34	0.58	6.5	0.210	< 0.02	1.2	30	1.3	7.0
709695	1.86	4.35	1.8	178	190	20.6	0.1	< 0.002	8.37	18.6	12.0	17	3.8	26.1	0.29	2.18	2.8	0.131	0.74	1.1	42	0.9	13.4
709696	2.12	4.15	1.6	221	200	20.8	0.3	< 0.002	8.66	19.6	11.7	17	5.1	26.7	0.28	1.36	5.4	0.115	0.54	1.2	46	1.0	11.4
709697	2.70	4.47	1.8	124	130	10.1	0.1	< 0.002	4.67	15.9	10.8	10	2.2	31.4	0.30	1.07	4.6	0.115	0.23	1.0	33	0.9	13.0
709698	0.27	1.00	1.0	174	100	4.0	13.1	< 0.002	0.05	0.96	47.0	< 1	1.3	108	0.13	< 0.05	0.9	0.207	0.07	0.3	194	0.7	8.7
709699	0.16	3.52	2.2	37.5	50	3.8	0.7	< 0.002	0.21	1.27	5.8	< 1	0.9	24.9	0.39	0.16	4.6	0.134	< 0.02	0.6	25	1.1	4.8
709700	3.39	3.09	< 0.1	2790	40	13.4	0.6	0.003	6.37	56.3	7.9	25	1.0	30.4	< 0.05	9.56	6.0	0.065	0.11	0.7	31	0.6	6.5
709701	0.29	0.84	1.1	143	90	3.8	3.1	< 0.002	0.05	1.03	43.0	< 1	0.9	84.3	0.11	< 0.05	0.8	0.195	< 0.02	0.7	200	0.4	11.5
709702	6.03	1.12	2.0	223	260	40.4	26.8	< 0.002	0.87	0.77	19.9	< 1	0.6	76.8	0.17	0.35	1.9	0.229	0.22	0.5	134	12.3	8.7

Analyte Symbol	Yb	Zn	Zr
Unit Symbol	ppm	ppm	ppm
Lower Limit	0.1	2	0.5
Method Code	TD-MS	TD-ICP	TD-MS
709694	0.9	58	120
709695	1.3	28	97.4
709696	1.2	30	91.8
709697	1.4	21	89.0
709698	1.0	82	24.6
709699	0.6	187	70.2
709700	0.7	37	129
709701	1.2	111	24.9
709702	1.1	75	54.5

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5
Method Code	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP
GXR-4 Meas	3.52		109		2.10	18.5		0.30	103	14.6		2.46	6620		18.8		1.3	0.215		54.9	11.4		
GXR-4 Cert	4.00		98.0		1.90	19.0		0.860	102	14.6		2.80	6520		20.0		6.30	0.270		64.5	11.1		
GXR-4 Meas	3.52		109		2.10	18.5		0.30	103	14.6		2.46	6620		18.8		1.3	0.215		54.9	11.4		
GXR-4 Cert	4.00		98.0		1.90	19.0		0.860	102	14.6		2.80	6520		20.0		6.30	0.270		64.5	11.1		
GXR-4 Meas	3.64		112		2.13	17.9		0.29	108	13.7		2.49	6370		17.8		1.2	0.227		54.8	11.1		
GXR-4 Cert	4.00		98.0		1.90	19.0		0.860	102	14.6		2.80	6520		20.0		6.30	0.270		64.5	11.1		
SDC-1 Meas		7.21	3.1	600	2.84		1.03		85.8	17.1	44	3.85	29.1	4.42	16.9		1.1		1.46	37.4	37.5	0.98	823
SDC-1 Cert		8.34	0.220	630	3.00		1.00		93.00	18.0	64.00	4.00	30.000	4.82	21.00		8.30		2.72	42.00	34.0	1.02	880.00
SDC-1 Meas		7.51	< 0.2	610	2.74		1.05		80.2	17.2	39	3.78	31.0	4.45	18.4		0.8		2.57	35.2	35.1	0.99	825
SDC-1 Cert		8.34	0.220	630	3.00		1.00		93.00	18.0	64.00	4.00	30.000	4.82	21.00		8.30		2.72	42.00	34.0	1.02	880.00
GXR-6 Meas	0.31		267		1.09	0.22		0.10	34.0	14.0		4.03	72.2		27.4		2.1	0.063		12.6	34.5		
GXR-6 Cert	1.30		330		1.40	0.290		1.00	36.0	13.8		4.20	66.0		35.0		4.30	0.260		13.9	32.0		
GXR-6 Meas	0.31		267		1.09	0.22		0.10	34.0	14.0		4.03	72.2		27.4		2.1	0.063		12.6	34.5		
GXR-6 Cert	1.30		330		1.40	0.290		1.00	36.0	13.8		4.20	66.0		35.0		4.30	0.260		13.9	32.0		
GXR-6 Meas	0.35		242		1.08	0.23		0.07	33.4	14.2		4.13	73.8		18.8		1.8	0.059		11.6	36.0		
GXR-6 Cert	1.30		330		1.40	0.290		1.00	36.0	13.8		4.20	66.0		35.0		4.30	0.260		13.9	32.0		
OREAS 97 (4 Acid) Meas	19.1					38.0				61.0			> 10000										
OREAS 97 (4 Acid) Cert	19.6					40.1				62.9			63100.00										
OREAS 97 (4 Acid) Meas	19.1					38.0				61.0			> 10000										
OREAS 97 (4 Acid) Cert	19.6					40.1				62.9			63100.00										
OREAS 97 (4 Acid) Meas	19.7					38.0				61.7			> 10000										
OREAS 97 (4 Acid) Cert	19.6					40.1				62.9			63100.00										
OREAS 98 (4 Acid) Meas	45.1					83.6				120			> 10000										
OREAS 98 (4 Acid) Cert	45.1					97.2				121			148000.0										
OREAS 98 (4 Acid) Meas	45.1					83.6				120			> 10000										
OREAS 98 (4 Acid) Cert	45.1					97.2				121			148000.0										
OREAS 98 (4 Acid) Meas	44.2					84.7				123			> 10000										
OREAS 98 (4 Acid) Cert	45.1					97.2				121			148000.0										
DNC-1a Meas				100			7.77			57.5	128		102	6.86	14.4					3.7	5.0		
DNC-1a Cert				118			8.21			57	270		100	6.97	15					3.6	5.2		
DNC-1a Meas										57.5			102		14.4					3.7	5.0		
DNC-1a Cert										57			100		15					3.6	5.2		
SBC-1 Meas			24.1	690	3.08	0.71		0.38	86.4	22.0	65	7.29	33.1		25.0		2.6			45.9	167		

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5
Method Code	TD-MS	TD-ICP	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP
SBC-1 Cert			25.7	788.0	3.20	0.70		0.40	108.0	22.7	109	8.2	31.0		27.0		3.7			52.5	163		
SBC-1 Meas			24.1	770	3.08	0.71		0.38	86.4	22.0	89	7.29	33.1		25.0		2.6			45.9	167		
SBC-1 Cert			25.7	788.0	3.20	0.70		0.40	108.0	22.7	109	8.2	31.0		27.0		3.7			52.5	163		
SBC-1 Meas			26.3		2.89	0.70		0.33	88.7	22.3		7.45	31.7		26.7		3.5			47.2	160		
SBC-1 Cert			25.7		3.20	0.70		0.40	108.0	22.7		8.2	31.0		27.0		3.7			52.5	163		
SBC-1 Meas			27.0		3.10	0.70		0.40	105	21.6		7.87	32.0		17.8		3.6			48.0	168		
SBC-1 Cert			25.7		3.20	0.70		0.40	108.0	22.7		8.2	31.0		27.0		3.7			52.5	163		
OREAS 45d (4-Acid) Meas			7.4		0.72	0.35			34.8	29.4		3.64	364		21.3		3.3	0.092		17.1	22.9		
OREAS 45d (4-Acid) Cert			13.8		0.79	0.31			37.20	29.50		3.910	371		21.20		3.830	0.096		16.9	21.5		
OREAS 45d (4-Acid) Meas			7.4		0.72	0.35			34.8	29.4		3.64	364		21.3		3.3	0.092		17.1	22.9		
OREAS 45d (4-Acid) Cert			13.8		0.79	0.31			37.20	29.50		3.910	371		21.20		3.830	0.096		16.9	21.5		
OREAS 45d (4-Acid) Meas			6.1		0.76	0.33			34.8	27.9		3.63	347		20.6		1.0	0.073		16.0	21.4		
OREAS 45d (4-Acid) Cert			13.8		0.79	0.31			37.20	29.50		3.910	371		21.20		3.830	0.096		16.9	21.5		
OREAS 96 (4 Acid) Meas	11.4					26.9				48.6			> 10000										
OREAS 96 (4 Acid) Cert	11.5					26.3				49.9			39300										
OREAS 96 (4 Acid) Meas	11.4					26.9				48.6			> 10000										
OREAS 96 (4 Acid) Cert	11.5					26.3				49.9			39300										
OREAS 96 (4 Acid) Meas	11.6					26.6				53.3			> 10000										
OREAS 96 (4 Acid) Cert	11.5					26.3				49.9			39300										
709696 Orig	16.1	6.25	> 10000	10	0.57	11.7	0.20	0.46	13.6	149	69	0.12	> 10000	10.1	13.3	0.17	2.0	1.33	0.03	4.5	3.5	0.80	134
709696 Dup	17.3	6.02	> 10000	10	0.59	12.1	0.20	0.47	12.8	149	68	0.13	> 10000	9.86	13.4	0.17	2.1	1.27	0.03	4.2	3.6	0.78	135
709702 Orig	1.93	5.32	71.3	240	0.51	0.70	4.00	0.17	10.1	35.1	519	0.57	123	4.56	11.5	0.06	1.6	0.035	0.74	5.7	30.6	4.44	714
709702 Dup	1.94	5.16	69.5	230	0.48	0.70	3.91	0.19	10.1	34.7	405	0.59	121	4.45	11.8	0.08	1.5	0.027	0.72	5.8	31.0	4.33	699
Method Blank	< 0.01		< 0.2		< 0.05	0.04		< 0.02	< 0.01	< 0.1		< 0.05	0.2		< 0.05	< 0.05	< 0.1	< 0.005		< 0.5	< 0.2		
Method Blank	< 0.01		< 0.2		< 0.05	0.05		< 0.02	0.01	< 0.1		< 0.05	0.3		0.09	< 0.05	< 0.1	< 0.005		< 0.5	< 0.2		
Method Blank	< 0.01		1.4		< 0.05	0.04		< 0.02	< 0.01	< 0.1		< 0.05	0.6		0.08	< 0.05	< 0.1	< 0.005		< 0.5	< 0.2		
Method Blank	< 0.01		< 0.2		< 0.05	0.04		< 0.02	< 0.01	< 0.1		< 0.05	0.4		0.08	< 0.05	< 0.1	< 0.005		< 0.5	< 0.2		
Method Blank	< 0.01		0.2		< 0.05	0.04		< 0.02	< 0.01	< 0.1		< 0.05	< 0.2		< 0.05	< 0.05	< 0.1	< 0.005		< 0.5	< 0.2		
Method Blank	< 0.01	< 0.01	< 0.2	< 10	< 0.05	0.04	< 0.01	< 0.02	< 0.01	< 0.1		< 0.05	0.6	< 0.01	< 0.05	< 0.05	< 0.1	< 0.005	< 0.01	< 0.5	< 0.2	< 0.01	< 5
Method Blank	< 0.01	< 0.01	< 0.2	< 10	< 0.05	0.04	< 0.01	< 0.02	< 0.01	< 0.1		< 0.05	0.2	< 0.01	< 0.05	< 0.05	< 0.1	< 0.005	< 0.01	< 0.5	< 0.2	< 0.01	< 5

Analyte Symbol	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1	0.1
Method Code	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS
GXR-4 Meas	322		9.4	42.2		53.3	111			4.54	7.4	6	7.5	204	0.55	0.93	19.6		3.05	6.2		32.8	12.9
GXR-4 Cert	310		10.0	42.0		52.0	160			4.80	7.70	5.60	5.60	221	0.790	0.970	22.5		3.20	6.20		30.8	14.0
GXR-4 Meas	322		9.4	42.2		53.3	111			4.54	7.4	6	7.5	204	0.55	0.93	19.6		3.05	6.2		32.8	12.9
GXR-4 Cert	310		10.0	42.0		52.0	160			4.80	7.70	5.60	5.60	221	0.790	0.970	22.5		3.20	6.20		30.8	14.0
GXR-4 Meas	325		9.7	38.4		50.3	124			4.57	6.9	6	7.7	215	0.54	0.96	19.2		3.05	6.0		32.2	13.0
GXR-4 Cert	310		10.0	42.0		52.0	160			4.80	7.70	5.60	5.60	221	0.790	0.970	22.5		3.20	6.20		30.8	14.0
SDC-1 Meas		1.36	< 0.1	31.9	530	25.0	84.4			0.17	15.9		0.5	169	< 0.05		11.4	0.274	0.65	2.7	63	< 0.1	
SDC-1 Cert		1.52	21.00	38.0	690	25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00	0.606	0.70	3.10	102.00	0.80	
SDC-1 Meas		1.38	0.1	33.0	530	24.6	114			< 0.05	14.2		0.4	167	< 0.05		10.9	0.081	0.59	2.7	33	< 0.1	
SDC-1 Cert		1.52	21.00	38.0	690	25.00	127.00			0.54	17.00		3.00	180.00	1.20		12.00	0.606	0.70	3.10	102.00	0.80	
GXR-6 Meas	0.62		0.2	26.0		104	84.8			0.68	25.6	< 1	0.7	36.4	< 0.05	< 0.05	5.5		2.16	1.5		< 0.1	12.1
GXR-6 Cert	2.40		7.50	27.0		101	90.0			3.60	27.6	0.940	1.70	35.0	0.485	0.0180	5.30		2.20	1.54		1.90	14.0
GXR-6 Meas	0.62		0.2	26.0		104	84.8			0.68	25.6	< 1	0.7	36.4	< 0.05	< 0.05	5.5		2.16	1.5		< 0.1	12.1
GXR-6 Cert	2.40		7.50	27.0		101	90.0			3.60	27.6	0.940	1.70	35.0	0.485	0.0180	5.30		2.20	1.54		1.90	14.0
GXR-6 Meas	0.59		0.1	25.6		103	79.7			0.58	26.1	< 1	0.8	37.3	< 0.05	< 0.05	4.7		2.11	1.4		< 0.1	11.4
GXR-6 Cert	2.40		7.50	27.0		101	90.0			3.60	27.6	0.940	1.70	35.0	0.485	0.0180	5.30		2.20	1.54		1.90	14.0
OREAS 97 (4 Acid) Meas						138				5.33		69	92.0										
OREAS 97 (4 Acid) Cert						147				9.23		71.4	95.7										
OREAS 97 (4 Acid) Meas						138				5.33		69	92.0										
OREAS 97 (4 Acid) Cert						147				9.23		71.4	95.7										
OREAS 97 (4 Acid) Meas						141				5.30		69	93.4										
OREAS 97 (4 Acid) Cert						147				9.23		71.4	95.7										
OREAS 98 (4 Acid) Meas						309				6.77		167	195										
OREAS 98 (4 Acid) Cert						345				20.1		158	206										
OREAS 98 (4 Acid) Meas						309				6.77		167	195										
OREAS 98 (4 Acid) Cert						345				20.1		158	206										
OREAS 98 (4 Acid) Meas						319				5.41		152	195										
OREAS 98 (4 Acid) Cert						345				20.1		158	206										
DNC-1a Meas		1.36	1.4	263		6.4	3.8			0.62	30.7			152				0.270			148		15.3
DNC-1a Cert		1.40	3	247		6.3	5			0.96	31			144				0.29			148		18.0
DNC-1a Meas			1.4	263		6.4	3.8			0.62	30.7			152									15.3
DNC-1a Cert			3	247		6.3	5			0.96	31			144									18.0
SBC-1 Meas	2.26		8.6	82.0		36.8	110			0.72	18.9		2.9	155	0.57		15.8	0.393	0.86	6.2	210	1.3	26.9

Analyte Symbol	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1	0.1
Method Code	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS
SBC-1 Cert	2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8	0.51	0.89	5.76	220.0	1.60	36.5
SBC-1 Meas	2.26		8.6	82.0		36.8	110			0.72	18.9		2.9	155	0.57		15.8	0.486	0.86	6.2	220	1.3	26.9
SBC-1 Cert	2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8	0.51	0.89	5.76	220.0	1.60	36.5
SBC-1 Meas	2.13		15.1	86.8		35.5	137			1.03	19.5		3.6	166	0.94		15.1		0.84	5.9		1.5	28.8
SBC-1 Cert	2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8		0.89	5.76		1.60	36.5
SBC-1 Meas	2.29		14.8	84.1		35.7	139			1.05	20.3		3.8	173	0.92		15.1		0.84	5.7		1.5	28.7
SBC-1 Cert	2.40		15.3	82.8		35.0	147			1.01	20.0		3.3	178.0	1.10		15.8		0.89	5.76		1.60	36.5
OREAS 45d (4-Acid) Meas	0.19		0.1	227		22.5	42.9			< 0.05	51.2		0.4	31.7	< 0.05		14.5		0.24	2.9		< 0.1	11.0
OREAS 45d (4-Acid) Cert	2.500		14.50	231.0		21.8	42.1			0.82	49.30		2.78	31.30	1.02		14.5		0.27	2.63		1.62	9.53
OREAS 45d (4-Acid) Meas	0.19		0.1	227		22.5	42.9			< 0.05	51.2		0.4	31.7	< 0.05		14.5		0.24	2.9		< 0.1	11.0
OREAS 45d (4-Acid) Cert	2.500		14.50	231.0		21.8	42.1			0.82	49.30		2.78	31.30	1.02		14.5		0.27	2.63		1.62	9.53
OREAS 45d (4-Acid) Meas	0.21		0.2	223		21.1	40.0			< 0.05	49.3		0.6	30.5	< 0.05		14.2		0.23	2.8		< 0.1	10.4
OREAS 45d (4-Acid) Cert	2.500		14.50	231.0		21.8	42.1			0.82	49.30		2.78	31.30	1.02		14.5		0.27	2.63		1.62	9.53
OREAS 96 (4 Acid) Meas						100				2.59		41	65.1										
OREAS 96 (4 Acid) Cert						101				5.09		40.7	65.6										
OREAS 96 (4 Acid) Meas						100				2.59		41	65.1										
OREAS 96 (4 Acid) Cert						101				5.09		40.7	65.6										
OREAS 96 (4 Acid) Meas						101				2.97		41	65.0										
OREAS 96 (4 Acid) Cert						101				5.09		40.7	65.6										
709696 Orig	2.16	4.21	1.6	220	200	20.7	0.4	< 0.002	8.79	20.0	11.8	17	5.1	26.7	0.28	1.39	5.4	0.112	0.54	1.2	46	1.0	11.2
709696 Dup	2.08	4.10	1.6	222	190	20.8	0.3	< 0.002	8.54	19.2	11.7	17	5.1	26.7	0.28	1.32	5.3	0.118	0.55	1.2	46	0.9	11.5
709702 Orig	6.10	1.14	2.0	224	260	40.6	27.0	< 0.002	0.88	0.76	20.1	< 1	0.6	77.5	0.16	0.37	1.9	0.230	0.21	0.5	135	12.3	8.8
709702 Dup	5.97	1.10	2.0	222	250	40.2	26.7	< 0.002	0.86	0.78	19.6	< 1	0.6	76.2	0.18	0.33	1.9	0.227	0.22	0.5	132	12.3	8.6
Method Blank	< 0.05		< 0.1	< 0.2		< 0.5	< 0.1	< 0.002		< 0.05	< 0.1	< 1	< 0.2	< 0.2	< 0.05	< 0.05	< 0.2		< 0.02	< 0.1		< 0.1	< 0.1
Method Blank	0.05		< 0.1	< 0.2		< 0.5	< 0.1	< 0.002		< 0.05	< 0.1	< 1	0.3	< 0.2	< 0.05	< 0.05	< 0.2		< 0.02	< 0.1		< 0.1	< 0.1
Method Blank	0.15		< 0.1	< 0.2		< 0.5	< 0.1	< 0.002		< 0.05	< 0.1	< 1	0.3	< 0.2	< 0.05	< 0.05	< 0.2		< 0.02	< 0.1		< 0.1	< 0.1
Method Blank	0.08		< 0.1	< 0.2		< 0.5	< 0.1	< 0.002		< 0.05	< 0.1	< 1	0.3	< 0.2	< 0.05	< 0.05	< 0.2		< 0.02	< 0.1		< 0.1	< 0.1
Method Blank	0.09		< 0.1	< 0.2		< 0.5	< 0.1	< 0.002		< 0.05	< 0.1	< 1	0.3	< 0.2	< 0.05	< 0.05	< 0.2		< 0.02	< 0.1		< 0.1	< 0.1
Method Blank	0.06	< 0.01	< 0.1	< 0.2	< 10	< 0.5	< 0.1	< 0.002	< 0.01	< 0.05	< 0.1	< 1	0.3	< 0.2	< 0.05	< 0.05	< 0.2	< 0.005	< 0.02	< 0.1	< 1	< 0.1	< 0.1
Method Blank	< 0.05	< 0.01	< 0.1	< 0.2	< 10	< 0.5	< 0.1	< 0.002	< 0.01	< 0.05	< 0.1	< 1	< 0.2	< 0.2	< 0.05	< 0.05	< 0.2	< 0.005	< 0.02	< 0.1	< 1	< 0.1	< 0.1

Analyte Symbol	Yb	Zn	Zr
Unit Symbol	ppm	ppm	ppm
Lower Limit	0.1	2	0.5
Method Code	TD-MS	TD-ICP	TD-MS
GXR-4 Meas	1.0		42.9
GXR-4 Cert	1.60		186
GXR-4 Meas	1.0		42.9
GXR-4 Cert	1.60		186
GXR-4 Meas	1.0		41.7
GXR-4 Cert	1.60		186
SDC-1 Meas	3.4	98	37.8
SDC-1 Cert	4.00	103.00	290.00
SDC-1 Meas	3.2	100	29.3
SDC-1 Cert	4.00	103.00	290.00
GXR-6 Meas	1.7		75.2
GXR-6 Cert	2.40		110
GXR-6 Meas	1.7		75.2
GXR-6 Cert	2.40		110
GXR-6 Meas	1.6		65.3
GXR-6 Cert	2.40		110
OREAS 97 (4 Acid) Meas			
OREAS 97 (4 Acid) Cert			
OREAS 97 (4 Acid) Meas			
OREAS 97 (4 Acid) Cert			
OREAS 97 (4 Acid) Meas			
OREAS 97 (4 Acid) Cert			
OREAS 98 (4 Acid) Meas			
OREAS 98 (4 Acid) Cert			
OREAS 98 (4 Acid) Meas			
OREAS 98 (4 Acid) Cert			
OREAS 98 (4 Acid) Meas			
OREAS 98 (4 Acid) Cert			
DNC-1a Meas	1.8	61	39.9
DNC-1a Cert	2.0	70	38.0
DNC-1a Meas	1.8		39.9
DNC-1a Cert	2.0		38.0
SBC-1 Meas	3.3	184	95.2

Analyte Symbol	Yb	Zn	Zr
Unit Symbol	ppm	ppm	ppm
Lower Limit	0.1	2	0.5
Method Code	TD-MS	TD-ICP	TD-MS
SBC-1 Cert	3.64	186	134.0
SBC-1 Meas	3.3	188	95.2
SBC-1 Cert	3.64	186	134.0
SBC-1 Meas	3.2		123
SBC-1 Cert	3.64		134.0
SBC-1 Meas	3.3		126
SBC-1 Cert	3.64		134.0
OREAS 45d (4-Acid) Meas	1.5		133
OREAS 45d (4-Acid) Cert	1.33		141
OREAS 45d (4-Acid) Meas	1.5		133
OREAS 45d (4-Acid) Cert	1.33		141
OREAS 45d (4-Acid) Meas	1.4		39.9
OREAS 45d (4-Acid) Cert	1.33		141
OREAS 96 (4 Acid) Meas			
OREAS 96 (4 Acid) Cert			
OREAS 96 (4 Acid) Meas			
OREAS 96 (4 Acid) Cert			
OREAS 96 (4 Acid) Meas			
OREAS 96 (4 Acid) Cert			
709696 Orig	1.2	29	91.2
709696 Dup	1.3	32	92.4
709702 Orig	1.1	77	54.2
709702 Dup	1.1	73	54.9
Method Blank	< 0.1		< 0.5
Method Blank	< 0.1		1.0
Method Blank	< 0.1		< 0.5
Method Blank	< 0.1		< 0.5
Method Blank	< 0.1		< 0.5
Method Blank	< 0.1	< 2	< 0.5
Method Blank	< 0.1	< 2	< 0.5