



ALS Scandinavia AB
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www.alsglobal.com/geochemistry

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

QC CERTIFICATE PI18302149

Project: Not provided

P.O. No.: 379500

This report is for 206 1/4 Core samples submitted to our lab in Pitea, Sweden on 28-NOV-2018.

The following have access to data associated with this certificate:

NOLWENN COINT

SVEN DAHLGREN

HENRIK SCHIELLERUP

To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

Page: 1
Total # Pages: 7 (A - E)
Plus Appendix Pages
Finalized Date: 19-DEC-2018
Account: ONUSEG

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-22Y	Split Sample - Boyd Rotary Splitter
PUL-31	Pulverize split to 85% <75 um
LOG-24	Pulp Login - Rcd w/o Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME-MS61	48 element four acid ICP-MS
ME-MS81h	High grade REE by fusion/ICPMS 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 *****

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

Signature:

Andrey Tairov, Technical Manager, Ireland



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[illegible]

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01
STANDARDS																
AMIS0304		12.6	36.4	428	3.63	22.6	5	410	16.5	1090						
AMIS0304		12.1	35.1	434	3.46	22.7	5	395	16.3	1110						
AMIS0304		13.2	37.2	431	3.78	23.6	6	423	17.1	1150						
AMIS0304		13.2	35.6	431	3.34	23.8	6	420	16.2	1200						
Target Range - Lower Bound		11.6	32.5	406	3.21	22.0	<5	378	15.6	1030						
Upper Bound		14.4	37.5	468	3.80	26.0	15	442	18.4	1210						
EMOG-17											68.8	4.64	569	580	1.82	5.86
EMOG-17											67.9	4.65	581	670	1.71	5.94
EMOG-17											68.3	4.64	570	700	1.81	6.06
EMOG-17											66.1	4.76	591	690	1.76	6.17
Target Range - Lower Bound											60.9	4.18	515	310	1.60	5.31
Upper Bound											74.5	5.13	629	440	2.06	6.51
GRE-04		128.0	22.8	134.5	2.78	124.0	<5	320	14.1	930						
GRE-04		123.0	23.0	138.5	2.76	126.0	<5	310	13.9	910						
GRE-04		126.0	23.4	132.5	2.76	127.5	<5	303	13.4	910						
Target Range - Lower Bound		113.0	22.7	123.5	2.75	116.0	<5	294	13.8	870						
Upper Bound		131.0	26.2	142.5	3.27	134.0	10	345	16.3	1020						
GRE-3		164.5	18.40	109.0	2.70	108.0	<5	301	14.4	900						
GRE-3		166.0	19.55	113.0	3.01	111.5	<5	309	14.4	960						
GRE-3		161.0	20.4	110.5	2.90	108.0	<5	307	14.6	930						
GRE-3		160.0	20.1	109.5	2.85	109.5	<5	306	14.5	950						
Target Range - Lower Bound		149.5	20.1	109.0	2.81	103.5	<5	295	14.2	890						
Upper Bound		173.5	23.2	126.0	3.35	120.0	13	346	16.8	1050						
MRGeo08											4.81	7.76	33.6	1170	3.29	0.71
MRGeo08											4.70	7.66	33.4	1160	3.46	0.70
MRGeo08											4.55	7.34	32.9	1120	3.44	0.68
Target Range - Lower Bound											4.00	6.64	29.5	920	2.98	0.60
Upper Bound											4.92	8.14	36.5	1270	3.76	0.76
OGGeo08											20.3	6.76	116.0	910	2.65	10.30
OGGeo08											19.75	6.74	115.0	900	3.09	10.05
OGGeo08											19.80	6.86	116.5	920	3.13	10.65
OGGeo08											19.95	6.17	116.0	790	2.74	10.30
OGGeo08											19.65	6.75	120.5	940	2.94	11.00
OGGeo08											19.30	6.87	118.5	940	2.88	10.20
Target Range - Lower Bound											18.15	6.07	106.0	700	2.59	9.44
Upper Bound											22.2	7.44	130.0	980	3.27	11.55

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm
		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
STANDARDS																
AMIS0304																
AMIS0304																
AMIS0304																
AMIS0304																
Target Range - Lower Bound																
Upper Bound																
EMOG-17		1.93	20.3	52.0	753	54	7.14	8170	4.86	11.85	0.33	2.0	0.930	1.63	26.3	24.4
EMOG-17		2.00	19.65	46.3	772	54	7.06	8410	4.95	12.05	0.39	2.0	0.890	1.66	24.5	24.0
EMOG-17		1.92	20.1	48.5	764	54	7.41	8210	4.89	11.95	0.33	1.8	0.934	1.66	24.1	26.7
EMOG-17		2.02	20.8	46.5	765	51	7.38	8350	4.93	11.95	0.36	1.9	0.919	1.66	23.5	26.9
Target Range - Lower Bound		1.72	18.15	42.9	686	49	6.56	7750	4.42	10.75	0.07	1.6	0.823	1.49	20.7	23.9
Upper Bound		2.12	22.2	52.5	838	62	8.12	8910	5.42	13.25	0.29	2.2	1.015	1.85	26.4	29.7
GRE-04																
GRE-04																
GRE-04																
Target Range - Lower Bound																
Upper Bound																
GRE-3																
GRE-3																
GRE-3																
GRE-3																
Target Range - Lower Bound																
Upper Bound																
MRGeo08		2.84	2.29	70.2	19.9	97	12.30	668	4.20	19.65	0.16	3.3	0.191	3.24	33.9	31.1
MRGeo08		2.78	2.34	77.4	20.8	95	12.55	652	4.17	19.20	0.17	3.4	0.175	3.26	35.4	34.2
MRGeo08		2.65	2.26	68.1	19.5	90	11.75	614	3.99	18.60	0.13	3.2	0.179	3.10	32.1	32.9
Target Range - Lower Bound		2.35	2.00	66.2	17.7	81	11.20	587	3.55	17.50	<0.05	2.8	0.155	2.79	31.1	29.5
Upper Bound		2.90	2.48	81.0	21.9	102	13.80	675	4.37	21.5	0.27	3.6	0.201	3.43	39.1	36.5
OGGeo08		2.23	17.95	68.7	89.6	82	10.25	8230	5.36	16.20	0.51	2.8	1.355	2.88	34.4	30.8
OGGeo08		2.21	18.40	66.8	92.7	82	10.30	8330	5.37	16.65	0.39	2.9	1.375	2.89	31.2	31.4
OGGeo08		2.20	18.85	67.8	96.9	81	10.95	8210	5.38	17.15	0.40	2.9	1.430	2.96	33.7	32.2
OGGeo08		2.22	19.00	52.3	93.0	80	10.40	8380	5.34	16.55	0.43	2.6	1.405	2.86	24.6	31.2
OGGeo08		2.24	19.95	69.1	97.8	79	10.75	8370	5.35	17.15	0.68	2.9	1.480	2.90	33.8	31.7
OGGeo08		2.22	19.30	65.3	95.5	80	10.70	8390	5.44	17.05	1.04	2.9	1.410	2.98	31.6	31.1
Target Range - Lower Bound		1.98	16.70	64.8	87.2	78	9.85	7800	4.81	16.05	0.25	2.5	1.320	2.59	31.0	29.7
Upper Bound		2.44	20.5	79.2	107.0	98	12.15	8980	5.91	19.75	0.49	3.3	1.620	3.19	39.0	36.7

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NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm	ME-MS61 Pb ppm	ME-MS61 Rb ppm	ME-MS61 Re ppm	ME-MS61 S %	ME-MS61 Sb ppm	ME-MS61 Sc ppm	ME-MS61 Se ppm	ME-MS61 Sn ppm
		0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2
STANDARDS																
AMIS0304																
AMIS0304																
AMIS0304																
AMIS0304																
Target Range - Lower Bound																
Upper Bound																
EMOG-17		0.98	740	1080	1.10	14.4	7390	780	7120	111.0	0.311	3.27	742	8.0	5	2.6
EMOG-17		1.01	750	1110	1.13	15.6	7620	790	7280	110.5	0.312	3.27	761	7.6	7	2.6
EMOG-17		0.97	747	1080	1.10	14.6	7640	810	7310	109.5	0.311	3.28	755	8.0	7	2.5
EMOG-17		1.01	745	1100	1.13	15.1	7580	790	7340	113.0	0.315	3.27	756	8.1	8	2.7
Target Range - Lower Bound		0.86	670	997	0.99	12.7	6820	700	6570	98.9	0.286	2.91	643	7.2	4	2.2
Upper Bound		1.08	830	1220	1.23	15.7	8330	880	8030	121.0	0.354	3.57	869	9.0	9	3.2
GRE-04																
GRE-04																
GRE-04																
Target Range - Lower Bound																
Upper Bound																
GRE-3																
GRE-3																
GRE-3																
GRE-3																
Target Range - Lower Bound																
Upper Bound																
MRGeo08		1.42	616	15.30	2.12	22.9	742	1110	1150	193.0	0.008	0.32	4.79	11.4	2	4.1
MRGeo08		1.41	598	15.70	2.01	21.2	734	1060	1130	200	0.010	0.32	4.48	12.1	1	4.2
MRGeo08		1.33	567	13.85	1.99	20.5	697	1030	1080	180.5	0.008	0.31	4.35	11.3	1	3.9
Target Range - Lower Bound		1.17	497	13.65	1.76	19.0	622	930	971	173.5	0.005	0.27	3.89	11.1	<1	3.5
Upper Bound		1.45	619	16.75	2.18	23.4	760	1160	1185	212	0.013	0.35	5.39	13.7	4	4.7
OGGeo08		1.28	503	897	1.81	19.8	8760	850	7230	185.0	1.310	2.79	25.3	9.8	12	13.1
OGGeo08		1.32	505	900	1.82	18.8	8680	850	7260	177.5	1.290	2.82	26.0	9.2	11	13.4
OGGeo08		1.26	500	881	1.83	17.8	8710	830	7270	183.5	1.425	2.79	26.1	9.7	13	13.6
OGGeo08		1.25	502	905	1.80	15.6	8860	840	7230	144.5	1.430	2.81	27.0	9.0	11	14.1
OGGeo08		1.30	503	917	1.81	18.2	8870	850	7290	187.5	1.415	2.80	26.8	10.0	12	13.8
OGGeo08		1.22	520	932	1.84	18.2	8830	850	7220	174.5	1.435	2.80	25.9	9.4	12	13.6
Target Range - Lower Bound		1.11	447	841	1.62	15.4	8000	760	6520	164.5	1.285	2.51	22.8	9.2	8	12.5
Upper Bound		1.38	557	1030	2.00	19.0	9770	950	7970	201	1.575	3.09	31.0	11.4	14	15.7

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
STANDARDS													
AMIS0304													
AMIS0304													
AMIS0304													
AMIS0304													
Target Range - Lower Bound													
Upper Bound													
EMOG-17		202	0.95	1.29	11.05	0.313	2.23	3.1	71	4.2	15.7	7190	64.8
EMOG-17		205	1.03	1.41	10.90	0.325	2.14	3.1	74	4.3	15.1	7530	63.7
EMOG-17		207	0.90	1.31	11.60	0.318	2.28	3.3	74	4.0	15.8	7580	63.3
EMOG-17		208	0.95	1.33	12.10	0.321	2.31	3.3	72	3.8	16.6	7540	64.6
Target Range - Lower Bound		184.5	0.78	1.10	10.35	0.294	1.89	2.8	67	3.3	14.3	6800	55.6
Upper Bound		226	1.08	1.46	12.65	0.370	2.61	3.7	84	4.7	17.7	8320	76.4
GRE-04													
GRE-04													
GRE-04													
Target Range - Lower Bound													
Upper Bound													
GRE-3													
GRE-3													
GRE-3													
GRE-3													
Target Range - Lower Bound													
Upper Bound													
MRGeo08		336	1.74	<0.05	18.25	0.525	1.16	5.2	117	5.2	24.5	836	112.5
MRGeo08		313	1.55	0.05	19.75	0.514	1.15	5.5	111	5.1	26.6	834	109.5
MRGeo08		306	1.62	0.05	18.30	0.501	1.16	4.9	111	4.7	25.5	805	103.0
Target Range - Lower Bound		277	1.39	<0.05	17.90	0.443	0.89	4.9	97	4.1	23.8	722	92.2
Upper Bound		339	1.81	0.14	21.9	0.553	1.25	6.2	121	5.8	29.3	886	126.0
OGGeo08		244	1.35	0.16	18.90	0.397	1.68	5.0	84	4.5	22.5	7240	88.5
OGGeo08		247	1.37	0.18	17.05	0.399	1.69	4.6	85	4.5	21.2	7260	91.5
OGGeo08		246	1.28	0.13	18.70	0.394	1.77	5.1	86	4.4	22.9	7110	94.1
OGGeo08		248	1.29	0.17	14.45	0.391	1.75	4.6	84	4.4	20.1	7240	86.6
OGGeo08		249	1.29	0.20	18.80	0.397	1.76	4.9	84	4.7	23.2	7210	93.6
OGGeo08		248	1.31	0.22	18.60	0.413	1.76	4.9	86	4.5	21.9	7210	92.6
Target Range - Lower Bound		224	1.19	0.09	16.90	0.353	1.43	4.5	77	3.9	21.1	6500	78.6
Upper Bound		274	1.57	0.31	20.7	0.443	1.98	5.8	97	5.4	26.0	7950	107.5

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Sample Description	Method Analyte Units LOD	ME-MS81h Ce ppm 3	ME-MS81h Dy ppm 0.3	ME-MS81h Er ppm 0.2	ME-MS81h Eu ppm 0.2	ME-MS81h Gd ppm 0.3	ME-MS81h Hf ppm 1	ME-MS81h Ho ppm 0.05	ME-MS81h La ppm 3	ME-MS81h Lu ppm 0.05	ME-MS81h Nb ppm 1	ME-MS81h Nd ppm 0.5	ME-MS81h Pr ppm 0.2	ME-MS81h Rb ppm 1	ME-MS81h Sm ppm 0.2	ME-MS81h Sn ppm 5
STANDARDS																
OREAS 920																
OREAS 920																
OREAS 920																
OREAS 920																
OREAS 920																
OREAS 920																
Target Range - Lower Bound																
Upper Bound																
REE-1		3870	875	708	24.2	437	475	206	1650	93.9	3850	1415	431	991	360	466
REE-1		4130	872	701	24.2	456	511	211	1760	94.8	3950	1530	463	1060	383	534
REE-1		3900	900	727	24.6	458	502	211	1630	93.6	4060	1515	456	1045	379	536
REE-1		4220	892	706	25.2	452	510	219	1720	94.5	4060	1475	461	1050	400	513
REE-1		4050	884	701	23.8	435	492	209	1680	94.6	3740	1480	452	1105	389	525
Target Range - Lower Bound		3680	787	652	21.7	402	444	193.5	1540	85.9	3770	1355	404	973	354	458
Upper Bound		4240	907	750	25.3	464	514	223	1780	98.9	4330	1560	466	1120	408	538
BLANKS																
BLANK																
BLANK																
BLANK																
BLANK																
BLANK																
BLANK																
BLANK																
BLANK																
BLANK																
BLANK																
Target Range - Lower Bound																
Upper Bound																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	0.08	<3	0.09	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	0.3	<0.2	0.3	<1	0.09	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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



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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
 POSTBOKS 6315 TORGARDEN
 NO-7491 TRONDHEIM
 NORWAY

Page: 3 - B
 Total # Pages: 7 (A - E)
 Plus Appendix Pages
 Finalized Date: 19-DEC-2018
 Account: ONUSEG

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01
STANDARDS																
OREAS 920											0.08	7.54	5.2	550	2.63	0.68
OREAS 920											0.08	7.66	5.0	550	2.58	0.85
OREAS 920											0.10	7.78	5.2	560	2.87	0.63
OREAS 920											0.09	7.69	4.5	570	2.77	0.67
OREAS 920											0.10	7.38	4.9	530	2.59	0.69
OREAS 920											0.12	7.51	5.6	540	2.87	0.79
Target Range - Lower Bound											0.08	6.91	4.4	450	2.54	0.61
Upper Bound											0.13	8.47	5.8	640	3.22	0.77
REE-1		224	106.5	737	107.0	135.0	8	5520	710	19100						
REE-1		236	113.0	760	113.5	139.5	9	5710	680	19500						
REE-1		234	116.0	769	111.5	143.5	8	5760	687	19250						
REE-1		232	110.0	748	113.0	141.5	9	5710	675	20300						
REE-1		222	110.5	779	111.5	139.0	9	5820	703	19800						
Target Range - Lower Bound		214	98.7	668	98.5	127.0	<5	5090	630	17750						
Upper Bound		248	113.5	770	113.5	147.0	20	5870	726	20400						
BLANKS																
BLANK											0.02	<0.01	0.2	<10	<0.05	<0.01
BLANK											0.01	<0.01	0.2	<10	<0.05	0.01
BLANK											<0.01	<0.01	<0.2	<10	<0.05	0.01
BLANK											0.01	<0.01	0.3	10	<0.05	0.01
BLANK											<0.01	<0.01	<0.2	<10	<0.05	0.01
BLANK											0.01	<0.01	<0.2	<10	<0.05	<0.01
BLANK											0.01	<0.01	<0.2	<10	<0.05	0.01
BLANK											<0.01	<0.01	<0.2	<10	<0.05	0.01
BLANK											0.01	<0.01	0.3	<10	<0.05	0.01
BLANK											<0.01	<0.01	0.2	<10	<0.05	<0.01
Target Range - Lower Bound											<0.01	<0.01	<0.2	<10	<0.05	<0.01
Upper Bound											0.02	0.02	0.4	20	0.10	0.02
BLANK		0.6	<0.05	<0.3	0.06	<0.3	<5	<3	<0.2	<10						
BLANK		0.9	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
BLANK		<0.5	0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	0.3	<10						
BLANK		0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
BLANK		0.8	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						

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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

Page: 3 - C
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Account: ONUSE

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm
		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
STANDARDS																
OREAS 920		0.51	0.07	91.5	14.3	82	7.97	110.5	4.05	19.20	0.17	4.8	0.080	2.80	45.1	28.0
OREAS 920		0.53	0.07	94.2	14.4	84	8.24	110.0	4.05	19.60	0.13	4.5	0.084	2.79	44.1	27.8
OREAS 920		0.52	0.06	92.4	15.4	82	8.58	111.0	4.06	20.7	0.11	4.7	0.083	2.87	45.5	29.7
OREAS 920		0.50	0.05	85.6	14.1	86	8.72	107.5	4.11	19.75	0.12	4.5	0.081	2.89	41.3	27.9
OREAS 920		0.51	0.08	87.2	14.8	83	8.33	106.0	4.07	19.95	0.18	4.7	0.079	2.85	43.2	28.2
OREAS 920		0.47	0.06	93.1	15.0	81	8.26	111.0	4.01	20.0	0.20	4.7	0.097	2.83	44.5	29.8
Target Range - Lower Bound		0.44	0.04	84.6	13.9	70	7.72	104.0	3.72	18.65	0.06	4.0	0.070	2.59	41.0	26.0
Upper Bound		0.56	0.12	103.5	17.3	88	9.54	120.0	4.56	22.9	0.28	5.2	0.098	3.19	51.2	32.2
REE-1																
REE-1																
REE-1																
REE-1																
REE-1																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK		<0.01	<0.02	0.02	<0.1	<1	<0.05	0.2	<0.01	<0.05	<0.05	<0.1	<0.005	<0.01	<0.5	<0.2
BLANK		<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
BLANK		<0.01	<0.02	<0.01	<0.1	1	<0.05	0.3	<0.01	<0.05	<0.05	<0.1	<0.005	<0.01	<0.5	<0.2
BLANK		<0.01	<0.02	0.02	<0.1	1	<0.05	0.3	<0.01	<0.05	<0.05	<0.1	<0.005	<0.01	<0.5	<0.2
BLANK		<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
BLANK		<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
BLANK		<0.01	<0.02	<0.01	<0.1	1	<0.05	0.3	<0.01	<0.05	<0.05	<0.1	<0.005	<0.01	<0.5	<0.2
BLANK		<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
BLANK		<0.01	<0.02	<0.01	<0.1	1	<0.05	<0.2	<0.01	<0.05	<0.05	<0.1	0.007	<0.01	<0.5	0.2
BLANK		<0.01	<0.02	0.01	<0.1	<1	<0.05	0.2	<0.01	<0.05	<0.05	<0.1	0.009	<0.01	<0.5	<0.2
Target Range - Lower Bound		<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
Upper Bound		0.02	0.04	0.02	0.2	2	0.10	0.4	0.02	0.10	0.10	0.2	0.010	0.02	1.0	0.4
BLANK																
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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

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Account: ONUSEG

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm	ME-MS61 Pb ppm	ME-MS61 Rb ppm	ME-MS61 Re ppm	ME-MS61 S %	ME-MS61 Sb ppm	ME-MS61 Sc ppm	ME-MS61 Se ppm	ME-MS61 Sn ppm
		0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2
STANDARDS																
OREAS 920		1.37	603	0.47	0.63	16.5	40.6	740	22.8	170.5	0.002	0.04	1.48	13.5	1	4.6
OREAS 920		1.37	596	0.54	0.66	17.7	39.9	770	23.9	170.5	<0.002	0.04	1.48	12.8	2	4.7
OREAS 920		1.35	600	0.47	0.62	19.0	38.9	720	22.6	176.0	<0.002	0.03	1.45	13.8	1	4.7
OREAS 920		1.36	584	0.49	0.64	16.0	43.9	730	23.1	161.0	0.002	0.03	1.57	13.7	1	4.9
OREAS 920		1.30	596	0.53	0.62	19.0	40.1	700	25.1	163.0	<0.002	0.03	1.50	13.3	<1	4.7
OREAS 920		1.27	587	0.46	0.62	15.9	41.5	720	22.4	173.5	0.006	0.04	1.52	13.2	1	4.8
Target Range - Lower Bound		1.23	535	0.34	0.56	15.6	37.4		20.7	158.5	<0.002	<0.01	1.22	12.8	<1	4.3
Upper Bound		1.53	665	0.58	0.71	19.2	46.2		26.4	193.5	0.004	0.05	1.76	15.8	2	5.7
REE-1																
REE-1																
REE-1																
REE-1																
REE-1																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK		<0.01	<5	<0.05	<0.01	<0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	<0.1	<1	<0.2
BLANK		<0.01	<5	0.07	<0.01	0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	<0.1	1	<0.2
BLANK		<0.01	<5	<0.05	<0.01	<0.1	0.3	<10	<0.5	<0.1	<0.002	<0.01	0.06	<0.1	1	<0.2
BLANK		<0.01	<5	0.08	0.01	0.1	0.3	10	<0.5	<0.1	<0.002	<0.01	0.07	<0.1	1	<0.2
BLANK		<0.01	<5	<0.05	<0.01	<0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	<0.1	1	<0.2
BLANK		<0.01	<5	<0.05	<0.01	0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	0.1	1	<0.2
BLANK		<0.01	<5	<0.05	<0.01	0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	0.05	0.1	2	<0.2
BLANK		<0.01	<5	<0.05	<0.01	<0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	0.1	1	<0.2
BLANK		<0.01	<5	<0.05	<0.01	<0.1	0.4	<10	<0.5	<0.1	<0.002	<0.01	0.08	<0.1	<1	<0.2
BLANK		<0.01	<5	<0.05	<0.01	<0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	<0.1	1	<0.2
Target Range - Lower Bound		<0.01	<5	<0.05	<0.01	<0.1	<0.2	<10	<0.5	<0.1	<0.002	<0.01	<0.05	<0.1	<1	<0.2
Upper Bound		0.02	10	0.10	0.02	0.2	0.4	20	1.0	0.2	0.004	0.02	0.10	0.2	2	0.4
BLANK																
BLANK																
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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
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NORWAY

Page: 3 - E
Total # Pages: 7 (A - E)
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Finalized Date: 19-DEC-2018
Account: ONUSEK

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
STANDARDS													
OREAS 920		79.8	1.34	0.06	19.15	0.483	0.88	3.6	94	3.3	31.4	115	153.5
OREAS 920		80.6	1.42	<0.05	18.45	0.484	0.88	3.5	97	3.1	30.9	124	152.5
OREAS 920		82.6	1.42	<0.05	20.2	0.473	0.97	3.8	95	3.4	32.7	120	156.0
OREAS 920		78.6	1.38	0.05	18.35	0.481	0.91	3.8	98	3.1	31.2	118	154.5
OREAS 920		79.1	1.36	0.05	17.65	0.481	1.00	3.6	97	3.2	30.8	118	158.0
OREAS 920		79.9	1.35	0.08	19.95	0.475	0.87	3.6	90	3.2	31.5	116	155.5
Target Range - Lower Bound		73.6	1.08	<0.05	17.35	0.434	0.76	3.3	86	2.5	29.8	102	128.0
Upper Bound		90.4	1.43	0.10	21.2	0.542	1.08	4.2	108	3.7	36.6	130	174.0
REE-1													
REE-1													
REE-1													
REE-1													
REE-1													
Target Range - Lower Bound													
Upper Bound													
BLANKS													
BLANK		0.2	<0.05	<0.05	0.01	<0.005	<0.02	<0.1	<1	<0.1	<0.1	2	<0.5
BLANK		<0.2	<0.05	<0.05	0.01	<0.005	<0.02	<0.1	<1	0.1	<0.1	<2	<0.5
BLANK		0.2	<0.05	<0.05	0.01	<0.005	<0.02	<0.1	<1	<0.1	<0.1	2	<0.5
BLANK		0.2	<0.05	<0.05	<0.01	<0.005	<0.02	<0.1	<1	<0.1	<0.1	<2	<0.5
BLANK		<0.2	<0.05	<0.05	0.02	<0.005	<0.02	<0.1	<1	<0.1	<0.1	<2	<0.5
BLANK		<0.2	<0.05	<0.05	0.01	<0.005	<0.02	<0.1	<1	<0.1	<0.1	<2	<0.5
BLANK		0.4	<0.05	<0.05	0.01	<0.005	<0.02	0.1	<1	<0.1	<0.1	2	<0.5
BLANK		0.2	<0.05	<0.05	0.01	<0.005	<0.02	<0.1	<1	<0.1	<0.1	<2	<0.5
BLANK		0.4	<0.05	<0.05	0.01	<0.005	0.02	<0.1	<1	0.2	<0.1	2	<0.5
BLANK		<0.2	<0.05	<0.05	<0.01	<0.005	<0.02	<0.1	<1	0.1	<0.1	<2	<0.5
Target Range - Lower Bound		<0.2	<0.05	<0.05	<0.01	<0.005	<0.02	<0.1	<1	<0.1	<0.1	<2	<0.5
Upper Bound		0.4	0.10	0.10	0.02	0.010	0.04	0.2	2	0.2	0.2	4	1.0
BLANK													
BLANK													
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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ce ppm 3	ME-MS81h Dy ppm 0.3	ME-MS81h Er ppm 0.2	ME-MS81h Eu ppm 0.2	ME-MS81h Gd ppm 0.3	ME-MS81h Hf ppm 1	ME-MS81h Ho ppm 0.05	ME-MS81h La ppm 3	ME-MS81h Lu ppm 0.05	ME-MS81h Nb ppm 1	ME-MS81h Nd ppm 0.5	ME-MS81h Pr ppm 0.2	ME-MS81h Rb ppm 1	ME-MS81h Sm ppm 0.2	ME-MS81h Sn ppm 5
BLANKS																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Target Range - Lower Bound		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Upper Bound		6	0.6	0.4	0.4	0.6	2	0.10	6	0.10	2	1.0	0.4	2	0.4	10
DUPLICATES																
191705		8310	23.0	5.2	41.6	79.3	2	2.83	4880	0.34	97	2320	841	8	199.5	9
DUP		8220	22.8	4.7	41.1	79.2	2	2.94	4750	0.29	110	2290	785	8	199.0	9
Target Range - Lower Bound		7970	21.8	4.6	39.7	76.2	<1	2.73	4640	0.25	99	2220	784	7	192.0	<5
Upper Bound		8560	24.0	5.3	43.0	82.3	3	3.04	4990	0.38	108	2390	842	9	206	10
191707		3400	11.0	3.3	22.3	38.6	3	1.57	1370	0.29	60	1390	396	14	115.0	<5
DUP		3300	10.9	3.4	21.8	40.0	3	1.48	1420	0.29	53	1320	388	13	119.0	<5
Target Range - Lower Bound		3230	10.3	3.0	21.1	37.6	2	1.42	1345	0.23	54	1305	378	12	112.5	<5
Upper Bound		3470	11.6	3.7	23.0	41.0	4	1.63	1445	0.35	59	1405	406	15	121.5	10
191719		4930	20.6	4.3	32.0	63.6	1	2.49	2690	0.30	236	1445	477	<1	138.5	5
DUP		4870	19.8	4.1	32.2	64.4	1	2.50	2620	0.33	238	1425	471	<1	137.5	5
Target Range - Lower Bound		4730	19.2	3.9	30.8	61.5	<1	2.36	2560	0.25	228	1385	457	<1	133.0	<5
Upper Bound		5070	21.2	4.5	33.4	66.5	2	2.63	2750	0.38	246	1485	491	2	143.0	10
198804		5940	10.3	2.2	26.4	50.5	<1	1.16	3630	0.15	498	1705	578	1	129.5	<5
DUP		5850	10.2	1.9	25.0	48.3	<1	1.11	3580	0.13	490	1675	562	<1	123.0	<5
Target Range - Lower Bound		5690	9.6	1.8	24.6	47.4	<1	1.05	3480	0.09	476	1630	550	<1	121.5	<5
Upper Bound		6100	10.9	2.3	26.8	51.4	2	1.22	3730	0.19	512	1750	590	2	131.0	10
198818																
DUP																
Target Range - Lower Bound																
Upper Bound																
198819		2980	9.7	2.7	15.5	30.3	1	1.25	1730	0.25	196	916	286	<1	82.0	<5
DUP		3000	10.2	2.7	15.7	30.3	<1	1.37	1760	0.23	188	911	290	<1	84.9	<5
Target Range - Lower Bound		2880	9.3	2.4	14.9	28.9	<1	1.21	1680	0.18	184	881	278	<1	80.3	<5
Upper Bound		3100	10.6	3.0	16.3	31.7	2	1.41	1810	0.30	200	946	298	2	86.6	10
198838																
DUP																
Target Range - Lower Bound																
Upper Bound																

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01
BLANKS																
BLANK		0.7	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
Target Range - Lower Bound		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10						
Upper Bound		1.0	0.10	0.6	0.10	0.6	10	6	0.4	20						
DUPLICATES																
191705		2.1	11.05	221	0.50	2.4	<5	61	3.2	150						
DUP		1.0	11.20	217	0.45	2.4	<5	61	2.8	140						
Target Range - Lower Bound		1.0	10.70	211	0.41	2.0	<5	56	2.7	130						
Upper Bound		2.1	11.55	227	0.54	2.8	10	66	3.3	160						
191707		1.8	3.02	91.9	0.34	2.0	<5	40	2.1	160						
DUP		1.7	3.13	90.9	0.28	1.9	<5	37	2.1	150						
Target Range - Lower Bound		1.2	2.92	87.9	0.25	1.6	<5	34	1.8	140						
Upper Bound		2.3	3.23	94.9	0.37	2.3	10	43	2.4	170						
191719		2.1	8.60	174.0	0.39	5.1	<5	54	2.7	140						
DUP		2.2	8.35	177.0	0.33	5.0	<5	52	3.0	140						
Target Range - Lower Bound		1.6	8.13	169.0	0.30	4.6	<5	48	2.6	130						
Upper Bound		2.7	8.82	182.0	0.42	5.5	10	58	3.1	150						
198804		4.9	3.36	286	0.25	4.5	<5	25	1.1	20						
DUP		4.6	3.34	267	0.21	4.0	<5	25	1.3	10						
Target Range - Lower Bound		4.1	3.18	267	0.17	3.8	<5	21	1.0	<10						
Upper Bound		5.4	3.52	286	0.29	4.7	10	29	1.4	20						
198818											0.11	0.07	2.2	3290	0.46	0.20
DUP											0.16	0.07	1.9	2630	0.45	0.17
Target Range - Lower Bound											0.12	0.06	1.7	2730	0.38	0.17
Upper Bound											0.15	0.08	2.4	3190	0.53	0.20
198819		2.2	2.35	127.5	0.37	2.0	<5	31	1.7	40						
DUP		1.8	2.46	125.0	0.29	2.0	<5	30	1.8	40						
Target Range - Lower Bound		1.4	2.27	121.5	0.27	1.6	<5	26	1.5	30						
Upper Bound		2.6	2.54	131.0	0.39	2.4	10	35	2.0	50						
198838											0.05	0.57	1.3	3620	0.87	0.49
DUP											0.11	0.55	1.5	3730	0.83	0.46
Target Range - Lower Bound											0.07	0.52	1.1	3390	0.76	0.44
Upper Bound											0.09	0.60	1.7	3960	0.94	0.51

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm
		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
BLANK		BLANKS														
Target Range - Lower Bound																
Upper Bound																
191705		DUPLICATES														
DUP																
Target Range - Lower Bound																
Upper Bound																
191707																
DUP																
Target Range - Lower Bound																
Upper Bound																
191719																
DUP																
Target Range - Lower Bound																
Upper Bound																
198804																
DUP																
Target Range - Lower Bound																
Upper Bound																
198818		19.30	2.06	>500	6.8	8	<0.05	1.7	7.76	18.50	2.28	0.2	0.410	<0.01	2660	1.4
DUP		19.00	2.07	>500	6.9	6	<0.05	1.6	7.67	17.80	2.16	0.2	0.393	<0.01	2580	1.4
Target Range - Lower Bound		18.20	1.94	475	6.4	6	<0.05	1.4	7.32	17.20	2.06	<0.1	0.376	<0.01	2490	1.1
Upper Bound		20.1	2.19	>500	7.3	8	0.10	1.9	8.11	19.10	2.38	0.3	0.427	0.02	2750	1.7
198819																
DUP																
Target Range - Lower Bound																
Upper Bound																
198838		18.15	1.89	>500	9.7	11	0.21	5.6	8.08	25.8	3.11	0.5	0.330	0.01	4190	8.7
DUP		17.80	2.00	>500	10.1	10	0.21	6.1	7.95	27.0	3.15	0.4	0.327	0.01	4070	8.9
Target Range - Lower Bound		17.05	1.83	475	9.3	9	0.15	5.4	7.60	25.0	2.92	0.3	0.307	<0.01	3920	8.2
Upper Bound		18.90	2.06	>500	10.5	12	0.27	6.3	8.43	27.8	3.34	0.6	0.350	0.02	4340	9.4

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm	ME-MS61 Pb ppm	ME-MS61 Rb ppm	ME-MS61 Re ppm	ME-MS61 S %	ME-MS61 Sb ppm	ME-MS61 Sc ppm	ME-MS61 Se ppm	ME-MS61 Sn ppm
		0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2
BLANK		BLANKS														
Target Range - Lower Bound																
Upper Bound																
191705		DUPLICATES														
DUP																
Target Range - Lower Bound																
Upper Bound																
191707																
DUP																
Target Range - Lower Bound																
Upper Bound																
191719																
DUP																
Target Range - Lower Bound																
Upper Bound																
198804																
DUP																
Target Range - Lower Bound																
Upper Bound																
198818		6.86	11800	15.95	<0.01	82.8	7.1	1250	8.9	0.1	0.002	0.40	0.08	20.2	1	1.2
DUP		6.62	11300	16.10	<0.01	75.7	6.6	1280	8.5	0.1	<0.002	0.38	0.09	20.4	1	1.2
Target Range - Lower Bound		6.39	10950	15.15	<0.01	75.2	6.3	1190	7.8	<0.1	<0.002	0.36	<0.05	19.2	<1	0.9
Upper Bound		7.09	12150	16.90	0.02	83.3	7.4	1340	9.6	0.2	0.004	0.42	0.10	21.4	2	1.5
198819																
DUP																
Target Range - Lower Bound																
Upper Bound																
198838		6.72	10600	65.8	0.01	294	17.0	4510	15.7	0.8	0.003	0.58	0.13	15.0	1	2.6
DUP		6.64	10450	63.3	0.01	350	18.1	4450	15.1	0.8	0.005	0.56	0.13	14.9	1	2.7
Target Range - Lower Bound		6.34	9990	61.3	<0.01	306	16.5	4250	14.1	0.7	<0.002	0.53	0.07	14.1	<1	2.3
Upper Bound		7.02	11050	67.8	0.02	338	18.6	4710	16.7	0.9	0.006	0.61	0.19	15.8	2	3.0

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 POSTBOKS 6315 TORGARDEN
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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
BLANK Target Range - Lower Bound Upper Bound		BLANKS											
191705 DUP Target Range - Lower Bound Upper Bound		DUPLICATES											
191707 DUP Target Range - Lower Bound Upper Bound													
191719 DUP Target Range - Lower Bound Upper Bound													
198804 DUP Target Range - Lower Bound Upper Bound													
198818 DUP Target Range - Lower Bound Upper Bound		1755 1695 1640 1810	0.78 0.56 0.59 0.75	0.09 0.11 <0.05 0.16	130.5 130.0 123.5 137.0	0.018 0.017 0.012 0.023	<0.02 <0.02 <0.02 0.04	1.3 1.3 1.1 1.5	14 14 12 16	1.1 1.0 0.9 1.2	26.5 25.8 24.7 27.6	394 382 367 409	12.8 12.6 11.2 14.2
198819 DUP Target Range - Lower Bound Upper Bound													
198838 DUP Target Range - Lower Bound Upper Bound		1680 1660 1585 1755	2.88 2.69 2.60 2.97	0.14 0.09 0.06 0.17	346 344 328 362	0.019 0.018 0.013 0.024	0.07 0.07 0.04 0.10	4.3 4.3 4.0 4.6	11 11 9 13	1.3 1.3 1.1 1.5	45.1 45.0 42.7 47.4	318 318 300 336	28.3 28.8 25.9 31.2

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QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ce ppm 3	ME-MS81h Dy ppm 0.3	ME-MS81h Er ppm 0.2	ME-MS81h Eu ppm 0.2	ME-MS81h Gd ppm 0.3	ME-MS81h Hf ppm 1	ME-MS81h Ho ppm 0.05	ME-MS81h La ppm 3	ME-MS81h Lu ppm 0.05	ME-MS81h Nb ppm 1	ME-MS81h Nd ppm 0.5	ME-MS81h Pr ppm 0.2	ME-MS81h Rb ppm 1	ME-MS81h Sm ppm 0.2	ME-MS81h Sn ppm 5
198852 DUP Target Range - Lower Bound Upper Bound		DUPLICATES														
198853 DUP Target Range - Lower Bound Upper Bound		4980 5270 4940 5310	7.3 7.8 7.0 8.1	2.3 2.3 2.0 2.6	21.2 21.5 20.4 22.3	32.6 32.7 31.2 34.1	1 1 <1 2	1.13 1.10 1.03 1.20	3750 3850 3660 3940	0.24 0.19 0.16 0.27	1230 1290 1215 1305	1255 1325 1245 1335	460 489 458 491	4 4 3 5	97.3 103.5 96.7 104.0	<5 <5 <5 10
198873 DUP Target Range - Lower Bound Upper Bound		2340 2540 2350 2530	5.2 5.8 5.0 6.0	1.7 1.5 1.3 1.9	9.7 10.2 9.4 10.5	18.5 18.8 17.7 19.6	1 1 <1 2	0.83 0.84 0.76 0.91	1470 1610 1485 1595	0.19 0.18 0.13 0.24	1280 1340 1265 1355	648 691 646 693	217 230 215 232	1 1 <1 2	49.3 51.7 48.5 52.5	<5 <5 <5 10
198887 DUP Target Range - Lower Bound Upper Bound																
198888 DUP Target Range - Lower Bound Upper Bound		2210 2200 2120 2290	22.6 24.2 22.3 24.5	7.6 7.8 7.2 8.2	24.1 23.3 22.7 24.7	52.6 53.2 50.7 55.1	1 1 <1 2	3.56 3.55 3.38 3.73	1240 1210 1180 1270	0.53 0.61 0.50 0.64	515 591 533 573	819 798 780 837	230 224 219 235	1 1 <1 2	99.0 99.4 95.5 103.0	<5 <5 <5 10
198898 DUP Target Range - Lower Bound Upper Bound																
198906 DUP Target Range - Lower Bound Upper Bound																
198907 DUP Target Range - Lower Bound Upper Bound		7820 8030 7640 8210	6.5 6.5 6.0 7.0	1.8 1.6 1.4 2.0	20.7 21.2 20.0 21.9	31.2 32.0 30.2 33.0	<1 <1 <1 2	0.69 0.72 0.63 0.78	5020 5140 4900 5260	<0.05 <0.05 <0.05 0.10	643 625 611 657	2000 2080 1970 2110	717 738 702 753	2 1 <1 2	129.5 134.5 127.0 137.0	<5 <5 <5 10

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01
DUPLICATES																
198852											<0.01	0.83	<0.2	6650	2.48	0.27
DUP											<0.01	0.81	<0.2	5590	2.56	0.27
Target Range - Lower Bound											<0.01	0.77	<0.2	5650	2.34	0.25
Upper Bound											0.02	0.87	0.4	6590	2.70	0.29
198853		45.8	2.44	208	0.27	23.4	5	26	1.7	20						
DUP		47.9	2.32	199.5	0.30	26.6	5	27	1.6	20						
Target Range - Lower Bound		44.7	2.25	196.5	0.23	23.8	<5	23	1.4	<10						
Upper Bound		49.0	2.51	211	0.34	26.2	10	30	1.9	30						
198873		36.5	1.59	137.0	0.22	12.4	<5	20	1.1	20						
DUP		36.9	1.50	135.5	0.22	12.1	<5	20	1.2	20						
Target Range - Lower Bound		34.9	1.44	131.0	0.16	11.5	<5	16	0.9	<10						
Upper Bound		38.5	1.65	141.5	0.28	13.0	10	24	1.4	30						
198887											0.14	0.86	1.3	>10000	0.76	0.30
DUP											0.19	0.83	1.5	>10000	0.68	0.31
Target Range - Lower Bound											0.15	0.79	1.1	9240	0.63	0.28
Upper Bound											0.18	0.90	1.7	>10000	0.81	0.33
198888		44.8	5.02	227	0.83	57.4	<5	94	4.5	70						
DUP		50.3	5.33	221	0.88	59.6	<5	98	4.2	70						
Target Range - Lower Bound		45.4	4.94	216	0.78	56.2	<5	90	4.0	60						
Upper Bound		49.7	5.41	232	0.93	60.8	10	102	4.7	80						
198898											1.33	0.12	4.3	2630	0.36	0.42
DUP											1.30	0.12	4.1	1400	0.38	0.42
Target Range - Lower Bound											1.24	0.10	3.8	1850	0.30	0.39
Upper Bound											1.39	0.14	4.6	2180	0.44	0.45
198906											0.52	0.62	1.3	3100	0.90	0.72
DUP											0.68	0.61	0.5	3070	0.86	0.76
Target Range - Lower Bound											0.56	0.57	0.7	2840	0.79	0.69
Upper Bound											0.64	0.66	1.1	3330	0.97	0.79
198907		6.5	2.44	186.5	0.06	4.8	<5	19	0.8	20						
DUP		5.9	2.20	185.5	<0.05	4.5	<5	18	0.7	20						
Target Range - Lower Bound		5.5	2.19	179.0	<0.05	4.2	<5	15	0.5	<10						
Upper Bound		6.9	2.45	193.0	0.10	5.1	10	22	1.0	30						

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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



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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm
		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
DUPLICATES																
198852		16.65	1.43	>500	6.1	5	0.68	3.8	7.86	47.1	5.00	0.4	0.329	0.02	>10000	24.4
DUP		16.60	1.42	>500	7.0	5	0.68	3.3	7.75	47.0	4.89	0.4	0.350	0.02	>10000	24.7
Target Range - Lower Bound		15.80	1.33	475	6.1	4	0.60	3.2	7.40	44.6	4.65	0.3	0.318	<0.01	9500	23.1
Upper Bound		17.45	1.52	>500	7.0	6	0.76	3.9	8.21	49.5	5.24	0.5	0.361	0.03	>10000	26.0
198853																
DUP																
Target Range - Lower Bound																
Upper Bound																
198873																
DUP																
Target Range - Lower Bound																
Upper Bound																
198887		17.30	1.38	>500	6.4	8	1.16	2.7	8.88	12.55	1.17	0.6	0.365	0.06	1130	32.2
DUP		17.00	1.10	>500	6.4	8	1.08	3.2	8.37	10.50	0.97	0.5	0.348	0.06	1150	32.1
Target Range - Lower Bound		16.30	1.16	475	6.0	7	1.01	2.6	8.18	10.90	0.97	0.4	0.334	0.05	1085	30.3
Upper Bound		18.00	1.32	>500	6.8	9	1.23	3.3	9.07	12.15	1.17	0.7	0.379	0.07	1200	34.0
198888																
DUP																
Target Range - Lower Bound																
Upper Bound																
198898		18.90	1.38	>500	27.8	8	0.05	8.3	8.60	14.55	1.65	0.2	0.373	0.01	1940	4.1
DUP		18.60	1.41	>500	27.4	7	0.05	8.0	8.37	13.95	1.53	0.2	0.370	0.01	1900	4.2
Target Range - Lower Bound		17.80	1.31	475	26.1	6	<0.05	7.7	8.05	13.50	1.46	<0.1	0.348	<0.01	1825	3.7
Upper Bound		19.70	1.48	>500	29.1	9	0.10	8.6	8.92	15.00	1.72	0.3	0.395	0.02	2020	4.6
198906		18.15	1.50	>500	8.1	12	0.09	2.9	8.11	18.95	2.04	0.3	0.286	0.02	2960	7.3
DUP		17.95	1.41	>500	8.3	11	0.08	2.9	8.30	18.85	1.97	0.3	0.289	0.02	3000	7.4
Target Range - Lower Bound		17.15	1.36	475	7.7	10	<0.05	2.6	7.78	17.90	1.85	0.2	0.268	<0.01	2830	6.8
Upper Bound		18.95	1.55	>500	8.7	13	0.10	3.2	8.63	19.90	2.16	0.4	0.307	0.03	3130	7.9
198907																
DUP																
Target Range - Lower Bound																
Upper Bound																

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NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm	ME-MS61 Pb ppm	ME-MS61 Rb ppm	ME-MS61 Re ppm	ME-MS61 S %	ME-MS61 Sb ppm	ME-MS61 Sc ppm	ME-MS61 Se ppm	ME-MS61 Sn ppm
		0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2
DUPLICATES																
198852		7.53	8520	19.05	0.03	460	3.7	1190	18.7	1.3	0.003	0.30	0.28	16.1	1	2.0
DUP		7.51	8490	19.35	0.03	470	4.1	1180	18.5	1.4	0.003	0.30	0.32	16.4	1	2.1
Target Range - Lower Bound		7.13	8070	18.20	0.02	442	3.5	1120	17.2	1.2	<0.002	0.28	0.23	15.3	<1	1.7
Upper Bound		7.91	8940	20.2	0.04	488	4.3	1250	20.0	1.5	0.004	0.33	0.37	17.2	2	2.4
198853																
DUP																
Target Range - Lower Bound																
Upper Bound																
198873																
DUP																
Target Range - Lower Bound																
Upper Bound																
198887		7.84	9620	113.0	0.03	>500	7.7	3370	49.2	2.8	0.010	0.21	0.29	16.9	1	2.0
DUP		7.71	9560	110.5	0.05	>500	8.2	3290	43.8	2.5	0.007	0.26	0.28	14.7	1	1.9
Target Range - Lower Bound		7.38	9110	106.0	0.03	475	7.4	3150	43.7	2.4	0.006	0.21	0.21	14.9	<1	1.7
Upper Bound		8.17	10050	117.5	0.05	>500	8.5	3510	49.3	2.9	0.011	0.26	0.36	16.7	2	2.2
198888																
DUP																
Target Range - Lower Bound																
Upper Bound																
198898		7.92	12200	116.0	0.02	269	35.4	1120	28.4	0.3	0.008	1.39	0.10	15.8	1	0.8
DUP		7.89	12050	115.0	0.01	274	34.3	1120	27.2	0.3	0.009	1.29	0.12	15.4	1	0.9
Target Range - Lower Bound		7.50	11500	109.5	<0.01	258	32.9	1050	25.9	0.2	0.006	1.26	<0.05	14.7	<1	0.6
Upper Bound		8.31	12750	121.5	0.02	285	36.8	1190	29.7	0.4	0.011	1.42	0.17	16.5	2	1.1
198906		7.77	11650	180.5	<0.01	>500	14.0	2350	74.1	0.8	0.011	0.25	0.16	14.7	1	2.3
DUP		7.77	11550	178.5	<0.01	>500	14.5	2230	74.8	0.8	0.010	0.26	0.16	14.6	1	2.3
Target Range - Lower Bound		7.37	11000	170.5	<0.01	475	13.3	2170	70.2	0.7	0.008	0.23	0.10	13.8	<1	2.0
Upper Bound		8.17	12200	188.5	0.02	>500	15.2	2410	78.7	0.9	0.013	0.28	0.22	15.5	2	2.6
198907																
DUP																
Target Range - Lower Bound																
Upper Bound																

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
DUPLICATES													
198852		3130	1.80	0.05	720	0.034	0.12	2.9	20	2.2	44.0	253	13.1
DUP		3120	1.83	0.07	630	0.033	0.10	2.9	20	2.3	43.1	242	13.2
Target Range - Lower Bound		2970	1.67	<0.05	641	0.027	0.08	2.7	18	2.0	41.3	233	11.7
Upper Bound		3280	1.96	0.10	709	0.040	0.14	3.1	22	2.5	45.8	262	14.6
198853													
DUP													
Target Range - Lower Bound													
Upper Bound													
198873													
DUP													
Target Range - Lower Bound													
Upper Bound													
198887		2780	4.41	0.16	149.5	0.031	0.25	9.9	13	2.1	30.9	180	20.9
DUP		2720	3.68	0.20	139.0	0.030	0.25	9.0	15	1.8	26.6	162	19.1
Target Range - Lower Bound		2610	3.79	0.12	137.0	0.024	0.21	8.9	12	1.7	27.2	160	18.0
Upper Bound		2890	4.30	0.24	151.5	0.037	0.29	10.0	16	2.2	30.3	182	22.0
198888													
DUP													
Target Range - Lower Bound													
Upper Bound													
198898		2640	1.71	0.72	112.0	0.006	0.02	2.7	8	0.9	19.0	92	7.6
DUP		2610	1.53	0.73	108.0	0.006	0.02	2.7	8	0.8	18.5	91	7.4
Target Range - Lower Bound		2490	1.49	0.64	104.5	<0.005	<0.02	2.5	7	0.7	17.7	85	6.4
Upper Bound		2760	1.75	0.81	115.5	0.010	0.04	2.9	9	1.0	19.8	98	8.6
198906		1530	6.54	0.25	231	0.031	0.03	5.3	12	1.4	24.2	230	13.0
DUP		1500	6.93	0.24	239	0.032	0.03	5.5	13	1.4	24.2	219	14.8
Target Range - Lower Bound		1440	6.35	0.18	223	0.025	<0.02	5.0	11	1.2	22.9	211	12.4
Upper Bound		1590	7.12	0.31	247	0.038	0.04	5.8	14	1.6	25.5	238	15.4
198907													
DUP													
Target Range - Lower Bound													
Upper Bound													

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QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ce ppm 3	ME-MS81h Dy ppm 0.3	ME-MS81h Er ppm 0.2	ME-MS81h Eu ppm 0.2	ME-MS81h Gd ppm 0.3	ME-MS81h Hf ppm 1	ME-MS81h Ho ppm 0.05	ME-MS81h La ppm 3	ME-MS81h Lu ppm 0.05	ME-MS81h Nb ppm 1	ME-MS81h Nd ppm 0.5	ME-MS81h Pr ppm 0.2	ME-MS81h Rb ppm 1	ME-MS81h Sm ppm 0.2	ME-MS81h Sn ppm 5
198921 DUP Target Range - Lower Bound Upper Bound		DUPLICATES														
198941 DUP Target Range - Lower Bound Upper Bound																
FEN198270 DUP Target Range - Lower Bound Upper Bound																
198956 DUP Target Range - Lower Bound Upper Bound		6010 6110 5840 6280	6.2 5.6 5.4 6.4	1.7 1.7 1.4 2.0	15.0 15.0 14.3 15.7	24.5 24.3 23.2 25.6	1 1 <1 2	0.78 0.78 0.70 0.86	4030 3940 3840 4130	0.20 0.18 0.13 0.25	810 813 782 841	1580 1545 1505 1620	544 534 520 558	5 5 4 6	94.4 93.5 90.5 97.4	<5 5 <5 10
198975 DUP Target Range - Lower Bound Upper Bound																
198976 DUP Target Range - Lower Bound Upper Bound		2050 1975 1940 2090	5.3 5.5 4.9 5.9	2.3 2.4 2.1 2.6	14.5 15.3 14.2 15.6	20.2 21.8 20.0 22.0	2 3 <1 4	0.87 0.91 0.81 0.97	856 854 822 888	0.35 0.35 0.29 0.41	709 706 682 733	1055 1075 1025 1105	259 264 252 271	3 3 2 4	98.5 98.1 94.7 102.0	6 6 <5 10
198991 DUP Target Range - Lower Bound Upper Bound		2250 2140 2120 2270	4.8 4.6 4.2 5.2	2.1 1.8 1.7 2.2	22.7 22.3 21.5 23.5	31.8 31.6 30.3 33.1	4 3 2 5	0.61 0.64 0.55 0.70	894 898 862 930	0.29 0.29 0.23 0.35	576 569 551 594	1125 1090 1070 1145	285 276 270 291	5 5 4 6	140.0 138.0 134.0 144.0	9 10 <5 10
191501 DUP Target Range - Lower Bound Upper Bound																

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QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01
DUPLICATES																
198921											0.85	0.48	3.9	4590	0.88	0.59
DUP											0.89	0.49	3.4	5250	0.88	0.62
Target Range - Lower Bound											0.82	0.45	3.3	4540	0.79	0.56
Upper Bound											0.92	0.52	4.0	5300	0.97	0.65
198941											0.20	1.38	1.5	970	2.08	0.38
DUP											0.12	1.32	1.3	940	1.99	0.33
Target Range - Lower Bound											0.14	1.27	1.1	870	1.88	0.33
Upper Bound											0.18	1.43	1.7	1040	2.19	0.38
FEN198270											<0.01	0.72	17.2	370	9.54	6.15
DUP											<0.01	0.74	15.8	370	9.82	6.10
Target Range - Lower Bound											<0.01	0.68	15.5	330	9.15	5.81
Upper Bound											0.02	0.78	17.5	410	10.20	6.44
198956		5.2	1.78	120.5	0.18	4.1	<5	19	1.2	50						
DUP		5.4	2.25	123.5	0.17	4.1	<5	18	1.1	50						
Target Range - Lower Bound		4.6	1.89	117.5	0.12	3.7	<5	15	0.9	40						
Upper Bound		6.0	2.14	126.5	0.23	4.5	10	22	1.4	60						
198975											0.30	1.70	5.3	650	1.92	1.06
DUP											0.48	1.69	5.6	660	1.99	1.03
Target Range - Lower Bound											0.36	1.60	5.0	600	1.81	0.98
Upper Bound											0.42	1.79	5.9	710	2.10	1.11
198976		7.8	1.24	263	0.27	9.5	<5	29	2.2	90						
DUP		8.5	1.21	265	0.30	9.4	<5	29	2.3	90						
Target Range - Lower Bound		7.4	1.13	254	0.23	8.8	<5	25	2.0	80						
Upper Bound		8.9	1.32	274	0.34	10.1	10	33	2.5	100						
198991		5.8	3.37	243	0.26	2.5	5	19	2.0	100						
DUP		5.7	3.22	240	0.24	2.5	5	19	1.7	90						
Target Range - Lower Bound		5.0	3.13	233	0.19	2.1	<5	15	1.6	80						
Upper Bound		6.5	3.46	250	0.31	2.9	10	23	2.1	110						
191501											<0.01	1.67	<0.2	6980	6.65	0.42
DUP											0.09	1.69	<0.2	7040	6.72	0.43
Target Range - Lower Bound											0.04	1.59	<0.2	6470	6.30	0.39
Upper Bound											0.06	1.77	0.4	7550	7.07	0.46

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm
		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
DUPLICATES																
198921		17.90	2.50	>500	11.6	12	0.32	5.7	8.04	20.0	2.16	0.4	0.409	0.04	3400	9.7
DUP		17.75	2.64	>500	11.9	11	0.31	4.8	8.07	20.5	2.22	0.4	0.410	0.13	3440	9.9
Target Range - Lower Bound		16.90	2.42	475	11.1	10	0.25	4.9	7.64	19.20	2.03	0.3	0.384	0.07	3250	9.1
Upper Bound		18.75	2.72	>500	12.4	13	0.38	5.6	8.47	21.3	2.35	0.5	0.435	0.10	3590	10.5
198941		16.35	1.09	>500	14.5	46	0.51	10.6	9.75	17.80	1.40	2.4	0.363	0.07	2260	15.4
DUP		14.55	1.19	>500	13.5	48	0.55	9.3	9.38	16.50	1.27	2.2	0.349	0.07	2070	14.6
Target Range - Lower Bound		14.65	1.06	475	13.2	44	0.45	9.4	9.08	16.25	1.22	2.1	0.333	0.06	2060	14.1
Upper Bound		16.25	1.22	>500	14.8	50	0.61	10.5	10.05	18.05	1.45	2.5	0.379	0.08	2270	16.0
FEN198270		1.34	0.02	>500	7.7	101	0.91	0.7	>50	26.7	6.83	0.7	1.390	0.03	720	12.7
DUP		1.33	<0.02	>500	7.6	100	0.86	0.8	>50	26.2	6.82	0.8	1.370	0.03	720	12.6
Target Range - Lower Bound		1.26	<0.02	475	7.2	94	0.79	0.5	47.5	25.1	6.43	0.6	1.305	0.02	684	11.8
Upper Bound		1.41	0.04	>500	8.1	107	0.98	1.0	50.0	27.8	7.22	0.9	1.455	0.04	757	13.5
198956																
DUP																
Target Range - Lower Bound																
Upper Bound																
198975		11.30	0.36	>500	19.2	71	0.44	34.9	15.65	17.30	1.75	1.9	0.581	0.03	960	16.6
DUP		11.30	0.38	>500	19.0	69	0.42	34.7	15.85	16.75	1.65	1.7	0.581	0.03	920	16.4
Target Range - Lower Bound		10.75	0.33	475	18.0	66	0.36	33.4	14.95	16.10	1.57	1.6	0.547	0.02	893	15.5
Upper Bound		11.90	0.41	>500	20.2	75	0.50	36.2	16.55	17.95	1.84	2.0	0.615	0.04	988	17.5
198976																
DUP																
Target Range - Lower Bound																
Upper Bound																
198991																
DUP																
Target Range - Lower Bound																
Upper Bound																
191501		15.60	0.46	>500	13.9	82	4.68	14.3	8.16	13.10	1.00	2.4	0.295	0.95	1500	71.1
DUP		15.65	0.50	>500	13.3	68	4.68	13.9	8.18	13.20	0.95	2.4	0.301	0.95	1560	71.5
Target Range - Lower Bound		14.85	0.44	475	12.8	70	4.40	13.4	7.75	12.45	0.88	2.2	0.278	0.89	1455	67.5
Upper Bound		16.40	0.52	>500	14.4	80	4.96	14.8	8.59	13.85	1.07	2.6	0.318	1.01	1605	75.1

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.



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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm	ME-MS61 Pb ppm	ME-MS61 Rb ppm	ME-MS61 Re ppm	ME-MS61 S %	ME-MS61 Sb ppm	ME-MS61 Sc ppm	ME-MS61 Se ppm	ME-MS61 Sn ppm
		0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2
DUPLICATES																
198921		7.73	12150	181.5	<0.01	>500	15.7	960	23.5	2.3	0.009	0.47	0.15	15.7	1	1.5
DUP		7.79	12200	189.0	<0.01	>500	15.0	950	24.1	2.3	0.008	0.48	0.17	15.9	2	1.6
Target Range - Lower Bound		7.36	11550	176.0	<0.01	475	14.4	900	22.1	2.1	0.006	0.44	0.10	14.9	<1	1.3
Upper Bound		8.16	12800	194.5	0.02	>500	16.3	1010	25.5	2.5	0.011	0.51	0.22	16.7	2	1.8
198941		7.88	9580	97.5	0.01	>500	48.4	6100	15.2	3.0	0.006	0.22	0.25	27.6	1	4.9
DUP		7.70	9490	93.1	0.01	>500	46.3	6050	13.4	2.9	0.005	0.21	0.26	26.9	2	4.8
Target Range - Lower Bound		7.39	9050	90.5	<0.01	475	44.8	5760	13.1	2.7	0.003	0.19	0.19	25.8	<1	4.4
Upper Bound		8.19	10000	100.0	0.02	>500	49.9	6390	15.5	3.2	0.008	0.24	0.32	28.7	2	5.3
FEN198270		0.57	308	21.9	0.01	217	15.2	3020	49.6	3.2	0.005	0.04	5.73	44.8	1	2.7
DUP		0.58	318	21.7	0.01	213	15.1	3020	49.3	3.1	0.005	0.04	5.73	43.9	1	2.7
Target Range - Lower Bound		0.54	292	20.7	<0.01	204	14.2	2860	46.5	2.9	0.003	0.03	5.25	42.0	<1	2.4
Upper Bound		0.61	334	22.9	0.02	226	16.1	3180	52.4	3.4	0.007	0.05	6.21	46.7	2	3.0
198956																
DUP																
Target Range - Lower Bound																
Upper Bound																
198975		7.09	16800	105.0	0.02	>500	93.8	1630	19.4	2.0	0.002	0.67	0.35	40.9	<1	4.0
DUP		7.09	16900	107.5	0.02	>500	94.6	1630	17.7	2.2	0.004	0.68	0.34	39.7	1	3.8
Target Range - Lower Bound		6.73	16000	101.0	<0.01	475	89.3	1540	17.1	1.9	<0.002	0.63	0.27	38.2	<1	3.5
Upper Bound		7.45	17700	111.5	0.03	>500	99.1	1720	20.0	2.3	0.004	0.72	0.42	42.4	2	4.3
198976																
DUP																
Target Range - Lower Bound																
Upper Bound																
198991																
DUP																
Target Range - Lower Bound																
Upper Bound																
191501		8.71	8370	60.6	0.06	480	81.0	430	4.7	42.6	0.004	0.21	0.17	27.6	1	10.1
DUP		8.68	8320	62.0	0.06	470	86.3	430	4.8	42.3	0.007	0.21	0.18	27.8	1	10.1
Target Range - Lower Bound		8.25	7920	58.2	0.05	451	79.3	400	4.0	40.2	0.003	0.19	0.11	26.2	<1	9.4
Upper Bound		9.14	8770	64.4	0.07	499	88.0	460	5.5	44.7	0.008	0.23	0.24	29.2	2	10.8

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



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NO-7491 TRONDHEIM
NORWAY

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An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
DUPLICATES													
198921		1830	4.64	0.25	232	0.021	0.07	4.4	11	1.1	16.9	518	13.0
DUP		1800	4.99	0.26	232	0.022	0.09	4.5	11	1.2	17.1	534	10.8
Target Range - Lower Bound		1725	4.52	0.19	220	0.015	0.05	4.1	9	1.0	16.1	498	10.5
Upper Bound		1905	5.11	0.32	244	0.028	0.11	4.8	13	1.3	18.0	554	13.3
198941		2310	8.15	0.13	80.1	0.143	0.04	22.5	29	1.6	29.3	219	68.2
DUP		2260	8.00	0.14	72.7	0.139	0.05	21.7	29	1.6	28.7	227	70.8
Target Range - Lower Bound		2170	7.62	0.08	72.6	0.129	<0.02	20.9	27	1.4	27.5	210	63.8
Upper Bound		2400	8.53	0.19	80.2	0.153	0.07	23.3	31	1.8	30.6	236	75.2
FEN198270		258	0.30	<0.05	1020	0.057	0.06	7.8	99	53.4	130.0	103	32.6
DUP		258	0.29	<0.05	1020	0.058	0.06	8.1	100	52.1	128.0	103	31.4
Target Range - Lower Bound		245	0.23	<0.05	969	0.050	0.04	7.5	94	48.7	122.5	96	29.1
Upper Bound		271	0.36	0.10	1070	0.065	0.08	8.4	105	56.8	135.5	110	34.9
198956													
DUP													
Target Range - Lower Bound													
Upper Bound													
198975		1920	6.65	0.16	283	0.167	0.05	10.1	29	2.5	23.3	171	49.1
DUP		1920	6.09	0.12	250	0.167	0.06	9.5	29	2.3	22.9	193	47.7
Target Range - Lower Bound		1825	6.00	0.08	253	0.154	0.03	9.2	27	2.1	21.8	171	44.3
Upper Bound		2020	6.74	0.20	280	0.180	0.08	10.4	31	2.7	24.4	193	52.5
198976													
DUP													
Target Range - Lower Bound													
Upper Bound													
198991													
DUP													
Target Range - Lower Bound													
Upper Bound													
191501		1510	6.66	0.12	97.7	0.195	0.40	6.9	53	1.2	15.1	95	62.2
DUP		1500	7.40	0.09	105.5	0.196	0.43	7.5	53	1.2	15.1	95	62.5
Target Range - Lower Bound		1430	6.63	<0.05	96.5	0.181	0.36	6.7	49	1.0	14.2	88	57.2
Upper Bound		1580	7.43	0.16	106.5	0.210	0.47	7.7	57	1.4	16.0	102	67.5

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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



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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ce ppm 3	ME-MS81h Dy ppm 0.3	ME-MS81h Er ppm 0.2	ME-MS81h Eu ppm 0.2	ME-MS81h Gd ppm 0.3	ME-MS81h Hf ppm 1	ME-MS81h Ho ppm 0.05	ME-MS81h La ppm 3	ME-MS81h Lu ppm 0.05	ME-MS81h Nb ppm 1	ME-MS81h Nd ppm 0.5	ME-MS81h Pr ppm 0.2	ME-MS81h Rb ppm 1	ME-MS81h Sm ppm 0.2	ME-MS81h Sn ppm 5
191502 DUP Target Range - Lower Bound Upper Bound		DUPLICATES														
199335 DUP Target Range - Lower Bound Upper Bound		8040 8150 7810 8380	18.0 18.4 17.3 19.1	3.3 3.5 3.1 3.7	30.5 32.2 30.1 32.6	62.5 62.7 60.1 65.1	<1 <1 <1 2	2.18 2.08 2.01 2.25	4790 4830 4640 4980	0.12 0.14 0.08 0.18	263 236 240 259	2310 2410 2280 2440	725 740 707 758	1 1 <1 2	157.5 164.5 155.0 167.0	<5 <5 <5 10
199349 DUP Target Range - Lower Bound Upper Bound		7220 7470 7080 7610	14.5 14.2 13.5 15.2	2.4 2.4 2.1 2.7	38.2 37.1 36.1 39.2	64.6 65.2 62.3 67.5	2 1 <1 2	1.47 1.39 1.33 1.53	4170 4240 4050 4360	0.10 0.09 <0.05 0.10	176 167 164 179	2630 2680 2560 2750	718 741 704 755	1 1 <1 2	219 227 215 231	20 23 16 27
ORIGINAL DUP Target Range - Lower Bound Upper Bound																
198851 198851 PREP DUP		PREP DUPLICATES														
198851 198851 PREP DUP		8470 8990	9.7 9.2	2.5 2.1	32.8 32.1	50.8 46.9	1 1	1.19 1.15	6010 5860	0.25 0.12	704 706	2160 2180	797 824	2 2	161.5 164.5	<5 <5
198901 198901 PREP DUP		5260 5110	15.0 14.3	4.9 4.2	23.1 21.8	43.6 42.3	1 1	2.18 2.01	3300 3160	0.52 0.32	849 877	1410 1345	503 468	2 1	124.5 119.0	6 5
198951 198951 PREP DUP		9090 10200	24.7 23.0	7.8 7.2	37.5 39.4	67.8 64.6	2 2	3.59 3.38	6020 6560	0.77 0.54	364 366	2720 2690	850 947	2 1	211 215	5 <5
191501 191501 PREP DUP		2530 2590	3.5 3.9	1.6 1.5	11.9 11.7	17.9 16.4	2 3	0.41 0.60	1830 1690	0.19 0.11	590 483	679 650	232 229	42 39	63.5 60.3	13 12

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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



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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
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NORWAY

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01
DUPLICATES																
191502 DUP											0.01	2.37	<0.2	6950	4.94	0.38
Target Range - Lower Bound											<0.01	2.38	<0.2	7110	5.20	0.39
Upper Bound											<0.01	2.25	<0.2	6490	4.77	0.36
											0.02	2.50	0.4	7570	5.37	0.41
199335 DUP		16.2	5.23	179.5	0.24	50.4	<5	43	1.5	10						
Target Range - Lower Bound		15.2	5.13	183.0	0.21	48.0	<5	44	1.4	20						
Upper Bound		14.7	4.95	174.5	0.17	47.2	<5	39	1.2	<10						
		16.7	5.41	188.0	0.28	51.2	10	48	1.7	20						
199349 DUP		1.2	4.20	387	0.17	5.6	<5	30	1.3	50						
Target Range - Lower Bound		1.5	4.05	384	0.13	5.7	<5	30	1.2	60						
Upper Bound		0.8	3.93	372	0.09	5.2	<5	26	1.0	40						
		1.9	4.32	399	0.21	6.1	10	34	1.5	70						
ORIGINAL DUP											0.13	4.62	3.8	220	0.14	6.78
Target Range - Lower Bound											0.10	4.48	4.7	220	0.12	6.21
Upper Bound											0.10	4.31	3.8	190	0.07	6.16
											0.13	4.79	4.7	250	0.19	6.83
PREP DUPLICATES																
198851 198851 PREP DUP		5.6	3.38	265	0.30	4.7	<5	28	1.4	50	<0.01	1.42	1.3	7700	2.01	0.47
		6.0	7.61	243	0.19	4.8	<5	27	1.4	50	0.35	1.52	1.2	>10000	1.95	0.48
198901 198901 PREP DUP		7.1	4.26	195.0	0.60	28.1	<5	52	2.9	40	1.39	0.43	3.8	2450	2.50	1.46
		7.1	6.61	179.5	0.42	27.0	<5	49	2.4	40	1.69	0.43	3.1	2670	2.44	1.41
198951 198951 PREP DUP		1.9	6.31	446	0.91	9.9	<5	91	5.2	150	0.62	1.08	2.0	2030	1.91	1.47
		2.3	11.40	429	0.85	8.7	<5	84	5.1	140	0.77	1.11	2.5	2070	1.64	1.36
191501 191501 PREP DUP		8.3	2.37	97.3	0.15	7.9	<5	15	1.1	70	<0.01	1.67	<0.2	6980	6.65	0.42
		6.6	2.28	85.3	0.07	6.2	<5	14	1.1	70	0.02	1.70	<0.2	7190	6.86	0.47

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Ca %	ME-MS61 Cd ppm	ME-MS61 Ce ppm	ME-MS61 Co ppm	ME-MS61 Cr ppm	ME-MS61 Cs ppm	ME-MS61 Cu ppm	ME-MS61 Fe %	ME-MS61 Ga ppm	ME-MS61 Ge ppm	ME-MS61 Hf ppm	ME-MS61 In ppm	ME-MS61 K %	ME-MS61 La ppm	ME-MS61 Li ppm
		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
DUPLICATES																
191502		12.35	0.18	>500	16.1	114	5.42	19.4	9.39	14.55	0.86	2.7	0.229	1.31	1240	81.0
DUP		12.30	0.21	>500	16.3	104	5.39	18.3	9.41	14.75	0.88	2.5	0.229	1.31	1280	82.1
Target Range - Lower Bound		11.70	0.17	475	15.3	103	5.08	18.0	8.92	13.85	0.78	2.4	0.213	1.23	1195	77.3
Upper Bound		12.95	0.22	>500	17.1	115	5.73	19.7	9.88	15.45	0.96	2.8	0.245	1.39	1325	85.8
199335																
DUP																
Target Range - Lower Bound																
Upper Bound																
199349																
DUP																
Target Range - Lower Bound																
Upper Bound																
ORIGINAL		0.06	<0.02	80.3	0.2	23	0.27	1.4	0.26	5.90	0.07	2.8	0.015	1.86	40.3	2.3
DUP		0.08	<0.02	80.0	0.2	48	0.26	1.5	0.27	6.03	0.08	2.8	0.016	1.88	39.5	2.2
Target Range - Lower Bound		0.06	<0.02	76.1	<0.1	33	0.20	1.2	0.24	5.62	<0.05	2.6	0.010	1.77	37.4	1.9
Upper Bound		0.08	0.04	84.2	0.3	38	0.33	1.7	0.29	6.31	0.10	3.0	0.021	1.97	42.4	2.6
PREP DUPLICATES																
198851		15.85	1.33	>500	10.1	14	1.04	3.5	8.87	27.2	2.78	0.7	0.353	0.04	4480	26.2
198851 PREP DUP		16.65	1.08	>500	10.0	12	1.15	3.2	9.43	28.2	2.93	0.7	0.312	0.05	4630	26.6
198901		18.15	7.70	>500	17.3	17	0.35	7.0	8.09	18.40	2.14	1.0	0.404	0.03	2790	13.3
198901 PREP DUP		18.35	7.67	>500	14.2	15	0.36	7.2	8.21	17.60	2.04	1.1	0.409	0.04	2670	14.0
198951		12.75	9.76	>500	17.9	24	0.34	32.5	12.55	29.8	3.23	1.6	1.080	0.03	4250	19.9
198951 PREP DUP		16.00	9.27	>500	16.8	26	0.38	31.8	12.55	20.9	2.24	1.3	1.030	0.04	3290	18.7
191501		15.60	0.46	>500	13.9	82	4.68	14.3	8.16	13.10	1.00	2.4	0.295	0.95	1500	71.1
191501 PREP DUP		15.85	0.29	>500	13.4	65	4.84	16.1	8.27	12.70	0.97	2.5	0.305	0.98	1390	72.1

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Mg %	ME-MS61 Mn ppm	ME-MS61 Mo ppm	ME-MS61 Na %	ME-MS61 Nb ppm	ME-MS61 Ni ppm	ME-MS61 P ppm	ME-MS61 Pb ppm	ME-MS61 Rb ppm	ME-MS61 Re ppm	ME-MS61 S %	ME-MS61 Sb ppm	ME-MS61 Sc ppm	ME-MS61 Se ppm	ME-MS61 Sn ppm
		0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2
DUPLICATES																
191502		9.02	8050	49.8	0.06	>500	96.2	600	3.9	53.6	0.003	0.26	0.17	27.8	1	10.0
DUP		8.98	8040	52.0	0.06	480	100.5	590	4.2	54.2	0.006	0.25	0.15	27.6	1	9.0
Target Range - Lower Bound		8.54	7640	48.3	0.05	465	93.2	560	3.3	51.1	<0.002	0.23	0.10	26.2	<1	8.8
Upper Bound		9.46	8450	53.5	0.07	>500	103.5	630	4.8	56.7	0.007	0.28	0.22	29.2	2	10.2
199335																
DUP																
Target Range - Lower Bound																
Upper Bound																
199349																
DUP																
Target Range - Lower Bound																
Upper Bound																
ORIGINAL		0.07	25	3.16	0.18	2.3	0.8	280	5.6	28.1	0.023	0.01	1.98	5.8	1	0.4
DUP		0.07	36	3.38	0.18	2.5	1.3	290	5.5	28.6	0.020	0.01	1.88	5.9	1	0.4
Target Range - Lower Bound		0.06	24	3.06	0.16	2.2	0.8	260	4.8	26.8	0.018	<0.01	1.74	5.5	<1	<0.2
Upper Bound		0.08	37	3.48	0.20	2.6	1.3	310	6.3	29.9	0.025	0.02	2.12	6.2	2	0.6
PREP DUPLICATES																
198851		7.01	9880	69.4	0.04	>500	13.3	670	13.8	2.4	0.004	0.22	0.29	16.3	1	3.9
198851 PREP DUP		7.41	10100	69.7	0.03	>500	14.2	650	13.8	2.7	0.008	0.31	0.31	18.1	1	4.1
198901		6.75	10950	759	0.14	>500	20.4	>10000	45.4	1.7	0.028	0.73	0.32	17.8	1	4.9
198901 PREP DUP		7.05	11100	728	0.16	>500	20.3	>10000	43.8	1.9	0.027	0.66	0.29	19.6	2	4.7
198951		5.95	9600	176.0	0.02	309	34.8	>10000	36.0	1.5	0.020	0.72	0.55	32.7	1	3.1
198951 PREP DUP		6.59	10100	186.0	0.14	331	37.6	>10000	33.9	1.8	0.023	0.73	0.46	33.3	2	3.1
191501		8.71	8370	60.6	0.06	480	81.0	430	4.7	42.6	0.004	0.21	0.17	27.6	1	10.1
191501 PREP DUP		8.81	8480	62.4	0.06	>500	79.2	430	5.6	43.9	0.006	0.20	0.19	28.0	1	10.1

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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



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To: GEOLOGICAL SURVEY OF NORWAY (NGU)
POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
NORWAY

Page: 7 - E
Total # Pages: 7 (A - E)
Plus Appendix Pages
Finalized Date: 19-DEC-2018
Account: ONUSEG

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

Sample Description	Method Analyte Units LOD	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.01	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
DUPLICATES													
191502		1240	11.75	0.06	116.5	0.287	0.49	6.7	53	1.5	12.4	111	62.3
DUP		1260	9.16	0.09	118.0	0.286	0.49	6.5	54	1.5	12.5	115	63.6
Target Range - Lower Bound		1185	9.88	<0.05	111.5	0.267	0.43	6.2	50	1.3	11.7	105	57.7
Upper Bound		1315	11.05	0.10	123.0	0.306	0.55	7.0	57	1.7	13.2	121	68.2
199335													
DUP													
Target Range - Lower Bound													
Upper Bound													
199349													
DUP													
Target Range - Lower Bound													
Upper Bound													
ORIGINAL		21.2	0.16	7.23	5.76	0.124	0.35	2.3	33	2.1	7.5	6	101.0
DUP		21.4	0.16	6.52	5.85	0.126	0.35	2.4	35	2.3	7.4	11	102.0
Target Range - Lower Bound		20.0	0.10	6.48	5.50	0.114	0.30	2.1	31	1.9	7.0	6	93.4
Upper Bound		22.6	0.22	7.27	6.11	0.136	0.40	2.6	37	2.5	7.9	11	109.5
PREP DUPLICATES													
198851		1840	4.97	0.16	94.6	0.070	0.19	4.4	21	1.8	24.5	245	31.6
198851 PREP DUP		2020	6.19	0.11	222	0.073	0.20	5.2	20	1.9	26.9	213	32.8
198901		2260	3.54	0.62	177.5	0.062	0.17	26.4	12	1.6	48.1	1080	36.2
198901 PREP DUP		2420	4.01	0.52	225	0.060	0.20	29.2	10	1.6	54.3	1100	33.8
198951		3410	2.47	0.21	353	0.029	0.06	9.9	20	2.9	82.8	1660	119.0
198951 PREP DUP		3570	2.89	0.30	169.5	0.032	0.06	9.3	22	2.8	76.4	1720	99.6
191501		1510	6.66	0.12	97.7	0.195	0.40	6.9	53	1.2	15.1	95	62.2
191501 PREP DUP		1510	7.02	0.13	94.5	0.200	0.44	7.1	53	1.3	15.4	100	61.8

Comments: Samples were received on 27-Nov-2018. and the SSF/Request on 28-Nov-2018.

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POSTBOKS 6315 TORGARDEN
NO-7491 TRONDHEIM
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Page: Appendix 1
Total # Appendix Pages: 1
Finalized Date: 19-DEC-2018
Account: ONUSEG

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Project: Not provided

QC CERTIFICATE OF ANALYSIS PI18302149

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME-MS61

ACCREDITATION COMMENTS

Applies to Method: The methods immediately below this line are ISO 17025:2005 Accredited. INAB Registration No: 173T
ME-MS61



LABORATORY ADDRESSES

Applies to Method: Processed at ALS Pitea located at Hammarvagen 22, SE-943 36, Ojebyn, Sweden.
CRU-31 CRU-QC LOG-22 LOG-24
PUL-31 PUL-QC SPL-22Y WEI-21

Applies to Method: Processed at ALS Loughrea located at Dublin Road, Loughrea, Co. Galway, Ireland.
ME-MS61 ME-MS81h