



ALS Canada Ltd.
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 www.alsglobal.com/geochemistry

To: ARCHER, CATHRO AND ASSOCIATES (1981)
 LIMITED
 1016-510 W HASTINGS ST
 VANCOUVER BC V6B 1L8

Page: 1
 Total # Pages: 6 (A - D)
 Plus Appendix Pages
 Finalized Date: 25-NOV-2018
 Account: F

QC CERTIFICATE WH18277248

Project: BLACKWATER

This report is for 214 Soil samples submitted to our lab in Whitehorse, YT, Canada on 2-NOV-2018.

The following have access to data associated with this certificate:

TRISH HUME		
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SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS41	Ultra Trace Aqua Regia ICP-MS	

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Colin Ramshaw, Vancouver Laboratory Manager



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QC CERTIFICATE OF ANALYSIS WH18277248

Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
Sample Description	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	
	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2	
STANDARDS																
AMISO486																
AMISO486																
Target Range - Lower Bound																
Upper Bound																
EMOG-17	64.8	1.47	568	0.82	<10	40	0.43	5.90	0.92	20.1	39.5	722	44	5.94	8350	
EMOG-17	65.2	1.50	567	0.85	<10	40	0.41	5.56	0.90	19.45	38.8	740	44	6.20	8400	
EMOG-17	66.5	1.54	568	0.90	<10	40	0.43	5.96	0.93	20.5	41.3	741	44	5.72	8260	
Target Range - Lower Bound	59.5	1.45	505	0.77	<10	30	0.32	5.32	0.87	18.35	37.6	680	42	5.57	7780	
Upper Bound	72.7	1.79	617	0.99	20	80	0.56	6.52	1.09	22.5	46.0	832	54	6.91	8960	
G913-10																
G913-10																
Target Range - Lower Bound																
Upper Bound																
GPP-14																
GPP-14																
Target Range - Lower Bound																
Upper Bound																
JK-17																
JK-17																
Target Range - Lower Bound																
Upper Bound																
MRGeo08	4.24	2.51	33.7	<0.02	<10	430	0.75	0.64	1.04	2.09	71.0	17.8	88	10.85	625	
MRGeo08	4.34	2.51	34.5	<0.02	<10	430	0.75	0.67	1.04	2.20	71.9	19.1	88	9.74	640	
MRGeo08	4.67	2.57	35.4	<0.02	<10	440	0.78	0.62	1.07	2.26	76.1	19.1	89	10.90	636	
MRGeo08	4.34	2.45	33.9	<0.02	<10	420	0.82	0.66	1.06	2.27	73.1	18.9	87	11.10	617	
Target Range - Lower Bound	4.00	2.44	29.6	<0.02	<10	370	0.67	0.60	1.00	2.01	66.2	17.0	81	9.40	587	
Upper Bound	4.92	3.00	36.4	0.04	20	530	0.95	0.76	1.24	2.47	81.0	21.0	102	11.60	675	
OREAS 503c																
Target Range - Lower Bound																
Upper Bound																
OREAS 684																
OREAS 684																
Target Range - Lower Bound																
Upper Bound																

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Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
Sample Description	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm
	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
STANDARDS															
AMISO486															
AMISO486															
Target Range - Lower Bound															
Upper Bound															
EMOG-17	4.50	6.06	0.15	0.43	0.52	0.892	0.65	19.4	18.9	0.76	614	1020	0.15	1.46	7560
EMOG-17	4.49	5.91	0.13	0.40	0.54	0.877	0.65	20.1	17.7	0.75	620	1025	0.15	1.56	7430
EMOG-17	4.49	5.70	0.14	0.41	0.56	0.881	0.66	20.4	17.5	0.75	625	1025	0.16	1.36	7580
Target Range - Lower Bound	4.18	5.56	0.08	0.39	0.46	0.814	0.60	18.3	17.2	0.73	595	1015	0.15	1.32	6930
Upper Bound	5.14	6.90	0.30	0.53	0.64	1.005	0.76	22.9	21.2	0.91	739	1240	0.20	1.72	8470
G913-10															
G913-10															
Target Range - Lower Bound															
Upper Bound															
GPP-14															
GPP-14															
Target Range - Lower Bound															
Upper Bound															
JK-17															
JK-17															
Target Range - Lower Bound															
Upper Bound															
MRGeo08	3.52	8.98	0.14	0.75	0.07	0.144	1.25	35.0	31.4	1.12	404	13.45	0.32	1.03	679
MRGeo08	3.54	9.49	0.14	0.70	0.06	0.149	1.25	35.5	29.8	1.13	409	13.60	0.31	1.02	686
MRGeo08	3.56	9.62	0.14	0.66	0.07	0.156	1.27	37.5	30.6	1.14	412	14.65	0.33	1.07	688
MRGeo08	3.52	9.29	0.13	0.73	0.06	0.159	1.26	37.4	31.5	1.14	406	14.05	0.31	0.95	694
Target Range - Lower Bound	3.22	8.73	0.07	0.64	0.04	0.137	1.12	33.2	29.6	1.03	378	13.10	0.30	0.79	622
Upper Bound	3.96	10.80	0.29	0.83	0.10	0.179	1.40	41.0	36.4	1.29	473	16.10	0.39	1.09	760
OREAS 503c															
Target Range - Lower Bound															
Upper Bound															
OREAS 684															
OREAS 684															
Target Range - Lower Bound															
Upper Bound															

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Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
Sample Description	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005	0.02
STANDARDS															
AMISO486															
AMISO486															
Target Range - Lower Bound															
Upper Bound															
EMOG-17	740	6850	73.0	0.313	3.02	709	4.4	6.5	2.0	48.6	0.01	1.27	9.4	0.201	2.03
EMOG-17	740	7020	79.4	0.310	3.06	692	4.9	6.4	1.8	48.2	0.02	1.21	10.3	0.201	1.90
EMOG-17	740	6980	72.5	0.315	3.05	662	4.6	6.8	2.0	51.2	<0.01	1.24	10.5	0.205	2.00
Target Range - Lower Bound	680	6510	66.5	0.287	2.90	574	4.3	5.5	1.5	47.5	<0.01	1.16	9.3	0.188	1.71
Upper Bound	850	7950	81.5	0.353	3.56	776	5.5	7.2	2.6	58.5	0.03	1.44	11.8	0.240	2.37
G913-10															
G913-10															
Target Range - Lower Bound															
Upper Bound															
GPP-14															
GPP-14															
Target Range - Lower Bound															
Upper Bound															
JK-17															
JK-17															
Target Range - Lower Bound															
Upper Bound															
MRGeo08	980	1055	136.0	0.007	0.31	3.36	7.0	1.1	3.2	75.9	0.01	0.03	20.1	0.372	0.78
MRGeo08	990	1065	140.0	0.008	0.32	3.45	7.9	0.8	3.4	74.7	0.02	0.02	21.5	0.371	0.75
MRGeo08	1000	1070	151.0	0.007	0.31	3.13	7.7	1.0	3.3	79.0	0.02	0.03	21.8	0.373	0.77
MRGeo08	980	1025	143.0	0.007	0.30	3.52	7.5	0.9	3.3	76.5	0.02	0.02	21.6	0.367	0.78
Target Range - Lower Bound	900	959	132.0	0.006	0.27	2.80	6.7	0.6	2.8	72.1	<0.01	<0.01	19.1	0.338	0.64
Upper Bound	1130	1175	162.0	0.010	0.35	3.90	8.4	1.5	4.0	88.5	0.03	0.04	23.7	0.424	0.92
OREAS 503c															
Target Range - Lower Bound															
Upper Bound															
OREAS 684															
OREAS 684															
Target Range - Lower Bound															
Upper Bound															



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Sample Description	Method Analyte Units LOD	ME-MS41 U ppm	ME-MS41 V ppm	ME-MS41 W ppm	ME-MS41 Y ppm	ME-MS41 Zn ppm	ME-MS41 Zr ppm	Au-ICP21 Au ppm
		0.05	1	0.05	0.05	2	0.5	0.001
STANDARDS								
AMIS0486								0.236
AMIS0486								0.226
Target Range - Lower Bound								
Upper Bound								
EMOG-17		2.67	61	1.95	10.70	7060	11.9	
EMOG-17		2.77	62	2.03	11.35	7130	13.0	
EMOG-17		2.66	61	1.70	11.10	7190	11.8	
Target Range - Lower Bound		2.57	58	1.65	10.20	6780	10.6	
Upper Bound		3.25	74	2.35	12.60	8290	15.5	
G913-10								7.21
G913-10								7.14
Target Range - Lower Bound								6.66
Upper Bound								7.52
GPP-14								0.909
GPP-14								0.899
Target Range - Lower Bound								0.853
Upper Bound								0.965
JK-17								1.930
JK-17								1.920
Target Range - Lower Bound								1.875
Upper Bound								2.12
MRGeo08		5.25	97	2.74	19.40	762	22.9	
MRGeo08		5.14	97	3.06	19.55	772	21.2	
MRGeo08		5.51	98	2.63	19.75	778	22.1	
MRGeo08		5.33	96	2.96	19.50	767	22.5	
Target Range - Lower Bound		4.93	90	2.44	17.50	708	18.1	
Upper Bound		6.13	112	3.42	21.5	870	25.7	
OREAS 503c								0.694
Target Range - Lower Bound								0.655
Upper Bound								0.741
OREAS 684								0.251
OREAS 684								0.251
Target Range - Lower Bound								
Upper Bound								

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Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
		Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm
STANDARDS																
OREAS 905		0.51	0.75	33.4	0.39	<10	230	0.89	5.79	0.33	0.32	77.2	13.4	16	1.19	1535
OREAS 905		0.50	0.73	32.8	0.37	<10	230	0.87	5.66	0.32	0.33	76.6	13.6	24	1.14	1550
OREAS 905		0.51	0.75	33.0	0.39	<10	230	0.91	5.28	0.32	0.32	76.8	13.2	19	1.11	1535
OREAS 905		0.48	0.74	32.0	0.39	<10	230	0.87	5.49	0.32	0.33	74.3	13.4	16	1.21	1495
Target Range - Lower Bound		0.45	0.73	28.4	0.33	<10	200	0.78	5.16	0.29	0.30	69.7	12.4	15	1.05	1450
Upper Bound		0.58	0.91	35.0	0.45	20	300	1.08	6.32	0.38	0.38	85.3	15.4	20	1.39	1670
OREAS 920		0.09	2.28	4.8	<0.02	<10	80	0.67	0.59	0.32	0.05	72.4	13.6	42	1.95	111.5
OREAS 920		0.09	2.20	5.0	<0.02	<10	70	0.67	0.86	0.30	0.06	66.0	13.7	39	1.90	107.5
OREAS 920		0.09	2.30	4.6	<0.02	<10	80	0.72	0.61	0.31	0.06	74.1	14.5	41	1.84	111.5
Target Range - Lower Bound		0.07	2.18	4.2	<0.02	<10	50	0.59	0.60	0.28	0.04	64.8	13.4	37	1.84	102.0
Upper Bound		0.12	2.68	5.3	0.04	20	110	0.87	0.76	0.37	0.08	79.2	16.6	48	2.36	118.0
PK2																
PK2																
Target Range - Lower Bound																
Upper Bound																
PMP-18																
PMP-18																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	0.2
BLANK		<0.01	<0.01	0.1	<0.02	<10	<10	<0.05	0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK		<0.01	<0.01	0.2	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK		<0.01	<0.01	0.1	<0.02	<10	<10	<0.05	0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
Target Range - Lower Bound		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
Upper Bound		0.02	0.02	0.2	0.04	20	20	0.10	0.02	0.02	0.02	0.04	0.2	2	0.10	0.4

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Method Analyte Units LOD	ME-MS41 Fe %	ME-MS41 Ga ppm	ME-MS41 Ge ppm	ME-MS41 Hf ppm	ME-MS41 Hg ppm	ME-MS41 In ppm	ME-MS41 K %	ME-MS41 La ppm	ME-MS41 Li ppm	ME-MS41 Mg %	ME-MS41 Mn ppm	ME-MS41 Mo ppm	ME-MS41 Na %	ME-MS41 Nb ppm	ME-MS41 Ni ppm
Sample Description	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
STANDARDS															
OREAS 905	3.33	5.87	0.09	1.16	0.02	0.566	0.30	38.3	4.3	0.14	332	2.77	0.08	0.31	8.1
OREAS 905	3.29	5.85	0.09	1.12	0.02	0.580	0.29	38.1	4.1	0.14	332	2.75	0.08	0.33	11.7
OREAS 905	3.31	5.87	0.09	1.02	0.02	0.550	0.30	37.2	4.1	0.14	331	2.73	0.08	0.25	9.4
OREAS 905	3.29	5.79	0.09	1.18	0.01	0.547	0.31	37.4	4.1	0.14	329	2.70	0.08	0.32	8.2
Target Range - Lower Bound	3.14	5.45	<0.05	1.02	<0.01	0.517	0.28	34.7	4.0	0.13	310	2.65	0.07	0.19	7.8
Upper Bound	3.86	6.77	0.22	1.29	0.04	0.643	0.36	42.9	5.2	0.19	390	3.35	0.12	0.43	10.0
OREAS 920	3.60	6.67	0.10	0.57	<0.01	0.029	0.42	36.2	20.5	1.08	512	0.39	0.02	0.36	39.9
OREAS 920	3.46	6.33	0.09	0.50	<0.01	0.030	0.38	34.6	19.9	1.03	499	0.34	0.02	0.31	37.2
OREAS 920	3.51	6.41	0.11	0.58	<0.01	0.030	0.41	36.5	21.4	1.04	502	0.37	0.02	0.37	38.1
Target Range - Lower Bound	3.26	6.12	<0.05	0.48	<0.01	0.019	0.37	33.3	19.0	0.93	454	0.26	<0.01	0.22	34.4
Upper Bound	4.00	7.60	0.22	0.63	0.02	0.043	0.47	41.1	23.4	1.15	566	0.50	0.02	0.46	42.4
PK2															
PK2															
Target Range - Lower Bound															
Upper Bound															
PMP-18															
PMP-18															
Target Range - Lower Bound															
Upper Bound															
BLANKS															
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
Target Range - Lower Bound	<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
Upper Bound	0.02	0.10	0.10	0.04	0.02	0.010	0.02	0.4	0.2	0.02	10	0.10	0.02	0.10	0.4

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Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
		P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm
STANDARDS																
OREAS 905		230	16.4	17.9	<0.001	0.07	1.11	1.7	2.5	1.2	12.6	<0.01	0.07	8.8	0.020	0.11
OREAS 905		230	15.8	17.2	<0.001	0.07	1.11	1.6	2.5	1.2	12.1	<0.01	0.08	8.5	0.019	0.10
OREAS 905		230	15.9	18.6	<0.001	0.07	0.93	1.6	2.1	1.1	12.3	<0.01	0.08	8.8	0.019	0.10
OREAS 905		230	15.6	18.2	<0.001	0.07	1.04	1.6	2.5	1.2	12.2	<0.01	0.06	8.2	0.020	0.11
Target Range - Lower Bound			14.4	16.3	<0.001	0.04	0.83	1.5	1.8	0.8	10.9	<0.01	0.04	7.4	0.008	0.06
Upper Bound			18.0	20.1	0.002	0.09	1.23	2.0	2.8	1.7	13.7	0.02	0.09	9.4	0.030	0.16
OREAS 920		700	20.1	24.0	<0.001	0.03	0.70	2.6	0.2	1.1	17.2	0.01	0.02	16.8	0.118	0.16
OREAS 920		690	19.6	22.8	<0.001	0.04	0.63	2.6	0.2	0.9	15.4	0.01	0.02	15.0	0.103	0.12
OREAS 920		690	19.9	23.5	<0.001	0.03	0.59	2.6	0.4	1.1	16.8	0.01	0.01	15.6	0.123	0.16
Target Range - Lower Bound			19.2	22.2	<0.001	<0.01	0.45	2.5	<0.2	0.6	15.0	<0.01	<0.01	13.6	0.106	0.09
Upper Bound			23.9	27.4	0.002	0.05	0.77	3.3	0.7	1.6	18.8	0.02	0.04	17.0	0.140	0.20
PK2																
PK2																
Target Range - Lower Bound																
Upper Bound																
PMP-18																
PMP-18																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK																
BLANK																
BLANK																
BLANK																
Target Range - Lower Bound																
Upper Bound																
BLANK		<10	<0.2	<0.1	<0.001	0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
Target Range - Lower Bound		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
Upper Bound		20	0.4	0.2	0.002	0.02	0.10	0.2	0.4	0.4	0.4	0.02	0.02	0.4	0.010	0.04

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Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Au-ICP21
		U	V	W	Y	Zn	Zr	Au
		ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.05	1	0.05	0.05	2	0.5	0.001
STANDARDS								
OREAS 905		2.19	5	0.64	7.03	63	45.1	
OREAS 905		2.07	5	0.62	6.76	62	45.2	
OREAS 905		2.14	5	0.51	6.65	62	43.1	
OREAS 905		2.03	5	0.59	7.09	62	44.1	
Target Range - Lower Bound		1.92	4	0.41	6.32	56	39.9	
Upper Bound		2.46	8	0.73	7.84	72	55.1	
OREAS 920		1.98	24	0.51	18.15	105	19.7	
OREAS 920		1.93	23	0.52	16.40	103	19.7	
OREAS 920		2.01	24	0.45	17.80	100	23.0	
Target Range - Lower Bound		1.89	21	0.31	15.80	93	17.6	
Upper Bound		2.42	28	0.61	19.40	119	25.0	
PK2							4.83	
PK2							4.89	
Target Range - Lower Bound							4.50	
Upper Bound							5.07	
PMP-18							0.303	
PMP-18							0.301	
Target Range - Lower Bound							0.281	
Upper Bound							0.319	
BLANKS								
BLANK							0.001	
BLANK							<0.001	
BLANK							<0.001	
BLANK							0.002	
Target Range - Lower Bound							<0.001	
Upper Bound							0.002	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5	
Target Range - Lower Bound		<0.05	<1	<0.05	<0.05	<2	<0.5	
Upper Bound		0.10	2	0.10	0.10	4	1.0	

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Sample Description	Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
		Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm
		0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2
DUPLICATES																
ORIGINAL DUP Target Range - Lower Bound Upper Bound																
ORIGINAL DUP Target Range - Lower Bound Upper Bound																
ORIGINAL DUP Target Range - Lower Bound Upper Bound																
YY08755 DUP Target Range - Lower Bound Upper Bound		0.14 0.15 0.13 0.16	2.28 2.29 2.16 2.41	14.0 13.8 13.1 14.7	<0.02 <0.02 <0.02 0.04	<10 <10 <10 20	130 130 110 150	0.42 0.41 0.34 0.49	0.14 0.13 0.12 0.15	0.48 0.49 0.45 0.52	0.21 0.22 0.19 0.24	21.7 21.3 20.4 22.6	17.6 17.4 16.5 18.5	66 66 62 70	2.03 2.06 1.89 2.20	56.9 58.3 55.4 59.8
YY08762 DUP Target Range - Lower Bound Upper Bound																
YY08782 DUP Target Range - Lower Bound Upper Bound		0.12 0.13 0.11 0.14	2.30 2.29 2.17 2.42	17.2 19.3 17.2 19.3	<0.02 <0.02 <0.02 0.04	<10 <10 <10 20	160 160 140 180	0.28 0.31 0.23 0.36	0.17 0.16 0.15 0.18	0.42 0.41 0.38 0.45	0.19 0.18 0.17 0.20	16.05 14.60 14.55 16.10	22.2 24.4 22.0 24.6	68 68 64 72	3.42 3.26 3.12 3.56	81.4 82.9 79.1 85.2
YY08800 DUP Target Range - Lower Bound Upper Bound																
YY08818 DUP Target Range - Lower Bound Upper Bound		0.14 0.15 0.13 0.16	2.20 2.22 2.09 2.33	13.2 13.1 12.4 13.9	<0.02 <0.02 <0.02 0.04	<10 <10 <10 20	140 140 120 160	0.27 0.28 0.21 0.34	0.15 0.15 0.13 0.17	0.30 0.30 0.28 0.33	0.07 0.08 0.06 0.09	17.70 17.85 16.85 18.70	13.8 13.7 13.0 14.5	58 58 54 62	2.65 2.70 2.49 2.86	43.6 42.6 41.4 44.8



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Method Analyte Units LOD	ME-MS41 Fe %	ME-MS41 Ga ppm	ME-MS41 Ge ppm	ME-MS41 Hf ppm	ME-MS41 Hg ppm	ME-MS41 In ppm	ME-MS41 K %	ME-MS41 La ppm	ME-MS41 Li ppm	ME-MS41 Mg %	ME-MS41 Mn ppm	ME-MS41 Mo ppm	ME-MS41 Na %	ME-MS41 Nb ppm	ME-MS41 Ni ppm
Sample Description	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
ORIGINAL DUP Target Range - Lower Bound Upper Bound	DUPLICATES														
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
YY08755	3.88	6.68	0.09	<0.02	0.04	0.028	0.23	9.9	28.8	1.10	629	0.91	0.02	1.36	47.4
DUP	3.90	6.59	0.08	0.02	0.03	0.028	0.24	9.6	28.9	1.11	632	0.94	0.02	1.33	47.6
Target Range - Lower Bound	3.69	6.25	<0.05	<0.02	0.02	0.022	0.21	9.1	27.3	1.04	594	0.83	<0.01	1.23	44.9
Upper Bound	4.09	7.02	0.10	0.04	0.05	0.034	0.26	10.4	30.4	1.17	667	1.02	0.03	1.46	50.1
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
YY08762															
DUP															
Target Range - Lower Bound															
Upper Bound															
YY08782	4.06	7.51	0.09	<0.02	0.02	0.032	0.43	6.7	22.0	1.13	347	0.93	0.01	1.94	70.2
DUP	4.06	7.45	0.08	<0.02	0.02	0.031	0.43	6.1	24.0	1.12	347	0.90	0.01	1.89	70.7
Target Range - Lower Bound	3.85	7.06	<0.05	<0.02	<0.01	0.025	0.40	5.9	21.8	1.06	325	0.82	<0.01	1.77	66.7
Upper Bound	4.27	7.90	0.10	0.04	0.03	0.038	0.46	6.9	24.3	1.19	369	1.01	0.02	2.06	74.2
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
YY08800															
DUP															
Target Range - Lower Bound															
Upper Bound															
YY08818	3.62	6.85	0.08	<0.02	0.03	0.027	0.32	8.9	27.8	0.98	353	0.83	0.01	1.47	38.5
DUP	3.66	6.79	0.08	<0.02	0.03	0.027	0.32	8.9	28.5	0.99	354	0.83	0.01	1.50	39.3
Target Range - Lower Bound	3.45	6.43	<0.05	<0.02	0.02	0.021	0.29	8.3	26.6	0.93	331	0.74	<0.01	1.36	36.8
Upper Bound	3.83	7.21	0.10	0.04	0.04	0.033	0.35	9.5	29.7	1.04	376	0.92	0.02	1.61	41.0



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Method Analyte Units LOD	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005	ME-MS41 TI ppm 0.02
ORIGINAL DUP Target Range - Lower Bound Upper Bound	DUPLICATES														
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
ORIGINAL DUP Target Range - Lower Bound Upper Bound															
YY08755 DUP Target Range - Lower Bound Upper Bound	870 880 820 930	6.4 6.6 6.0 7.0	25.2 25.5 24.0 26.7	0.001 <0.001 <0.001 0.002	0.05 0.04 0.03 0.06	0.42 0.40 0.33 0.49	5.7 5.7 5.3 6.1	<0.2 <0.2 <0.2 0.4	0.5 0.5 0.3 0.7	31.2 32.0 29.8 33.4	<0.01 <0.01 <0.01 0.02	0.06 0.05 0.04 0.07	1.1 1.1 0.8 1.4	0.124 0.121 0.111 0.134	0.21 0.21 0.17 0.25
YY08762 DUP Target Range - Lower Bound Upper Bound															
YY08782 DUP Target Range - Lower Bound Upper Bound	1100 1110 1040 1170	4.7 4.3 4.1 4.9	41.3 40.2 38.6 42.9	<0.001 <0.001 <0.001 0.002	0.09 0.08 0.07 0.10	0.40 0.38 0.31 0.47	6.7 6.8 6.3 7.2	0.5 0.6 0.3 0.8	0.7 0.7 0.5 0.9	29.9 29.6 28.1 31.4	<0.01 <0.01 <0.01 0.02	0.07 0.06 0.05 0.08	1.3 1.1 0.9 1.5	0.137 0.138 0.126 0.149	0.28 0.28 0.24 0.32
YY08800 DUP Target Range - Lower Bound Upper Bound															
YY08818 DUP Target Range - Lower Bound Upper Bound	680 720 660 750	4.7 4.6 4.2 5.1	33.9 34.1 32.2 35.8	<0.001 <0.001 <0.001 0.002	0.06 0.06 0.05 0.07	0.26 0.25 0.19 0.32	5.2 5.1 4.8 5.5	0.3 0.3 <0.2 0.4	0.5 0.5 0.3 0.7	25.1 25.4 23.8 26.7	<0.01 <0.01 <0.01 0.02	0.05 0.05 0.04 0.06	0.9 0.9 0.7 1.1	0.104 0.106 0.095 0.115	0.25 0.26 0.22 0.29



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QC CERTIFICATE OF ANALYSIS WH18277248

Sample Description	Method Analyte Units LOD	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5	Au-ICP21 Au ppm 0.001
DUPLICATES								
ORIGINAL								1.575
DUP								1.535
Target Range - Lower Bound								1.475
Upper Bound								1.635
ORIGINAL								<0.001
DUP								<0.001
Target Range - Lower Bound								<0.001
Upper Bound								0.002
ORIGINAL								1.335
DUP								1.335
Target Range - Lower Bound								1.265
Upper Bound								1.405
YY08755		0.60	87	0.12	8.62	95	0.5	
DUP		0.60	87	0.12	8.28	95	0.5	
Target Range - Lower Bound		0.52	82	0.06	7.98	88	<0.5	
Upper Bound		0.68	92	0.18	8.92	102	1.0	
YY08762								0.004
DUP								0.004
Target Range - Lower Bound								0.003
Upper Bound								0.005
YY08782		0.51	105	0.12	6.27	59	<0.5	0.005
DUP		0.47	105	0.12	6.10	59	<0.5	0.003
Target Range - Lower Bound		0.42	99	0.06	5.83	54	<0.5	0.003
Upper Bound		0.56	111	0.18	6.54	64	1.0	0.005
YY08800								0.006
DUP								0.004
Target Range - Lower Bound								0.004
Upper Bound								0.006
YY08818		0.59	85	0.09	5.80	61	<0.5	
DUP		0.61	86	0.09	6.05	61	<0.5	
Target Range - Lower Bound		0.52	80	<0.05	5.58	56	<0.5	
Upper Bound		0.68	91	0.10	6.27	66	1.0	

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Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
Sample Description	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	
	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2	
DUPLICATES																
YY08878 DUP Target Range - Lower Bound Upper Bound																
YY08894 DUP Target Range - Lower Bound Upper Bound	0.14 0.14 0.12 0.16	2.71 2.77 2.59 2.89	21.2 20.5 19.7 22.0	<0.02 <0.02 <0.02 0.04	<10 <10 <10 20	230 230 200 260	0.40 0.37 0.32 0.45	0.17 0.18 0.16 0.19	0.24 0.24 0.22 0.26	0.16 0.16 0.14 0.18	18.25 18.25 17.30 19.20	27.6 26.8 25.7 28.7	78 79 74 83	4.50 4.42 4.19 4.73	76.1 74.8 72.6 78.3	
YY08897 DUP Target Range - Lower Bound Upper Bound																
YY08837 DUP Target Range - Lower Bound Upper Bound																
YY08850 DUP Target Range - Lower Bound Upper Bound	0.08 0.08 0.07 0.09	1.87 1.89 1.78 1.98	14.9 14.4 13.8 15.5	<0.02 <0.02 <0.02 0.04	<10 <10 <10 20	100 100 80 120	0.24 0.20 0.16 0.28	0.16 0.15 0.14 0.17	0.38 0.38 0.35 0.41	0.12 0.11 0.10 0.13	14.75 14.45 13.85 15.35	13.7 13.2 12.7 14.2	56 56 52 60	2.23 2.24 2.07 2.40	29.3 28.0 27.4 29.9	
YY08915 DUP Target Range - Lower Bound Upper Bound																
YY08927 DUP Target Range - Lower Bound Upper Bound	0.17 0.18 0.16 0.19	2.38 2.39 2.26 2.51	19.0 19.4 18.1 20.3	<0.02 <0.02 <0.02 0.04	<10 <10 <10 20	200 200 180 230	0.34 0.33 0.27 0.40	0.18 0.18 0.16 0.20	0.57 0.57 0.53 0.61	0.26 0.23 0.22 0.27	19.40 19.75 18.60 20.6	22.7 21.9 21.1 23.5	64 63 59 68	2.86 2.84 2.66 3.04	76.2 76.1 73.3 79.0	
YY08932 DUP Target Range - Lower Bound Upper Bound																



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Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
Sample Description	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm
	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
YY08878 DUP Target Range - Lower Bound Upper Bound	DUPLICATES														
YY08894 DUP Target Range - Lower Bound Upper Bound	4.75 4.86 4.55 5.06	8.68 8.53 8.12 9.09	0.09 0.10 <0.05 0.10	<0.02 <0.02 <0.02 0.04	0.02 0.02 <0.01 0.03	0.041 0.039 0.033 0.047	0.55 0.56 0.52 0.59	8.9 8.6 8.1 9.4	29.7 29.6 28.1 31.2	1.20 1.22 1.14 1.28	510 525 487 548	1.09 1.03 0.96 1.16	0.01 0.01 <0.01 0.02	1.78 1.76 1.63 1.91	79.0 78.0 74.4 82.6
YY08897 DUP Target Range - Lower Bound Upper Bound															
YY08837 DUP Target Range - Lower Bound Upper Bound															
YY08850 DUP Target Range - Lower Bound Upper Bound	3.61 3.63 3.43 3.81	7.65 7.42 7.11 7.96	0.07 0.07 <0.05 0.10	0.02 0.03 <0.02 0.04	0.02 0.02 <0.01 0.03	0.024 0.024 0.018 0.030	0.30 0.31 0.28 0.33	7.5 7.4 6.9 8.0	27.7 26.6 25.7 28.6	0.99 0.99 0.93 1.05	364 372 345 391	1.40 1.37 1.27 1.50	0.01 0.01 <0.01 0.02	1.68 1.65 1.53 1.80	34.5 33.4 32.1 35.8
YY08915 DUP Target Range - Lower Bound Upper Bound															
YY08927 DUP Target Range - Lower Bound Upper Bound	3.98 4.01 3.79 4.20	7.18 7.09 6.73 7.54	0.08 0.08 <0.05 0.10	<0.02 <0.02 <0.02 0.04	0.05 0.05 0.04 0.06	0.033 0.037 0.028 0.042	0.35 0.35 0.32 0.38	9.7 9.8 9.1 10.4	27.1 25.8 25.0 27.9	1.05 1.05 0.99 1.11	559 557 525 591	1.20 1.15 1.07 1.28	0.01 0.01 <0.01 0.02	2.07 2.09 1.93 2.23	55.2 55.5 52.4 58.3
YY08932 DUP Target Range - Lower Bound Upper Bound															



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Method Analyte Units LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
Sample Description	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	
	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005	0.02	
DUPLICATES																
YY08878 DUP Target Range - Lower Bound Upper Bound																
YY08894 DUP Target Range - Lower Bound Upper Bound	760 770 720 810	5.8 6.0 5.4 6.4	53.7 52.2 50.2 55.7	<0.001 <0.001 <0.001 0.002	0.07 0.07 0.06 0.08	0.53 0.52 0.44 0.61	9.3 9.5 8.8 10.0	0.4 0.5 <0.2 0.7	0.7 0.7 0.5 0.9	26.5 25.3 24.4 27.4	<0.01 <0.01 <0.01 0.02	0.06 0.06 0.05 0.07	1.0 1.1 0.8 1.3	0.144 0.148 0.134 0.158	0.31 0.33 0.28 0.36	
YY08897 DUP Target Range - Lower Bound Upper Bound																
YY08837 DUP Target Range - Lower Bound Upper Bound																
YY08850 DUP Target Range - Lower Bound Upper Bound	630 650 600 680	5.9 5.8 5.4 6.3	41.8 41.1 39.3 43.6	<0.001 <0.001 <0.001 0.002	0.02 0.02 <0.01 0.03	0.23 0.23 0.16 0.30	5.7 5.3 5.1 5.9	0.2 0.3 <0.2 0.4	0.5 0.5 0.3 0.7	25.8 25.2 24.0 27.0	<0.01 <0.01 <0.01 0.02	0.05 0.05 0.04 0.06	1.8 1.7 1.5 2.0	0.139 0.139 0.127 0.151	0.19 0.18 0.15 0.22	
YY08915 DUP Target Range - Lower Bound Upper Bound																
YY08927 DUP Target Range - Lower Bound Upper Bound	940 930 880 990	5.3 5.3 4.8 5.8	36.4 36.3 34.4 38.3	<0.001 <0.001 <0.001 0.002	0.08 0.08 0.07 0.09	0.30 0.32 0.24 0.38	5.9 6.0 5.6 6.3	0.7 0.7 0.5 0.9	0.6 0.6 0.4 0.8	44.5 44.7 42.2 47.0	<0.01 <0.01 <0.01 0.02	0.06 0.05 0.04 0.07	0.7 0.7 0.5 0.9	0.125 0.123 0.113 0.135	0.27 0.28 0.23 0.32	
YY08932 DUP Target Range - Lower Bound Upper Bound																



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Sample Description	Method Analyte Units LOD	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5	Au-ICP21 Au ppm 0.001
DUPLICATES								
YY08878								0.006
DUP								0.002
Target Range - Lower Bound								0.003
Upper Bound								0.005
YY08894		0.63	114	0.10	6.81	55	<0.5	
DUP		0.66	116	0.10	6.89	56	<0.5	
Target Range - Lower Bound		0.56	108	<0.05	6.46	51	<0.5	
Upper Bound		0.73	122	0.16	7.24	60	1.0	
YY08897								0.005
DUP								0.002
Target Range - Lower Bound								0.002
Upper Bound								0.005
YY08837								<0.001
DUP								<0.001
Target Range - Lower Bound								<0.001
Upper Bound								0.002
YY08850		0.37	94	0.11	3.79	72	1.0	
DUP		0.38	94	0.14	3.65	73	0.9	
Target Range - Lower Bound		0.31	88	0.07	3.48	67	<0.5	
Upper Bound		0.44	100	0.18	3.96	78	1.0	
YY08915								<0.001
DUP								<0.001
Target Range - Lower Bound								<0.001
Upper Bound								0.002
YY08927		0.71	99	0.11	8.59	52	0.9	
DUP		0.70	99	0.10	8.32	52	0.5	
Target Range - Lower Bound		0.62	93	<0.05	7.98	47	<0.5	
Upper Bound		0.79	105	0.16	8.93	57	1.0	
YY08932								0.011
DUP								0.007
Target Range - Lower Bound								0.008
Upper Bound								0.010



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Sample Description	Method	Analyte	Units	LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41				
					Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	
					ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	
					0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2	
DUPLICATES																				
YY08956																				
DUP																				
Target Range - Lower Bound																				
Upper Bound																				
YY08968					0.17	2.22	15.6	<0.02	<10	130	0.31	0.18	0.26	0.12	16.20	18.1	61	2.79	50.5	
DUP					0.18	2.30	15.9	<0.02	<10	140	0.35	0.18	0.28	0.13	17.85	19.0	64	3.04	52.8	
Target Range - Lower Bound					0.16	2.14	14.9	<0.02	<10	110	0.26	0.16	0.25	0.11	16.15	17.5	58	2.72	49.6	
Upper Bound					0.19	2.38	16.6	0.04	20	160	0.40	0.20	0.29	0.14	17.90	19.6	67	3.11	53.7	

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Sample Description	Method	Analyte	Units	LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41			
					Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
					%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
					0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
DUPLICATES																			
YY08956																			
DUP																			
Target Range - Lower Bound																			
Upper Bound																			
YY08968					3.85	7.44	0.06	<0.02	0.02	0.032	0.25	8.1	25.5	1.00	487	1.21	0.01	1.30	42.6
DUP					3.97	7.83	0.06	<0.02	0.03	0.030	0.26	9.0	27.5	1.04	501	1.28	0.01	1.39	44.8
Target Range - Lower Bound					3.70	7.20	<0.05	<0.02	<0.01	0.024	0.23	7.9	25.1	0.96	464	1.13	<0.01	1.23	41.3
Upper Bound					4.12	8.07	0.10	0.04	0.04	0.038	0.28	9.2	27.9	1.08	524	1.36	0.02	1.46	46.1

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Sample Description	Method	Analyte	Units	LOD	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41					
					P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	
					ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	
					10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005	0.02	
DUPLICATES																				
YY08956																				
DUP																				
Target Range - Lower Bound																				
Upper Bound																				
YY08968					820	5.8	32.4	<0.001	0.07	0.25	4.6	0.4	0.5	25.5	<0.01	0.05	0.5	0.109	0.23	
DUP					850	6.1	33.6	<0.001	0.07	0.28	4.9	0.2	0.6	26.7	<0.01	0.06	0.5	0.114	0.23	
Target Range - Lower Bound					780	5.5	31.3	<0.001	0.06	0.20	4.4	<0.2	0.3	24.6	<0.01	0.04	0.3	0.101	0.19	
Upper Bound					890	6.4	34.8	0.002	0.08	0.33	5.1	0.4	0.8	27.6	0.02	0.07	0.7	0.122	0.27	

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DUPLICATES								
YY08956								0.005
DUP								0.001
Target Range - Lower Bound								0.002
Upper Bound								0.004
YY08968		0.64	98	0.10	4.36	58	<0.5	
DUP		0.71	101	0.16	4.67	60	<0.5	
Target Range - Lower Bound		0.59	94	0.07	4.24	54	<0.5	
Upper Bound		0.76	105	0.19	4.79	64	1.0	

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	CERTIFICATE COMMENTS
	<p style="text-align: center;">ANALYTICAL COMMENTS</p> <p>Applies to Method: NSS is non-sufficient sample. ALL METHODS</p> <p>Applies to Method: Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g). ME-MS41</p> <p style="text-align: center;">LABORATORY ADDRESSES</p> <p>Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada. LOG-22 SCR-41 WEI-21</p> <p>Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. Au-ICP21 ME-MS41</p>