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Collected Data in the project area, Mongolia

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M-48-101

M-48-110

M-48-111

M-48-112

M-48-113

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M-48-111-A, M-48-111-B, M-48-111-C, M-48-111-D

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M-48-100-D-d

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M-48-113-A-a, M-48-113-A-b, M-48-113-A-c, M-48-113-A-d

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Mineral location map of 1:500,00 in scale

Geological map of 1:100,00 in scale including the north and western area of Erdenet mine .

Geological maps of 1:100,00 in scale in and around Erdenet Mine.

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3 sheets of Erdenet Mine area

5 sheets of Location map of the survey of 1:100,000 in scale.

3. Geological maps of the seven geological survey areas.

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Explanation note

Mineral showing map and survey routs of 1:5,000 in scale

Geological map of 1:25,000 in scale

Geological map of 1:10,000 in scale

Geological map of1:5,000 in scale

Geophysical maps of IP electric survey (chargeability and resistivity)

Drilling section

3-(2) Mogoin gol area

Explanation note

Mineral showing map and survey routs of 1:5,000 in scale

Geological map of 1:25,000 in scale

Geological map of1:5,000 in scale

Geophysical maps of IP electric survey (chargeability and resistivity, 1:25,000 in scale) and magnetic survey

3-(3) Khujiriin area

Explanation note

Mineral showing map and survey routs of 1:100,000 in scale

Geological map of 1:25,000 in scale

Geological map of1:5,000 in scale

Geophysical maps of IP electric survey (chargeability and resistivity, 1:25,000 in scale) and magnetic survey

3-(4) Tsagaan Chuluut area

Mineral showing map and survey routs of 1:50,000 in scale

Geological map of 1:25,000 in scale

Geophysical maps of IP electric survey (chargeability and resistivity, 1:25,000 in scale) and magnetic survey

3-(5) Erdenet Mine area

Mineral showing map and survey routs of 1:50,000 in scale

Geological map of 1:25,000 in scale

Geophysical maps of IP electric survey (chargeability and resistivity, 1:50,000 in scale) and magnetic survey

3-(6) Danbatseren area

Explanation note

Geological map of 1:25,000 in scale

Geochemical map of 1: 25,000,

Geophysical maps of IP electric survey (chargeability and resistivity, 1:10,000 in scale) and magnetic survey

3-(7) Undrakh area

Explanation note

Mineral showing map and survey routs of 1:50,000 in scale

Geological map of 1:10,000 in scale

Geophysical map of IP electric survey (chargeability and resistivity, 1:10,000 in scale) and magnetic survey

3-8 Tsookher mert area

Explanation note

4. Collected data for Erdenet Mine area

1. 1981-1985 years executed geological survey around the Erdenet area. List of included coordinate of the survey's some area, drilling point, trench and topo points. In the CD number from 01 to 020.
2. Hydro geological map of the Erdenet area, scale 1:100000. In the CD number from 1-1 to

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3. Geochemical map of the Khujiriin gol area, scale 1:25000. In the CD number from 2-1 to 2-4.
4. Geo chemical map of the Mogoin gol area, in the CD number from 3-1 to 3-6.
5. Geological section of the Khujiriin gol area, scale 1:2000. In the CD from 4-1 to 4-4.
6. Drilling point 337, appendix number 40, and list 3. In the CD from 5-1 to 5-6.
7. Drilling point 337, appendix number 40, and list 2. In the CD from 6-1 to 6-4.
8. Drilling point 337, appendix number 40, and list 1. In the CD from 7-1 to 7-4.
9. Drilling point 336, appendix number 39, and list 3. In the CD from 8-1 to 8-6.
10. Drilling point 336, appendix number 39, and list 2. In the CD from 9-1 to 9-5.
11. Drilling point 336, appendix number 39, and list 1. In the CD from 10-1 to 10-4.
12. Drilling point 335, appendix number 38, and list 3. In the CD from 11-1 to 11-6.
13. Drilling point 335, appendix number 38, and list 2. In the CD from 12-1 to 12-5.
14. Drilling point 335, appendix number 38, and list 1. In the CD from 13-1 to 13-4.
15. Drilling point 334, appendix number 37, and list 3. In the CD from 14-1 to 14-4.
16. Drilling point 334, appendix number 37, and list 2. In the CD from 15-1 to 15-4.
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18. Drilling point 309, appendix number 55, and list 3. In the CD from 17-1 to 17-3.
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20. Drilling point 309, appendix number 55, and list 1. In the CD from 19-1 to 19-4.
21. Drilling point 308, appendix number 54, and list 4. In the CD from 20-1 to 20-6.
22. Drilling point 308, appendix number 54, and list 3. In the CD from 21-1 to 21-4.
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24. Drilling point 308, appendix number 54, and list 1. In the CD from 23-1 to 23-4.
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32. Drilling point 331, appendix number 35, and list 3. In the CD from 31-1 to 31-5.
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34. Geological section (a) of the line's number 63, scale 1:2000. /1990-1992yaers survey/. In the CD from 33-1 to 33-4.
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43. Goncharov. V.N.(1986-1988): Report of detailing survey in the Central area/ Erdenet area.
44. Kholmetskii. S.N.(1986-1990): Report of detailing survey in the Oyut area/ SE of Erdenet area.
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Appendix 2 Description of thin sections in the western Erdenet area

Ser. No.	Sample No.	Area	Coordinates N	Coordinates E	Geolo. Unit	Rock Name	Texture	Phenocrysts, crystals: quartz	K-feldspar	plagioclase	muscovite	biotite	hornblende	clinopyroxene	orthopyroxene	apatite	zircon	glass	opeq minerals	Secondary Minerals: quartz	muscovite	biotite	sericite	chlorite	epidote	carbonate	rutile	pyrite	limonite	opeq minerals	Remarks
1	MA1045	Zuukhiin gol	49° 15'28"	104° 14'25"	γξ3P2-T1s	granodiorite	hypidiomorphic granunular	◎	◎	◎		○				·	·		·				△	△		·				·	malachite(?)
2	MA1052	Zuukhiin gol	49° 15'26"	103° 16'43"	γξ3P2-T1s	basaltic lapilli tuff	pyroclastic			◎										△			·	△		·			·	·	basaltic fragments(◎), chlorite vein, iron oxide
3	MB1052	Zuukhiin gol	49° 13'25"	104° 14'24"	γξ3P2-T1s	liparite	porphyritic, flow structure	◎	○	△	○					·	·	◎	·												·	
4	MB1053	Zuukhiin gol	49° 13'26"	104° 15'05"	γξ3P2-T1s	rhyolite	glassy, porphyritic and flow structure	◎	○	△		△							·							△				·	
5	MB1060	Zuukhiin gol	49° 14'05"	104° 13'17"	γξ3P2-T1s	granodiorite	hypidiomorphic granunular	◎	○	◎		○	△			·	·		·				·	△						·	
6	MC1074	Zuukhiin gol	49° 15'24"	104° 12'46"	γξ3P2-T1s	micro-gabbro	granular	△		◎			◎	△					·	△			△	△	△			?		·	epidote vein
7	MC1075	Zuukhiin gol	49° 15'09"	104° 13'01"	γξ3P2-T1s	diorite to gabbro	granular	△		◎		△	○	△	△				·									?		·	
8	MC1076	Zuukhiin gol	49° 15'05"	104° 13'16"	γξ3P2-T1s	granodiorite	hypidiomorphic-granular	◎	◎	◎		○	△			·	·		·				·	△						·	
9	MC1077	Zuukhiin gol	49° 14'59"	104° 13'26"	γξ3P2-T1s	granite	hypidiomorphic-granular	◎	◎	◎		○	△			·	·		·				·	△	○					·	
10	MC1089	Zuukhiin gol	49° 12'15"	104° 13'12"	γξ3P2-T1s	strongly silicified rock						△								◎	·	·	◎			△					alunite(○)
11	MC1090	Zuukhiin gol	49° 12'03"	104° 13'31"	γξ3P2-T1s	granodiorite	hypidiomorphic-granular	◎	◎	◎		○	○			·	·		·				△	△	△		·			·	
12	MA1077	Mogoin gol	48° 46'15"	104° 15'34"	γξ3P2-T1s	liparite	intersertal and porphyritic	◎	◎	◎	△	△						◎	·	△				·						·	phenocryst (Pl, K-feldspar)
13	MA1078	Mogoin gol	48° 46'15"	103° 16'43"	γξ3P2-T1s	andesite altered	intersertal and porphyritic			◎						·				◎		△	△	○	·	·			△	·	phenocryst (Pl)
14	AM1080	Mogoin gol	49° 10'06"	103° 45'42"	γξ3P2-T1s	secondary quartzite	granular													◎	○		◎				·			·	topaz(○), hematite(△), tourmaline(○)
15	MB1064	Mogoin gol	49° 12'19"	103° 47'19"	γξ3P2-T1s	granite brecciated	hypidiomorphic granunular	◎	◎	○		?				·	·		·				△	·	·	·	·			·	
16	MB1066	Mogoin gol	49° 12'28"	103° 46'43"	γξ3P2-T1s	granite	hypidiomorphic granunular	◎	◎	○		○	△			·	·		·	○			△	△	△		·		?	·	
17	MB1070	Mogoin gol	49° 11'28"	103° 46'04"	γξ3P2-T1s	granodiorite porphyry	porphyritic	◎	○	◎		○	△			·	·		·	○			△	△	△	·	·	?		·	
18	MC1098	Mogoin gol	49° 12'27"	103° 45'04"	γξ3P2-T1s	diorite altered	language training	○	◎	◎		○	?			·	·		·	○			△	○						·	
19	MC1103	Mogoin gol	49° 11'52"	103° 45'13"	γξ3P2-T1s	brecciated andesitic tuff	pyroclastic													△			△	◎		△				△	basaltic and crystal fragments
20	MC1110	Mogoin gol	49° 11'16"	103° 47'15"	γξ3P2-T1s	granodiorite	language training	○	◎	◎		○	△			·	·		·	△			△	△	·			?		·	
21	MA1095	Khujiriin gol	49° 07'41"	103° 38'58"	γξ3P2-T1s	granodiorite porphyry	porphyritic	◎	◎	◎		△				·			△	○			○	△	·					·	·	
22	MA1101	Khujiriin gol	48° 46'15"	103° 16'43"	γξ3P2-T1s	granodiorite altered	hypidiomorphic granunular	◎	◎	◎		○				·			·	○			○	○	·					·	·	
23	MA1104	Khujiriin gol	49° 08'15"	103° 34'08"	γξ3P2-T1s	granodiorite	hypidiomorphic granunular	◎	◎	◎		○	○			·	·		·	△			·							·	·	
24	MA1105	Khujiriin gol	49° 08'18"	103° 34'48"	γξ3P2-T1s	granodiorite porphyry	hypidiomorphic granunular,	◎	◎	◎		○	○			·	·		·				·		·					·	·	
25	MA1116	Khujiriin gol	48° 52'16"	103° 46'46"	γξ3P2-T1s	granodiorite altered	hypidiomorphic granunular	◎	◎	◎		○	○			·			·	△			△	○	△				·	·	·	

◎: abundant, ○: common, △: a little, ·: rare, ?: uncertain

Ser. No.	Sample No.	Area	Coordinates N	Coordinates E	Geolo. Unit	Rock Name	Texture	Phenocrysts, crystals: quartz	K-feldspar	plagioclase	muscovite	biotite	hornblende	clinopyroxene	orthopyroxene	apatite	zircon	glass	opaq minerals	Secondary Minerals: quartz	muscovite	biotite	sericite	chlorite	epidote	carbonate	rutile	pyrite	limonite	opaq minerals	Remarks
26	MB1084	Khujiriin gol	49° 06'48"	103° 37'40"	γ ξ 3P2-T1s	gabbro	granular	△		◎		△	○	△	△	·	·		·	△			·	△	·			?		·	actinolite(○)
27	MB1086	Khujiriin gol	49° 07'16"	103° 35'58"	γ ξ 3P2-T1s	granite porphyry	hypidiomorphic-granular, porphyritic	◎	◎	◎		△							·	△			○	△				?		·	
28	MB1093	Khujiriin gol	49° 07'39"	103° 34'05"	γ ξ 3P2-T1s	granite porphyry	hypidiomorphic-granular, porphyritic	◎	◎	◎		○	△			·	·		·	△			△		·			?	·	·	
29	MC1119①	Khujiriin gol	49° 08'07"	103° 38'18"	γ ξ 3P2-T1s	granodioriteporphyry strongly silicified	hypidiomorphic-granular	○	◎	◎		?	?			·	·		·	○			△		◎			?		·	phenocryst(Pl)
30	MC1130	Khujiriin gol	49° 08'52"	103° 37'35"	γ ξ 3P2-T1s	andesite porphyry	porphyritic	○	○	◎		?	○			·	·		·	△			△	◎	△			?		·	phenocryst(Pl, Horn)
31	MC1137	Khujiriin gol	48° 08'15"	103° 38'50"	γ ξ 3P2-T1s	gabbro	granular	○	△	◎		△	○	○	·	·	·		·	△				△	△			?		·	
32	MA1039	Tsagaan Chuluut	49° 03'41"	103° 59'42"	γ ξ 3P2-T1s	andesite	intersertal and porphyritic			◎				○	·		·	○	·				·	△	·	·			·	·	Phenocryst:Pl(○)
33	MB1029	Tsagaan Chuluut	49° 03'33"	104° 03'00"	γ ξ 3P2-T1s	coarse tuff altered	pyroclastic													◎			△							·	○	basaltic fragments(◎), kaolinite(◎), alunite(◎)
34	MB1030	Tsagaan Chuluut	49° 03'34"	104° 02'45"	γ ξ 3P2-T1s	andesite strongly altered	pyroclastic			◎										◎			◎			△				·		
35	MB1035	Tsagaan Chuluut	49° 04'04"	104° 03'58"	γ ξ 3P2-T1s	silicified rock														◎			△							·		
36	MC1034	Tsagaan Chuluut	49° 02'15"	104° 04'09"	γ ξ 3P2-T1s	strongly silicified rock														◎			◎				△		△	△	hematite(△), alunite(○)
37	MC1037	Tsagaan Chuluut	49° 02'33"	104° 03'36"	γ ξ 3P2-T1s	strongly altered rock	porphyritic	○												◎			△				△		△	△	hematite(△)
38	MC1038	Tsagaan Chuluut	49° 02'31"	104° 02'43"	γ ξ 3P2-T1s	andesite	intersertal and porphyritic			◎									·					△	○						·	
39	MC1042	Tsagaan Chuluut	49° 02'22"	104° 00'25"	γ ξ 3P2-T1s	diorite	granular	○		◎		△	○			·	·		·					△	·						·	cromian spinel(△)
40	MC1043①	Tsagaan Chuluut	49° 02'47"	104° 00'18"	γ ξ 3P2-T1s	strongly silicified rock														◎			◎								·	alunite(○), smectite(△)
41	MC1044	Tsagaan Chuluut	49° 02'31"	103° 59'37"	γ ξ 3P2-T1s	basaltic andesite	porphyritic and intersertal			◎				△	△					△			○								△	
42	MC1048	Tsagaan Chuluut	49° 02'50"	104° 02'21"	γ ξ 3P2-T1s	strongly silicified rock														◎			○		△						·	
43	MC1053	Tsagaan Chuluut	49° 02'55"	104° 00'20"	γ ξ 3P2-T1s	strongly silicified rock														◎			△									kaolinite(◎), pyrrotite(△), alunite(◎), hematite(△)
44	MC1057	Tsagaan Chuluut	49° 03'13"	104° 00'33"	γ ξ 3P2-T1s	andesite porphyry	porphyritic and intersertal			◎		△	△			·	·		·	○			△	△		△					·	ohenocryst(PL)
45	MC1060	Tsagaan Chuluut	49° 02'11"	104° 01'14"	γ ξ 3P2-T1s	granodiorite	hypidiomorphic-granular	◎	◎	◎		○	○			·	·		·				△	△		·					·	actinolite(△)
46	MA1010	Erdenet Mine	49° 59'38"	104° 10'02"	γ δ 2T1s	diorite silicified	porphyritic	◎	△	◎		△				·			·	△			△	△	△	·		?		·	Phenocryst:Pl>Qz, iron oxide
47	MA1012	Erdenet Mine	48° 59'52"	104° 09'33"	γ ξ 3P2-T1s	andesite silicified	porphyritic	△	◎	○	△					·	·	△	·	○			△	·	·	○					Phenocryst:Pl(△)
48	MA1014	Erdenet Mine	48° 59'25"	104° 09'56"	γ ξ 3P2-T1s	granodiorite strongly silicified		○	?	?										○			◎	△	○	△			△	·	Azurite vein(△), malachite (○), quatrz vein
49	MC1006②	Erdenet Mine	49° 00'52"	104° 09'00"	γ ξ 3P2-T1s	granite porphyry	porphyritic	◎	○	◎		△				·	·		·				·	·						·	phenocryst(Qtz, Pl)
50	MC1014	Erdenet Mine	49° 00'51"	104° 09'02"	γ ξ 3P2-T1s	granodiorite	hypidiomorphic-granular	◎	○	◎		△	○			·	·		·				·	△						·	

◎: abundant, ○: common, △: a little, ·: rare, ?: uncertain

Ser. No.	Sample No.	Area	Coordinates N	Coordinates E	Geolo. Unit	Rock Name	Texture	Phenocrysts, crystals: quartz	K-feldspar	plagioclase	muscovite	biotite	hornblende	clinopyroxene	orthopyroxene	apatite	zircon	glass	opaq minerals	Secondary Minerals: quartz	muscovite	biotite	sericite	chlorite	epidote	carbonate	rutile	pyrite	limonite	opaq minerals	Remarks
51	MC1021	Erdenet Mine	48° 53'07"	104° 11'17"	γ ξ 3P2-T1s	granite	hypidiomorphic-granular	◎	◎	◎		△				·	·		·				·	·						·	·
52	MA1118	Danbatseren	48° 51'45"	103° 47'13"	γ ξ 3P2-T1s	secondary quartzite	granular													◎			·			·				△	Secondary K-feldspar
53	MB1114	Danbatseren	48° 45'25"	103° 14'55"	γ ξ 3P2-T1s	granodiorite	hypidiomorphic-granular	◎	◎	◎		△	O			·	·		·	△			△	·	·			?		·	
54	MC1171	Undrakh	48° 42'43"	102° 46'51"	γ ξ 3P2-T1s	micro-granite	granular	◎	◎	◎		O				·	·		·				△	·						·	
55	MA1121	Tsookher mert	48° 46'15"	103° 16'43"	γ ξ 3P2-T1s	granodiorite porphyry	porphyritic	◎	◎	◎		O	O			·	·		·	△			△			·				·	
56	MA1128	Tsookher mert	48° 42'03"	102° 45'45"	γ ξ 3P2-T1s	granite	hypidiomorphic granunular	◎	◎	◎		O				·	·		·	·			△			·				·	
57	MB1083	Khujiriin gol	49° 07'15"	103° 37'53"	γ ξ 3P2-T1s	basalt	intersertal			◎								O	·	O			△		O			?		·	
58	MB1120	Tsookher mert	48° 45'47"	103° 16'43"	γ ξ 3P2-T1s	granodiorite porphyry	porphyritic	◎	◎	◎		O	△			·	·		·				△					?		·	sphene(·)
59	MB1128	Tsookher mert	48° 45'44"	103° 15'52"	γ ξ 3P2-T1s	granite	hypidiomorphic-granular	◎	◎	◎		O				·	·		·				△	△	·					·	
60	MB1130	Tsookher mert	48° 45'32"	103° 15'42"	γ ξ 3P2-T1s	granodiorite	hypidiomorphic-granular	◎	◎	O		O	O			·	·		·				·	△	·					·	sphene(·)
61	MC1153①	Tsookher mert	48° 45'51"	103° 18'40"	γ ξ 3P2-T1s	basalt	interssertal			◎				O	△				·	O				O	△			?		·	
62	MC1161	Tsookher mert	48° 45'16"	103° 16'13"	γ ξ 3P2-T1s	micro-diorite	ophitic	◎	◎	◎		O				·	·		·	△			△	△	·	·		?		·	epidote vein

◎: abundant, O: common, △: a little, ·: rare, ?: uncertain

Appendix 3 Description of polished thin sections in the western Erdenet area

Microscope observation of polished thin section

Ser. No.	Sample No.	Area	Coordinates N	Coordinates E	Description	Phenocrysts, crystals: quartz	K-feldspar	plagioclase	biotite	hornblende	orthopyroxene	clinopyroxene	apatite	Zircon	opaq minerals	Secondary Minerals: quartz	biotite	sericite	chlorite	epidote	carbonate	Ore Minerals: pyrite	goethite	hematite	limonite	magnetite	chalcopyrite	chalcocite	covellite	bornite	pyrrhotite	Remarks
1	MA1058	Zuukhiin gol	49°13′03″	104°13′05″	silicified granodiorite with malachite along the fractures	◎	◎	◎	○				·	·	·			△	○	·			·	△	·							malachite(·), sphene(·)
2	MA1065	Zuukhiin gol	49°13′15″	104°12′24″	silicified granodiorite with malachite spots	◎	◎	◎	○				·	·	·			△	○	·			·	△	·							
3	MC1079	Zuukhiin gol	49°13′05″	104°13′35″	weak altered, granodiorite with malachite along the fracture.	◎	◎	◎										△	○			·		·	·							malachite(△)
4	MA1081	Mogoin gol	49°10′03″	103°45′29″	brown to white secondary quartzite with lm + hematite + goethite.											◎		○						△	·							kaolinite(△)
5	MB1071	Mogoin gol	49°11′17″	103°45′56″	ore mineral veins with specularite in silicified andesite. N28W, W:11mm											◎								◎	△							hematite vein
6	MB1073	Mogoin gol	49°11′18″	103°45′54″	silicified rock with specularite.	◎	◎															△		△	·							dissemination
7	MA1094	Khujiriin gol	49°07′45″	103°39′03″	micro-quartz veins, network quartz veinlets in basalt			◎								◎		·	△					△								
8	MB1091	Khujiriin gol	49°07′30″	103°34′22″	sphalerite veinlets in granite to syenite. N88E79N, W:1cm	◎	◎	◎					·	·				·	○	·		·	·	△	·							
9	MB1092	Khujiriin gol	49°07′30″	103°34′22″	sphalerite-quartz veinlets in granite or syenite. N79E55N, W:4cm.	◎	◎	◎					·	·				·	△	△		·	○	△	·							
10	MB1096	Khujiriin gol	49°08′10″	103°35′06″	float stones of quartz vein with malachite in syenite to granite.	◎	◎	◎	○			·	·	·				△	○	·		·	·	△	·							
11	MB1100	Khujiriin gol	49°07′59″	103°35′30″	quartz vein with malachite in syenite. N73E48N	◎	◎	◎											◎			·	○	△								
12	MC1117	Khujiriin gol	49°07′51″	103°37′18″	weak altered, granodiorite with malachite along the fracture.	◎	○	◎								◎			○			·	·	△	○							
13	MC1120	Khujiriin gol	49°08′19″	103°38′39″	quartz vein in granodiorite with malachite and hematite.	◎	○	△											△			·	△	△	△		·					malachite(△)
14	MC1136	Khujiriin gol	49°07′57″	103°37′18″	brecciated syenite with quartz veinlets and stockwork with malachite.	◎	◎	◎								○			◎	△		·	·	△	△							malachite(△)
15	MA1118	Danbatseren	48°51′45″	103°47′13″	strongly silicified rock (secondary quartzite?)	◎	·									◎		△	·				·	△	·							
16	MA1130	Undrakh	48°42′30″	102°45′49″	pink, fine grained, aplitic granite	◎	○	◎														·		△								
17	MB1131	Tsookher mert	48°45′32″	103°15′42″	quartz vein with malachite in syenite. N73E48N	◎	◎	◎								○		△	○		△	·		·	·			·	·			
18	MB1132	Tsookher mert	48°45′28″	103°15′39″	quartz vein with malachite in syenite. N73E48N	◎	◎	◎										○				·			·							azurite(△), malachite(·)
19	MC1157②	Tsookher mert	48°45′38″	103°19′26″	weakly altered granodiorite.	◎		◎								△			△	△		·		△	·							
20	MC1162	Tsookher mert	48°45′28″	103°16′02″	quartz veinlets in granite with malachite, azurite, hematite.	◎	◎	◎								○			△	△		·		△	·							
21	MC1163	Tsookher mert	48°45′29″	103°16′01″	quartz vein with malachite, hematite, iron oxides.	◎	△	◎											○	△	△	·		·	·							smectite(△)

◎: abundant, ○: common, △: a little, ·: rare, ?: uncertain

Appendix 4 Results of X-ray diffraction analyses in the western Erdenet area

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E	Geological Unit	Description	silicate: sli: Quartz	feldspar: plagioclase	feldspar: K-feldspar	feldspar: Albite	clay: sericite	clay: chlorite	clay: kaolin	clay: smectite	clay: pyrophyllite	clay: S/S	clay: C/S	other: hornblende	other: augite	other: biotite	sulph: alunite	sulph: jarosite	car: calcite	other minerals: pyrite	other minerals: hematite	other minerals: epidote	other minerals: rutile	other minerals: goethite	other minerals: marcasite	Remarks
1	MA1045	Zuukhiin gol	49°15′28″	104°14′25″	γδ1P2-T1s	granodiorite with magnetite	◎		◎	◎		○																	△	
2	MA1050	Zuukhiin gol	49°15′44″	104°15′24″	γδ1P2-T1s	diorite	◎	◎				○						◎												
3	MA1052	Zuukhiin gol	49°15′26″	104°15′34″	P1hn1	basalt	◎		△	◎		○						◎												
4	MA1054	Zuukhiin gol	49°14′05″	104°12′22″	γδ1P2-T1s	granodiorite with hornblende and biotite	◎		○	◎		○																		
5	MA1056	Zuukhiin gol	49°13′27″	104°13′23″	γ2P2-T1s	coarse grained granodiorite	◎		◎	◎	・	△						◎												
6	MA1058	Zuukhiin gol	49°13′03″	104°13′05″	γ2P2-T1s	silicified granodiorite with malachite along the fractures	◎		◎	◎	△	◎																		
7	MA1059	Zuukhiin gol	49°12′52″	104°12′54″	γ2P2-T1s	granodiorite in trench	◎		◎	◎	○	○																		
8	MA1061	Zuukhiin gol	49°13′07″	104°17′55″	γ2P2-T1s	granodiorite with malachite along the fracture	◎		◎	◎	△	○																		
9	MA1062	Zuukhiin gol	49°12′40″	104°12′29″	γ2P2-T1s	granodiorite	◎		◎	◎		○													・					
10	MA1064	Zuukhiin gol	49°13′15″	104°12′18″	γ2P2-T1s	granodiorite with hornblende and biotite	◎		◎	◎	・	○						△												
11	MA1065	Zuukhiin gol	49°13′15″	104°12′24″	γ2P2-T1s	silicified granodiorite with malachite spots	◎		◎	◎	・	○																		
12	MA1068	Zuukhiin gol	49°13′25″	104°12′54″	γ2P2-T1s	granodiorite	◎		◎	◎	・	◎																		
13	MB1046	Zuukhiin gol	49°14′34″	104°12′26″	P1hn1	strongly silicified rock with andesite	◎		○	◎	・	・																		9.11?
14	MB1054	Zuukhiin gol	49°13′06″	104°15′29″	γ3P2-T1s	granite or syenite	◎		◎	◎		・																		
15	MB1057	Zuukhiin gol	49°14′05″	104°15′50″	γδ1P2-T1s	granite or syenite with epidote	◎		○	◎		△														△				
16	MB1059	Zuukhiin gol	49°13′40″	104°15′30″	γδ1P2-T1s	granite or syenite	◎		◎	◎	・	○						◎												
17	MB1060	Zuukhiin gol	49°14′05″	104°13′17″	γδ1P2-T1s	granite or syenite with epidote	◎		△	◎	・	○																		
18	MB1061	Zuukhiin gol	49°14′00″	104°13′15″	dyke	andesite with malachite veinlets	◎		△	◎	△	○											△							
19	MB1062	Zuukhiin gol	49°13′45″	104°13′22″	γδ1P2-T1s	fine grained granite	◎		◎	◎		○						◎												
20	MB1063	Zuukhiin gol	49°13′48″	104°13′41″	γδ1P2-T1s	granite	◎		◎	◎		△																		
21	MC1069	Zuukhiin gol	49°14′53″	104°12′03″	P1hn1	andesite porphyry weakly silicified with sericite	◎		◎	◎		△														△				
22	MC1070	Zuukhiin gol	49°14′54″	104°12′00″	P1hn1	andesite porphyry weakly silicified with sericite and K-alteration	◎		○	◎		△						○		○				△						
23	MC 1074	Zuukhiin gol	49°15′24″	104°12′46″	δ1P2-T1s	Granodiorite	◎		△	◎	△	○						◎												
24	MC1075	Zuukhiin gol	49°15′09″	104°13′01″	δ1P2-T1s	weakly altered granodiorite.	◎			◎		△						△		○									・	
25	MC1077	Zuukhiin gol	49°14′59″	104°13′26″	δ1P2-T1s	granite porphyry weakly altered with epidote, chlorite, K-alteration	◎		◎	◎		△																		
26	MC1078	Zuukhiin gol	49°13′22″	104°13′16″	γ2P2-T1s	granodiorite weakly altered	◎		◎	◎	・	○																		
27	MC1079	Zuukhiin gol	49°13′05″	104°13′35″	γ2P2-T1s	weak altered, granodiorite with malachite along the fracture.	◎		◎	◎	△	◎																		prenite?
28	MC1081	Zuukhiin gol	49°12′42″	104°14′28″	γδ1P2-T1s	granodiorite weakly altered with epidote and chlorite	◎		○	◎	・	△											・							
29	MC1082	Zuukhiin gol	49°12′29″	104°15′05″	γδ1P2-T1s	granodiorite weakly altered with chlorite	◎		◎	◎		△						◎												
30	MC1084	Zuukhiin gol	49°12′42″	104°12′57″	γδ1P2-T1s	granodiorite weakly altered with chlorite, epidote and K-alteration	◎		◎	◎		△						△												

◎: abundant, ○: common, △: a little, ・: rare, ?: uncertain

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E		Description	silicate: sli: Quartz	feldspar: plagioclase	feldspar: K-feldspar	feldspar: Albite	clay: sericite	clay: chlorite	clay: kaolin	clay: smectite	clay: pyrophyllite	clay: S/S	clay: C/S	other: hornblende	other: augite	other: biotite	sulph: alunite	sulph: jarosite	car: calcite	other minerals: pyrite	other minerals: hematite	other minerals: epidote	other minerals: rutile	other minerals: goethite	other minerals: marcasite	Remarks
31	MC1087	Zuukhiin gol	49°12′17″	104°12′53″	dyke	basalt to andesite weakly altered with chlorite	◎		△	◎		○						△												prenite ?
32	MA1070	Mogoin gol	49°09′29″	103°45′34″	P1-2	basalt	◎		◎	◎																				
33	MA1069	Mogoin gol	49°09′35″	103°45′44″	P1-2	basalt to andesite	◎		◎	◎								○							△					
34	MA1077	Mogoin gol	49°10′40″	103°46′12″	P1-2	andesite to basalt with plagioclase phenocryst	◎		◎	◎																				
35	MA1078	Mogoin gol	49°10′15″	103°46′00″	P1-2	basalt	◎		◎	◎																				
36	MA1079	Mogoin gol	49°10′07″	103°45′44″	P1-2	altered rock with strong silicification and iron oxidation	◎															・			・		・			andalusite
37	MA1080	Mogoin gol	49°10′06″	103°45′42″	P1-2	strong altered rock with quartz network	◎				△																・			topaz+andalusite
38	MA1081	Mogoin gol	49°10′03″	103°45′29″	P1-2	brown to white secondary quartzite with lm + hematite + goethite.	◎				△		△												△					
39	MA1083	Mogoin gol	49°10′29″	103°44′36″	P1-2	basalt (fresh)	◎		△	◎		△						△												
40	MA1085	Mogoin gol	49°09′55″	103°45′32″	P1-2	altered rock	◎				○		△									△			△					
41	MB1064	Mogoin gol	49°12′19″	103°47′19″	γ3T1s	granite or syenite	◎		◎	◎	△																			
42	MB1067	Mogoin gol	49°12′26″	103°45′19″	γδ2T1s	granite or syenite	◎		◎	◎		○						○					△							
43	MB1069	Mogoin gol	49°11′45″	103°46′10″	P1-2	andesite weakly silicified	◎		◎	◎	△	△												△						
44	MB1070	Mogoin gol	49°11′28″	103°46′04″	δ1T1s	porphyrite with chlorite and epidote	◎		○	◎		○																		
45	MB1071	Mogoin gol	49°11′17″	103°45′56″	P1-2	ore mineral veins with specularite in silicified andesite. N28W, W:11mm	◎																		○					
46	MB1073	Mogoin gol	49°11′18″	103°45′54″	P1-2	silicified rock with specularite.	◎		◎				○		△						△									unkwon peak
47	MB1074	Mogoin gol	49°11′22″	103°45′29″	P1-2	silicified rock with pyrite dissemination	◎																		△		△			
48	MB1075	Mogoin gol	49°11′11″	103°45′14″	P1-2	andesite with plagioclase phenocryst	◎		○	◎	△	△						◎												
49	MC1096	Mogoin gol	49°11′55″	103°47′06″	P1-2	basalt to andesite weakly altered with chlorite	◎		◎	◎		△																		
50	MC1100	Mogoin gol	49°12′06″	103°45′04″	P1-2	basalt to andesite weakly altered with chlorite	◎		△	◎	・	△											・							
51	MC1101	Mogoin gol	49°11′01″	103°45′12″	δ1T1s	diorite weakly altered with quartz veinlets	◎				△								◎											?
52	MC1109	Mogoin gol	49°11′18″	104°12′46″	P1-2	andesite moderately altered with sericite	◎		△		△																			○chloritoid?
53	MC1110	Mogoin gol	49°15′24″	104°46′37″	γδ2T1s	granodiorite porphyry weakly altered with chlorite and K-alteration	◎		◎	◎	・	○												・						prenite ?
54	MC1111	Mogoin gol	49°11′28″	103°47′35″	γδ2T1s	granodiorite moderately altered with silicification and sericite	◎		◎	◎	△	・																	・	
55	MC1112	Mogoin gol	49°11′31″	103°47′24″	P1-2	basalt andesite strongly altered with silicification and sericite	◎		△		・																			
56	MA1091	Khujiriin gol	49°07′30″	103°39′46″	δ1T1s	granodiorite with iron oxidation and weak chloritization	◎		△	◎	△	△																		
57	MA1093	Khujiriin gol	49°07′71″	103°38′56″	γδ2T1s	granodiorite with strong silicification	◎		・		△																			
58	MA1094a	Khujiriin gol	49°07′45″	103°39′03″	γδ2T1s	micro-quartz veins, network quartz veinlets in basalt	◎		◎	◎	・	△																		
59	MA 1095	Khujiriin gol	49°07′54″	103°39′29″	γδ2T1s	Granodiorite	◎		◎	◎		△																		
60	MA1100	Khujiriin gol	49°08′24″	103°36′03″	γδ2T1s	andesite to basalt with weak silicification	◎		○	◎		◎															・			

◎: abundant, ○: common, △: a little, ・: rare, ? : uncertain

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E		Description	silicate: sli: Quartz	feldspar: plagioclase	feldspar: K-feldspar	feldspar: Albite	clay: sericite	clay: chlorite	clay: kaolin	clay: smectite	clay: pyrophyllite	clay: S/S	clay: C/S	other: hornblende	other: augite	other: biotite	sulph: alunite	sulph: jarosite	car: calcite	other minerals: pyrite	other minerals: hematite	other minerals: epidote	other minerals: rutile	other minerals: goethite	other minerals: marcasite	Remarks
61	MA1101	Khujiriin gol	49°08′27″	103°35′32″	γδ2T1s	granodiorite with silicification	◎		◎	◎	・	◎												・						
62	MA1103	Khujiriin gol	49°08′56″	103°34′53″	γδ2T1s	medium grained granodiorite	◎		◎	◎								○		◎										
63	MA1104	Khujiriin gol	49°08′15″	103°34′08″	γδ2T1s	medium grained granodiorite	◎	◎		◎								○		・										
64	MA 1105	Khujiriin gol	49°08′18″	103°34′48″	γδ2T1s	Granodiorite	◎	◎		◎	△							△						・						
65	MB 1083	Khujiriin gol	49°07′15″	103°37′53″	δ1T1s	Diorite	○		◎	◎		○						○												
66	MB1086	Khujiriin gol	49°07′16″	103°35′58″	γδ2T1s	granite or syenite with epidote and chlorite	◎		◎	◎	△	△																		
67	MB1088	Khujiriin gol	49°07′42″	103°36′05″	γδ2T1s	granite or syenite with epidote and chlorite	◎			◎	△	○																		
68	MB1090	Khujiriin gol	49°07′30″	103°34′33″	γδ2T1s	silicified granite with quartz-malachite	◎				・																			
69	MB1091a	Khujiriin gol	49°07′30″	103°34′22″	γδ2T1s	sphalerite veinlets in granite to syenite. N88E79N, W:1cm	◎		◎	◎	・	○												・						
70	MB1092a	Khujiriin gol	49°07′30″	103°34′22″	γδ2T1s	sphalerite quartz vein. N79E55N, W:4cm	◎		◎	◎	・	△													△					
71	MB 1093	Khujiriin gol	49°07′39″	103°34′05″	γδ2T1s	Granitic syenite	◎		◎	◎								△		△				・						
72	MB1096a	Khujiriin gol	49°08′10″	103°35′06″	γδ2T1s	float stones of quartz vein with malachite in syenite to granite.	◎		◎	◎		○																		
73	MB1100	Khujiriin gol	49°07′59″	103°35′30″	γδ2T1s	quartz vein with malachite in syenite. N73E48N	◎		◎	◎		◎													・					
74	MC1117	Khujiriin gol	49°07′51″	103°37′18″	γδ2T1s	weak altered, granodiorite with malachite along the fracture.	◎		○	◎		○												・						
75	MC1119②	Khujiriin gol	49°08′07″	103°38′18″	γδ2T1s	stockwork quartz vein in basalts.	◎		◎	◎		△														○				
76	MC1120	Khujiriin gol	49°08′19″	103°38′39″	γδ2T1s	quartz vein in granodiorite with malachite and hematite.	◎		◎	△		△																		
77	MC1124	Khujiriin gol	49°08′30″	103°37′09″	δ1T1s	andesite moderately altered with silicification and sericite	◎			◎																				
78	MC1126	Khujiriin gol	49°08′57″	103°13′21″	γδ2T1s	granodiorite to syenitic granodiorite weakly altered with chlorite and silicification	△		◎	◎								◎												
79	MC1130	Khujiriin gol	49°08′52″	103°37′35″	γδ2T1s	syenite porphyry moderately altered	◎		◎	◎		○						○						・		・				
80	MC1132	Khujiriin gol	49°08′59″	103°38′28″	γδ2T1s	syenitegranodiorite weakly altered with silicification	○		○	◎		・		○				○						・						
81	MC1136	Khujiriin gol	49°07′57″	103°37′18″	γδ2T1s	brecciated syenite with quartz veinlets and stockwork with malachite.	◎		◎	◎		○												・						
82	MC1137	Khujiriin gol	49°08′15″	103°38′50″	γδ2T1s	fine grained granodiorite	◎		◎	◎		△						○												?
83	MC1138①	Khujiriin gol	49°08′18″	103°38′49″	γδ2T1s	quartz vein, N60E75N	◎		○	○	・	○																		
84	MA1024	Tsagaan Chuluut	49°04′15″	103°58′53″	T3-J1mg	basalt	◎						◎											△						
85	MA1028	Tsagaan Chuluut	49°03′21″	104°01′14″	T3-J1mg	granite with strong weathering	◎															○					△			
86	MA1029	Tsagaan Chuluut	49°03′40″	104°01′52″	T3-J1mg	andesitic basalt with moderate oxidation	◎			◎	・			△										○						
87	MA1030	Tsagaan Chuluut	49°03′41″	104°02′18″	T3-J1mg	volcanic breccia with plagioclase phenocryst	◎						・								◎			△						
88	MA1031	Tsagaan Chuluut	49°03′40″	104°01′38″	T3-J1mg	altered rock with strong silicification	◎						○														△			
89	MA1032	Tsagaan Chuluut	49°03′41″	104°00′43″	T3-J1mg	altered rock, volcanic breccia with strong silicification	◎						・									○					△			
90	MA1033	Tsagaan Chuluut	49°02′43″	104°00′16″	T3-J1mg	andesite with strong silicification	◎		◎	○		△													・					

◎: abundant, ○: common, △: a little, ・: rare, ?: uncertain

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E		Description	silicate: sli Quartz	feldspar: plagioclase	feldspar: K-feldspar	feldspar: Albite	clay: sericite	clay: chlorite	clay: kaolin	clay: smectite	clay: pyrophyllite	clay: S/S	clay: C/S	other: hornblende	other: augite	other: biotite	sulph: alunite	sulph: jarosite	car: calcite	other minerals: pyrite	other minerals: hematite	other minerals: epidote	other minerals: rutile	other minerals: goethite	other minerals: marcasite	Remarks
91	MA1034	Tsagaan Chuluut	49°03′53″	104°00′05″	T3-J1mg	andesite porphyry with iron oxidation along the fracture	◎		△	◎		△																	
92	MA1035	Tsagaan Chuluut	49°03′53″	104°59′46″	T3-J1mg	altered volcanic rock	◎						○								△									
93	MA1036	Tsagaan Chuluut	49°03′43″	103°58′51″	T3-J1mg	basalt to andesite	◎		◎	○		△													○	?				
94	MA1037	Tsagaan Chuluut	49°03′46″	103°59′10″	T3-J1mg	brecciated basalt with moderate silicification	◎				△		○								◎									
95	MA1039	Tsagaan Chuluut	49°03′41″	103°59′42″	T3-J1mg	andesite to basalt	◎		◎	◎		○													△					
96	MA1041	Tsagaan Chuluut	49°03′18″	103°59′28″	T3-J1mg	altered rock in big alteration zone	◎				·		△								◎						△			
97	MA1042	Tsagaan Chuluut	49°03′33″	103°59′03″	T3-J1mg	altered volcanic rock	◎			◎	·	△													○					
98	MA1043	Tsagaan Chuluut	49°02′58″	103°59′45″	T3-J1mg	brecciated volcanic rock with iron oxidation	◎		○	◎	·																			
99	MB1028	Tsagaan Chuluut	49°04′47″	104°04′23″	γδ2P2-T1s	andesite with strong silicification	◎						·								◎									
100	MB1029	Tsagaan Chuluut	49°03′33″	104°03′00″	T3-J1mg	coarse tuff with silicification	◎						◎								◎									
101	MB1030	Tsagaan Chuluut	49°03′34″	104°02′45″	T3-J1mg	strongly silicified rock with andesite	◎														△						△	△		
102	MB1031	Tsagaan Chuluut	49°03′34″	104°02′45″	T3-J1mg	strongly silicified rock with andesite	◎														◎						△			
103	MB1033	Tsagaan Chuluut	49°04′17″	104°04′51″	γδ2P2-T1s	aplite with silicification	◎		○	◎	·													·						
104	MB1035	Tsagaan Chuluut	49°04′04″	104°03′58″	γδ2P2-T1s	aplite with epidotization	◎														◎									
105	MB1036	Tsagaan Chuluut	49°03′38″	104°03′28″	T3-J1mg	lapilli tuff silicified	◎						◎								△			△						
106	MB1037	Tsagaan Chuluut	49°03′45″	104°03′11″	T3-J1mg	strongly silicified rock with andesite	◎																							
107	MB1038	Tsagaan Chuluut	49°03′58″	104°04′15″	γδ2P2-T1s	syenite with biotite	◎		○	◎	·	△						○						△						
108	MC 1034	Tsagaan Chuluut	49°02′15″	104°04′09″	γδ2P2-T1s	silicified granite porphyry with chlorite, epidote, sericite and pyrite dissemination	◎														◎				△		△			
109	MC 1035	Tsagaan Chuluut	49°02′21″	104°04′09″	γδ2P2-T1s	silicified granite porphyry with chlorite, epidote, sericite and pyrite dissemination	◎						◎								△						△			
110	MC 1036	Tsagaan Chuluut	49°02′29″	104°03′56″	γδ2P2-T1s	brecciated granite porphyry with sericite and silicif	◎						◎								○				△					
111	MC1037	Tsagaan Chuluut	49°02′33″	104°03′36″	γδ2P2-T1s	granite porphyry with sericite and silicification	◎																				△			
112	MC1038	Tsagaan Chuluut	49°02′31″	104°02′43″	T3-J1mg	basaltic to andesitic tuff	◎			◎		△														△				
113	MC1040	Tsagaan Chuluut	49°02′25″	104°02′21″	T3-J1mg	andesitic tuff	◎														○									
114	MC1041	Tsagaan Chuluut	49°02′16″	104°01′03″	T3-J1mg	andesite porphyry with chlorite and epidote	◎		△	◎		△																		
115	MC1042	Tsagaan Chuluut	49°02′22″	104°00′25″	γδ2P2-T1s	granite with chlorite	◎		◎	◎	·	△						○												
116	MC1044	Tsagaan Chuluut	49°02′31″	103°59′37″	T3-J1mg	basalt weakly altered	○		○	◎	·			△										△						
117	MC1046	Tsagaan Chuluut	49°03′12″	104°01′39″	λπT1—J1	granite porphyry with sericite and silicification	◎														◎							·		
118	MC1047	Tsagaan Chuluut	49°03′09″	104°01′56″	λπT1—J1	granodiorite silicified and sericitized	◎														◎							△		
119	MC1048	Tsagaan Chuluut	49°02′50″	104°02′21″	λπT1—J1	granite silicified and sericitized	◎														◎	△								
120	MC1049	Tsagaan Chuluut	49°02′52″	104°01′59″	T3-J1mg	basalt with chlorite and epidote	◎			◎		○														△				

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Ser. No.	Sample No.	Location (Area)	Coordination			Description	silicate																sulph		car	other minerals						Remarks
			N	E			sli	feldspar			clay							other															
							Quartz	plagioclase	K-feldspar	Albite	sericite	chlorite	kaolin	smectite	pyrophyllite	S/S	C/S	hornblende	augite	biotite	alunite	jarosite	calcite	pyrite	hematite	epidote	rutile	goethite	marcasite	
121	MC1050	Tsagaan Chuluut	49°02′53″	104°01′37″	λ πT1—J1	granite strongly silicified with sericite	◎																				△				
122	MC1053	Tsagaan Chuluut	49°02′55″	104°00′20″	λ πT1—J1	myronitic granite strongly silicified with sericite	◎						◎		△						◎										unkwon peak
123	MC1057	Tsagaan Chuluut	49°03′13″	104°00′33″	T3-J1mg	andesite porphyritic tuff weakly altered	◎		○	◎		△											△								
124	MC1060	Tsagaan Chuluut	49°02′11″	104°01′14″	λ πT1—J1	syeniteic diorite with chlorite, epidote and K-alteration	◎		◎	◎		○														・					
125	MC1063	Tsagaan Chuluut	49°04′16″	104°00′59″	T3-J1mg	andesite porphyry weakly silicified with sericite	◎						・								◎				△		△				
126	MC1064	Tsagaan Chuluut	49°04′22″	104°01′27″	T3-J1mg	andesitic basaltic tuff weakly silicified			○	◎	△	△													○						
127	MC1066	Tsagaan Chuluut	49°04′27″	104°02′30″	T3-J1mg	andesite porphyry weakly silicified with sericite	◎														◎				△						
128	MA1008	Erdenet Mine	48°59′26″	104°10′05″	γ δ2P2s	Granodiorite in iron oxidation zone	◎		△	◎	・	◎													△						
129	MA1012	Erdenet Mine	48°59′52″	104°09′33″	γ δ2P2s	Granodiorite	◎		○	◎			△																		
130	MA1014	Erdenet Mine	48°59′25″	104°09′56″	γ δ2P2s	Granodiorite with azurite and malachite	◎												◎												
131	MB1004	Erdenet Mine	49°00′09″	104°09′01″	λ δ πP2-T1e	Float of granodiorite with biotite	◎		○	◎	・	○												・							
132	MB1009	Erdenet Mine	48°57′49″	104°12′03″	λ δ πP2-T1e	leucocratic and pegmatitic granite	◎	◎		◎	・																				
133	MB1011	Erdenet Mine	48°58′37″	104°12′26″	P1hn1	porphyritic andesite	◎	○		◎		・																			
134	MC1006	Erdenet Mine	49°00′52″	104°09′00″	dyke	andesite with chlorite	◎		○	◎		△																			
135	MC1014	Erdenet Mine	49°00′51″	104°09′02″	γ δ2P2s	granodiorite porphyry	◎		◎	◎		△						◎													
136	MC 1015	Erdenet Mine	48°58′21″	104°11′10″	γ δ2P2s	silicified granite porphyry with chlorite, epidote and pyrite dissemination	◎		◎	◎	△	○																			
137	MC 1021	Erdenet Mine	48°53′07″	104°11′17″	λ δ πP2-T1e	silicified granite porphyry with chlorite, epidote and pyrite dissemination	◎		◎	◎	△					△															
138	MC 1027	Erdenet Mine	48°57′55″	104°11′39″	λ δ πP2-T1e	silicified granite porphyry with chlorite, epidote and pyrite dissemination	◎		◎	◎	○																				
139	MC 1029	Erdenet Mine	48°57′50″	104°11′39″	λ δ πP2-T1e	silicified granite porphyry with chlorite, epidote and pyrite dissemination	◎			◎	△																				
140	MA1116	Danbatseren	48°52′16″	103°46′46″	γ δ2T1s	granodiorite in trench	◎	◎		◎		△						○													
141	MA1118	Danbatseren	48°51′45″	103°47′13″	λ J1	strongly silicified rock (secondary quartzite?)	◎		・															△							
142	MA1119	Danbatseren	48°51′54″	103°47′33″	γ δ2T1s	granodiorite	◎	◎		◎	・	△						○						・							
143	MC1145	Danbatseren	49°51′56″	103°46′15″	α λP1-2	andesite weakly silicified	◎			◎																					
144	MA1128	Undrakh	48°42′03″	102°45′45″	γ δ1PZ1	granite with moderate silicification and weak iron o	◎		◎	◎																					
145	MA1130	Undrakh	48°42′30″	102°45′49″	γ δ1PZ1	pink, fine grained, aplitic granite	◎			◎	△																				
146	MA1131	Undrakh	48°41′44″	102°45′55″	γ δ1PZ1	fine grained granite (dyke)	◎		○	◎																					
147	MA1133	Undrakh	48°52′40″	102°46′17″	γ δ1PZ1	diorite	◎		・	◎	△	△																			
148	MC1171	Undrakh	48°42′43″	102°46′51″	γ2D2	granite moderately alterated with silicification	◎		◎	◎	・													・							
149	MA 1121	Tsookher mert	48°46′15″	103°16′43″	γ ξ3P2-T1s	Granodiorite	◎	◎		◎		△						△						・							
150	MB 1117	Tsookher mert	48°46′22″	103°14′32″	γ ξ3P2-T1s	syenite with biotite	◎		◎	◎		△						△													

◎: abundant, ○: common, △: a little, ・: rare, ?: uncertain

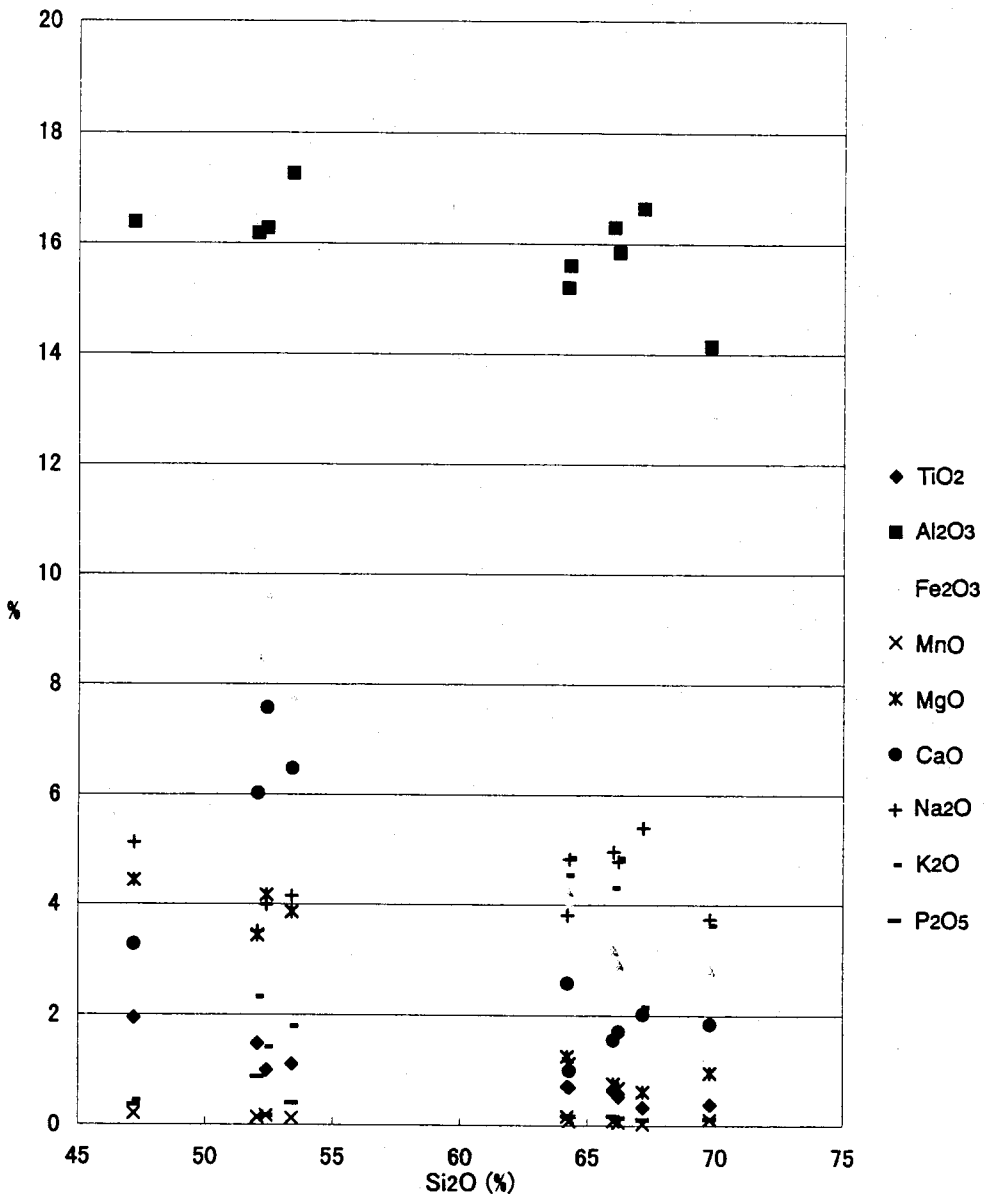
Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E		Description	silicate: sli: Quartz	feldspar: plagioclase	feldspar: K-feldspar	feldspar: Albite	clay: sericite	clay: chlorite	clay: kaolin	clay: smectite	clay: pyrophyllite	clay: S/S	clay: C/S	other: hornblende	other: augite	other: biotite	sulph: alunite	sulph: jarosite	car: calcite	other minerals: pyrite	other minerals: hematite	other minerals: epidote	other minerals: rutile	other minerals: goethite	other minerals: marcasite	Remarks
151	MB 1120	Tsookher mert	48°45′47″	103°15′10″	γ3P2-T1s	syenite with biotite	◎		◎	◎								△						·						
152	MB 1122	Tsookher mert	48°45′48″	103°15′15″	γ3P2-T1s	syenite with quartz veinlets	◎				◎																			
153	MB 1125	Tsookher mert	48°45′53″	103°15′24″	γ3P2-T1s	aplite with silicification and sericitization	◎		◎	◎	O																			
154	MB 1128	Tsookher mert	48°45′44″	103°15′52″	γξ3P2-T1s	syenite with biotite	◎		◎	◎		·																		
155	MB 1130	Tsookher mert	48°45′32″	103°15′42″	γξ3P2-T1s	granodiorite with biotite and hornblende	◎		◎	◎		△						O												
156	MB1131	Tsookher mert	48°45′32″	103°15′42″	γξ3P2-T1s	quartz vein with malachite in syenite. N73E48N	◎		◎	◎		O				O							△	·						
157	MB1132	Tsookher mert	48°45′28″	103°15′39″	γξ3P2-T1s	quartz vein with malachite in syenite. N73E48N	◎		◎	◎	O																			
158	MC1152	Tsookher mert	48°44′59″	103°17′51″	γξ3P2-T1s	granodiorite weakly altered with chlorite, K-alteration and silicification	◎		◎	◎		△						△						·						
159	MC1157②	Tsookher mert	48°45′38″	103°19′26″	γξ3P2-T1s	weakly altered granodiorite.	◎			◎		△														·				
160	MC1161	Tsookher mert	48°45′16″	103°16′13″	γξ3P2-T1s	basalt moderately alteration with silicification	◎		◎	◎	·	·																		
161	MC1162	Tsookher mert	48°45′28″	103°16′02″	γξ3P2-T1s	quartz veinlets in granite with malachite, azurite, hematite.	◎		◎	◎	△	△																		
162	MC1163	Tsookher mert	48°45′29″	103°16′01″	γξ3P2-T1s	quartz vein with malachite, hematite, iron oxides.	◎		△	◎	O	·		O																?
163	MC1164	Tsookher mert	48°45′01″	103°16′06″	γ3P2-T1s	quartz vein with malachite, azurite, hematite, iron oxides.	◎		◎	◎	△												·							

◎: abundant, O: common, △: a little, ·: rare, ?: uncertain

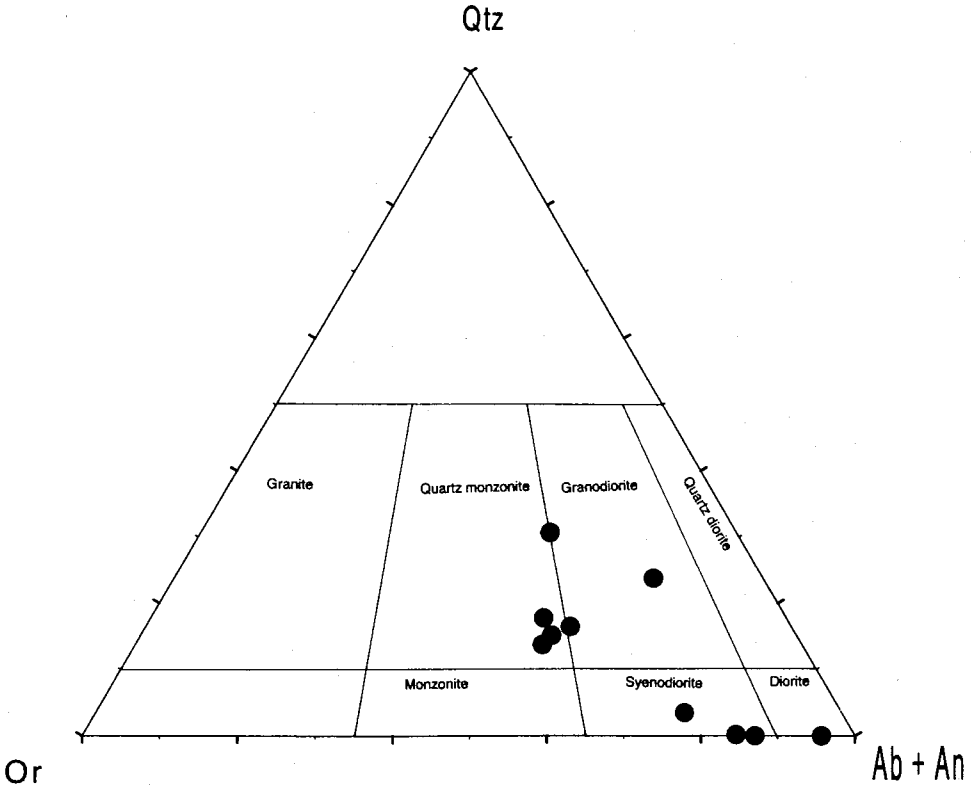
Appendix 5 Petrological chemical analyses, CIPW norms and petrological diagram for the rocks of Selenge granitic rocks and basalt in the western Erdenet area

Result of whole rock analysis in the Western Erdenet area, Mongolia

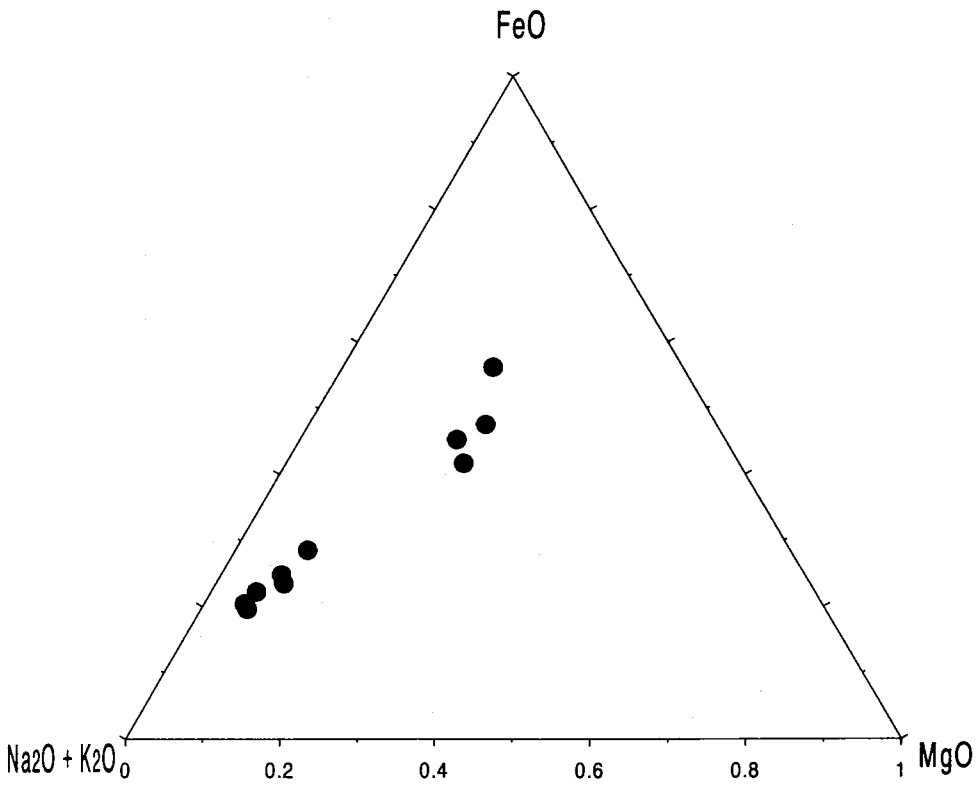
Ser. No.		1	2	3	4	5	6	7	8	9	10
Sample No.		MC 1074	MA 1095	MA 1105	MB 1093	MB 1083	MB 1084	MC 1119	MC 1006	MA 1121	MC 1153
Location (Area)		Zuukhiin gol	Khujiriin gol	Khujiriin gol	Khujiriin gol	Khujiriin gol	Khujiriin gol	Khujiriin gol	Erdenet Mine	Tsookher mert	Tsookher mert
Coordination	N	49° 15'24"	49° 07'54"	49° 08'18"	49° 07'39"	49° 07'15"	49° 06'48"	49° 08'07"	49° 00'52"	48° 46'15"	48° 45'51"
	E	104° 12'46"	103° 39'29"	103° 34'48"	103° 34'05"	103° 37'53"	103° 37'40"	103° 38'18"	104° 09'00"	103° 16'43"	103° 18'40"
Geological	Unit	δ1P2-T1s	γδ2T1s	γδ2T1s	γδ2T1s	δ1T1s	δ1T1s	γδ2T1s	λδπP2-T1e	γξ3P2-T1s	Dyke
Rock Name		Gabbro	Granodiorite	Granodiorite	Granitic syenite	Diorite	Gabbro	Syenite	Granodiorite	Granodiorite	Basalt
SiO2	% XRF	52.41	64.29	66.01	66.21	53.40	47.21	64.22	67.16	69.80	52.06
TiO2	% XRF	0.99	0.69	0.63	0.52	1.10	1.94	0.71	0.33	0.38	1.48
Al2O3	% XRF	16.27	15.60	16.30	15.84	17.26	16.38	15.20	16.64	14.15	16.18
Fe2O3	% XRF	9.64	3.97	3.19	2.94	7.78	14.28	4.27	2.21	2.84	8.51
MnO	% XRF	0.17	0.08	0.08	0.06	0.12	0.20	0.16	0.03	0.11	0.14
MgO	% XRF	4.17	1.13	0.76	0.68	3.86	4.44	1.26	0.61	0.96	3.44
CaO	% XRF	7.57	1.00	1.56	1.71	6.47	3.27	2.58	2.02	1.84	6.02
Na2O	% XRF	3.99	4.83	4.97	4.79	4.15	5.12	3.81	5.40	3.74	3.51
K2O	% XRF	1.41	4.86	4.31	4.85	1.79	0.44	4.54	2.15	3.63	2.32
P2O5	% XRF	0.16	0.16	0.17	0.13	0.39	0.36	0.17	0.10	0.12	0.87
Cr2O3	% XRF	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BaO	% XRF	0.02	0.07	0.13	0.07	0.06	0.03	0.07	0.13	0.08	0.11
SrO	% XRF	0.06	0.04	0.06	0.05	0.13	0.05	0.10	0.13	0.05	0.11
LOI	%	1.64	1.79	0.86	0.60	2.07	5.52	1.53	1.56	1.12	4.64
TOTAL	%	98.50	98.51	99.03	98.45	98.58	99.24	98.62	98.47	98.82	99.39
Rb	ppm	30	172	136	136	38	20	120	40	112	44
Sr	ppm	507	338	507	423	1100	423	846	1100	423	930
Ba	ppm	179	627	1165	627	537	269	627	1165	717	985
Nb	ppm	<10	10	10	10	<10	<10	10	<10	<10	10
Zr	ppm	70	480	380	330	180	130	350	120	150	240
Y	ppm	22	30	30	24	20	22	28	10	16	24
Result of C.I.P.W normative mineral calculation											
Rock series		alkali	alkali	high-alkali tholeite	alkali	alkali	alkali	high-alkali tholeitic	high-aluminum	tholeitic	alkali
Tholeiite(TH)/Calc-alkali(CA)				TH				CA	CA	CA	
Type		type 1	type 5	type 5	type 1	type 1	type 1	type 5	type 5	type 5	type 1
Quartz	%	--	11.68	14.61	13.65	0.14	--	15.10	21.12	27.16	2.35
Feldspar											
orthoclase	%	8.33	28.71	25.46	28.65	10.57	2.60	26.82	12.70	21.44	13.71
albite	%	33.75	40.86	42.04	40.52	35.10	43.31	32.23	45.68	31.64	29.69
anorthite	%	22.31	3.93	6.64	7.39	23.18	13.89	10.96	9.37	8.35	21.54
Diopside											
ferrosilite	%	3.48	--	--	0.08	1.43	--	0.21	--	--	0.66
enstatite	%	2.48	--	--	0.03	1.22	--	0.11	--	--	0.47
wollastinite	%	5.93	--	--	0.10	2.67	--	0.31	--	--	1.13
Hypersthene											
ferrosilite	%	7.12	5.56	4.38	4.04	9.83	4.42	5.97	3.16	4.28	11.20
enstatite	%	5.06	2.81	1.89	1.66	8.39	2.35	3.03	1.52	2.39	8.09
Olivine											
forsrerite	%	1.99	--	--	--	--	6.10	--	--	--	--
fayalite	%	3.09	--	--	--	--	12.62	--	--	--	--
Ilmenite	%	1.88	1.31	1.20	0.99	2.09	3.69	1.35	0.63	0.72	2.81
apatite	%	0.38	0.38	--	0.31	0.92	0.85	0.40	0.24	0.28	2.06
corundum	%	--	0.96	--	--	--	2.39		1.99	--	--
Total of nomative minerals (%)		95.80	96.20	96.22	97.42	95.54	92.22	96.49	96.41	96.26	93.71
Differencial Index (D. I.)		42.08	81.25	82.12	82.82	45.82	45.91	74.15	79.50	80.24	45.75



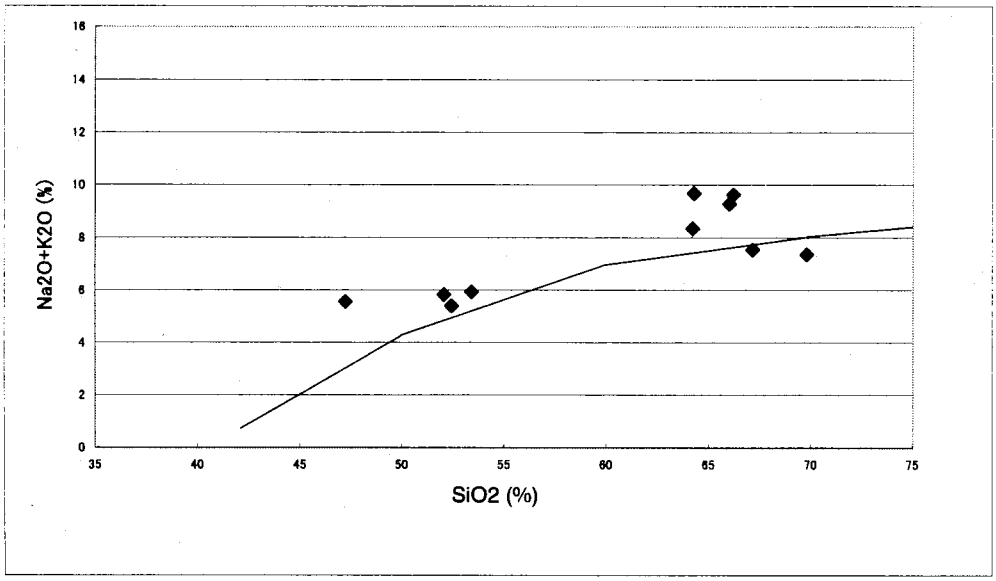
Variation diagram for the rocks of Selenge Granitic rocks and basalt



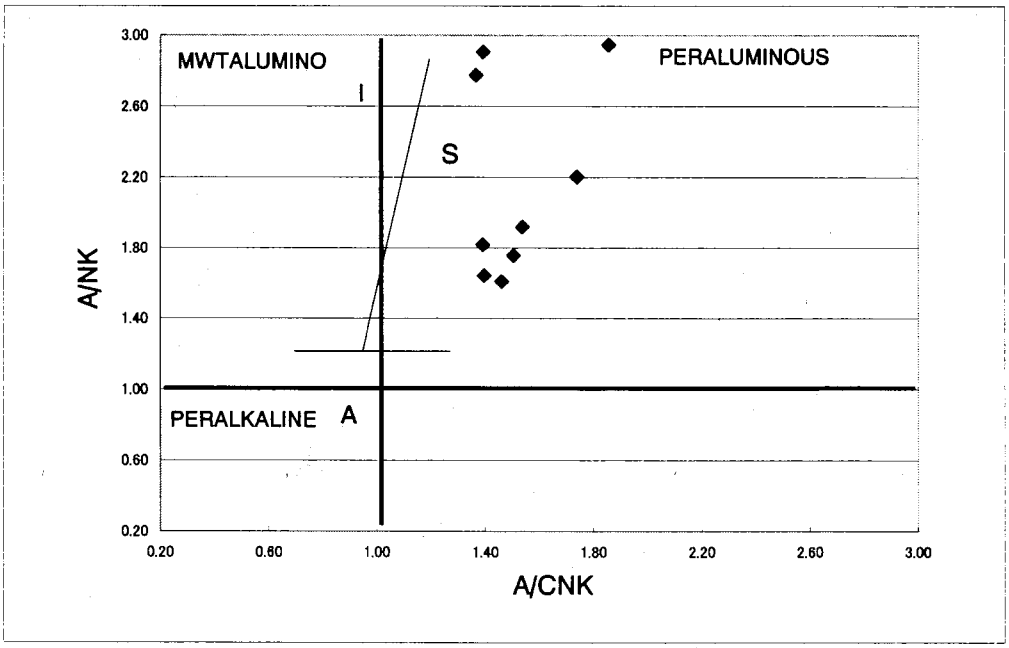
Q-Af-(Ab+An) diagram



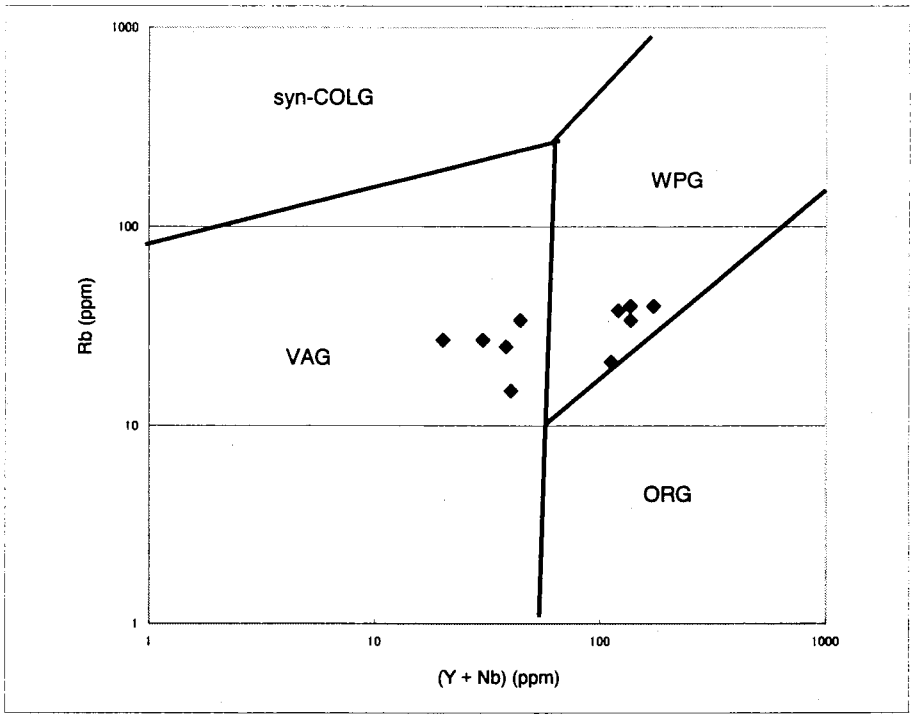
AMF diagram for the rocks of Selenge Granitic rocks and basalt



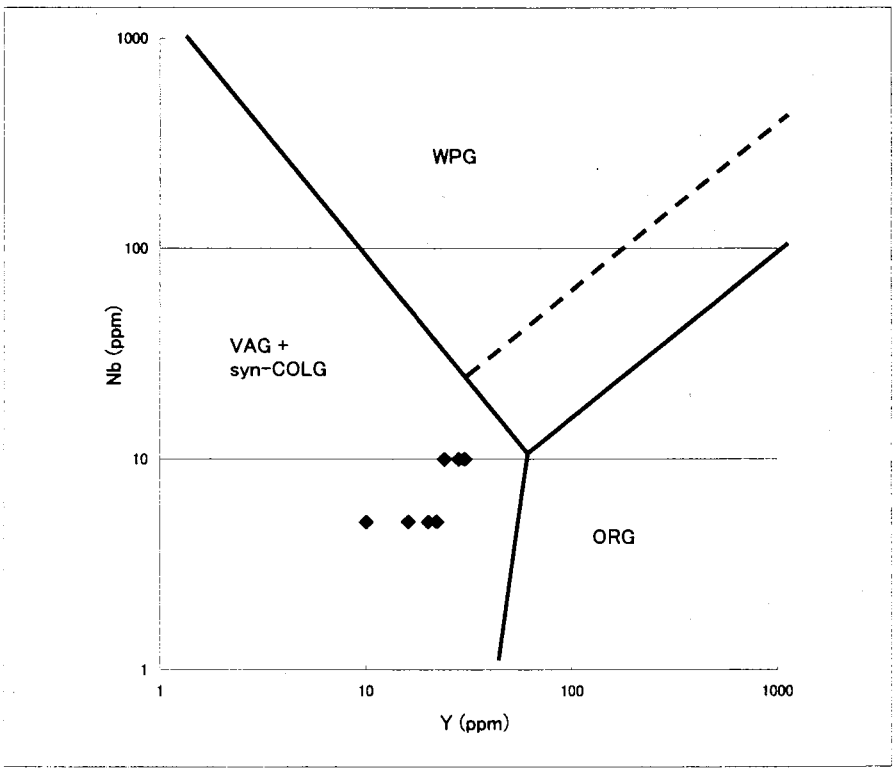
Alkali (Na2O+K2O)-silica (SiO2) diagram showing the composition of the major igneous rock type



A/NK-A/CNK diagram for the rocks of Selenge Granitic rocks and basalt



Rb-(Y+Nb) discrimination diagram for the rocks of Selenge Granitic rocks and basalt



Nb-Y discrimination diagram for the rocks of Selenge Granitic rocks and basalt

Appendix 6 Ore grade assay results in the western Erdenet area

Results of Ore analysis in the western Erdenet area, Mongolia.

Ser. No.	Sample No.	Location (Area)	Coordination		Description	Au	Ag	Al	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sr	Ti	V	Zn
			N	E		(g/t)	(ppm)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
1	MA1058	Zuukhiin gol	49°13′03″	104°13′05″	silicified granodiorite with malachite along the fractures	<0.01	<5	7.99	0.08	0.002	<0.002	0.82	<0.001	0.002	0.060	0.464	2.38	2.3	0.78	0.067	<0.001	2.89	0.002	0.005	0.063	0.18	0.005	0.019
2	MA1065	Zuukhiin gol	49°13′15″	104°12′25″	silicified granodiorite with malachite spots	<0.01	<5	7.90	0.08	0.002	<0.002	1.56	<0.001	<0.001	0.039	0.213	2.52	2.0	0.80	0.033	<0.001	2.73	0.016	0.005	0.061	0.23	0.004	0.013
3	MC1079	Zuukhiin gol	49°13′05″	104°13′35″	weak altered, granodiorite with malachite along the fracture.	<0.01	<5	7.23	0.07	0.002	<0.002	0.78	<0.001	<0.001	0.017	0.423	1.81	1.9	0.78	0.025	0.001	1.94	0.002	0.007	0.050	0.19	0.005	0.012
4	MA1081	Mogoin gol	49°10′03″	103°45′29″	brown to white secondary quartzite with lm + hematite + goethite.	<0.01	<5	0.56	<0.01	<0.001	<0.002	0.05	<0.001	<0.001	0.019	0.002	1.48	0.1	<0.05	0.022	<0.001	0.05	0.002	0.001	0.024	0.05	0.001	<0.002
5	MB1071	Mogoin gol	49°11′17″	103°45′56″	ore mineral veins with specularite in silicified andesite. N28W, W:11mm	<0.01	<5	0.07	<0.01	<0.001	0.008	<0.05	<0.001	<0.001	0.052	0.001	20.34	<0.1	<0.05	<0.001	<0.001	<0.05	<0.001	0.003	<0.001	0.32	0.066	<0.002
6	MB1073	Mogoin gol	49°11′18″	103°45′54″	silicified rock with specularite.	<0.01	<5	8.18	0.07	<0.001	<0.002	0.08	<0.001	<0.001	0.023	0.001	2.25	0.2	<0.05	0.003	<0.001	0.24	<0.001	0.016	0.101	0.12	0.009	<0.002
7	MA1094a	Khujiriin gol	49°07′45″	103°39′03″	micro-quartz veins, network quartz veinlets in basalt	<0.01	<5	6.97	0.12	0.001	<0.002	1.36	<0.001	<0.001	0.017	0.005	4.04	1.9	1.73	0.078	<0.001	1.67	0.004	0.009	0.036	0.51	0.011	0.010
8	MA1094b	Khujiriin gol	49°07′45″	103°39′03″	micro-quartz veins, network quartz veinlets in basalt	<0.01	<5	7.27	0.11	0.001	<0.002	1.70	<0.001	0.002	0.015	0.004	4.32	1.6	1.79	0.076	<0.001	1.61	0.004	0.009	0.038	0.55	0.011	0.010
9	MA1098	Khujiriin gol	49°07′28″	103°40′32″	white argillized silicified granodiorite	<0.01	<5	3.90	0.03	<0.001	<0.002	0.06	<0.001	<0.001	0.019	0.001	0.75	1.6	0.10	0.007	0.005	0.31	<0.001	0.004	0.006	0.15	0.001	<0.002
10	MB1078	Khujiriin gol	49°06′44″	103°38′21″	quartz vein in andesite. N57W83N, W:7cm.	<0.01	<5	2.07	0.03	0.001	<0.002	0.30	<0.001	<0.001	0.033	0.001	1.44	1.0	0.07	0.011	<0.001	0.07	<0.001	0.004	0.004	0.08	0.002	<0.002
11	MB1081	Khujiriin gol	49°07′23″	103°38′13″	quartz vein in andesite. N51W78E, W:8cm.	<0.01	<5	4.09	0.03	0.001	<0.002	0.05	<0.001	<0.001	0.017	0.004	1.93	1.1	0.15	0.006	<0.001	0.14	<0.001	0.005	0.006	0.15	0.002	<0.002
12	MB1091a	Khujiriin gol	49°07′34″	103°34′22″	sphalerite veinlets in granite to syenite. N88E79N, W:1cm	<0.01	<5	6.80	0.09	0.002	<0.002	0.40	<0.001	0.001	0.021	0.004	3.11	2.7	0.43	0.132	<0.001	1.89	0.001	0.012	0.021	0.24	0.003	0.016
13	MB1091b	Khujiriin gol	49°07′34″	103°34′22″	sphalerite veinlets in granite or syenite. N88E79N, W:1cm.	<0.01	<5	6.50	0.09	0.002	<0.002	0.70	<0.001	<0.001	0.018	0.006	2.48	1.8	0.39	0.117	0.001	1.39	<0.001	0.037	0.022	0.25	0.003	0.015
14	MB1092a	Khujiriin gol	49°07′34″	103°34′22″	sphalerite quartz vein. N79E55N, W:4cm	<0.01	<5	4.29	0.07	0.002	<0.002	0.20	<0.001	<0.001	0.035	0.013	6.78	1.6	0.43	0.237	<0.001	0.83	0.001	0.036	0.013	0.14	0.003	0.028
15	MB1092b	Khujiriin gol	49°07′34″	103°34′22″	sphalerite-quartz veinlets in granite or syenite. N79E55N, W:4cm.	<0.01	<5	4.23	0.07	0.001	<0.002	0.24	<0.001	<0.001	0.034	0.008	5.15	1.4	0.34	0.169	<0.001	0.71	0.001	0.025	0.013	0.16	0.003	0.021
16	MB1094	Khujiriin gol	49°07′30″	103°34′28″	quartz vein in granite to syenite.	<0.01	5	0.27	<0.01	0.001	<0.002	0.45	<0.001	<0.001	0.026	0.004	0.43	<0.1	<0.05	0.011	<0.001	0.05	0.001	0.018	0.004	<0.05	<0.001	0.003
17	MB1095	Khujiriin gol	49°07′48″	103°35′32″	quartz vein with malachite in granite to syenite.	<0.01	39	1.94	0.02	0.001	<0.002	3.93	<0.001	<0.001	0.023	0.360	1.18	0.7	0.27	0.041	<0.001	0.58	0.002	0.478	0.015	0.10	0.002	0.060
18	MB1096a	Khujiriin gol	49°08′10″	103°35′06″	float stones of quartz vein with malachite in syenite to granite.	<0.01	111	1.96	0.01	<0.001	<0.002	0.20	0.004	0.003	0.032	11.131	4.17	0.5	0.33	0.065	0.269	0.05	0.001	1.006	0.003	0.07	0.004	0.857
19	MB1096b	Khujiriin gol	49°08′10″	103°35′06″	float stones of quartz vein with malachite in granite to syenite.	<0.01	60	4.47	0.10	0.001	<0.002	0.57	<0.001	0.001	0.026	2.496	4.58	2.0	0.58	0.126	0.093	0.31	0.001	0.519	0.021	0.24	0.006	0.184
20	MB1097	Khujiriin gol	49°08′08″	103°35′20″	quartz vein with malachite and azurite in granite to syenite. N63E86N.	<0.01	17	5.30	0.08	0.002	<0.002	1.49	<0.001	0.001	0.031	0.436	4.53	1.5	0.87	0.287	0.014	1.17	0.002	0.145	0.059	0.23	0.006	0.052
21	MB1099	Khujiriin gol	49°08′03″	103°35′28″	quartz vein with malachite in syenite. N52E43N.	0.02	75	0.44	<0.01	<0.001	<0.002	0.11	<0.001	<0.001	0.031	0.870	0.85	0.1	<0.05	0.017	<0.001	<0.05	<0.001	1.062	0.002	<0.05	0.001	0.078
22	MB1100	Khujiriin gol	49°07′59″	103°35′30″	quartz vein with malachite in syenite. N73E48N	<0.01	19	2.67	0.05	0.001	<0.002	0.48	<0.001	<0.001	0.049	0.332	4.57	1.0	0.50	0.118	0.026	0.34	0.002	0.207	0.015	0.10	0.005	0.072
23	MC1115②	Khujiriin gol	49°07′38″	103°37′21″	quartz vein.	<0.01	<5	0.82	<0.01	<0.001	<0.002	0.08	<0.001	<0.001	0.023	0.005	0.63	0.2	0.06	0.012	<0.001	0.05	0.001	0.017	0.002	<0.05	0.001	0.013
24	MC1116	Khujiriin gol	49°07′50″	103°37′16″	silicified syenite with quartz veinlets.	<0.01	<5	4.89	0.06	0.002	<0.002	0.65	<0.001	<0.001	0.022	0.008	1.93	2.3	0.48	0.048	<0.001	1.40	0.002	0.014	0.019	0.25	0.004	0.013
25	MC1117	Khujiriin gol	49°07′51″	103°37′18″	weak altered, granodiorite with malachite along the fracture.	0.03	221	1.76	0.03	0.001	<0.002	0.49	0.002	0.006	0.020	4.078	7.71	0.6	0.64	0.443	<0.001	0.07	0.003	5.575	0.011	0.09	0.004	2.644
26	MC1118	Khujiriin gol	49°07′52″	103°37′54″	stockwork in silicified, fine grained syenite with hematite	<0.01	<5	6.35	0.04	0.002	<0.002	0.10	<0.001	<0.001	0.014	0.003	1.40	3.3	0.12	0.014	<0.001	2.35	<0.001	0.007	0.006	0.17	0.002	0.006
27	MC1119②	Khujiriin gol	49°08′07″	103°38′18″	stockwork quartz vein in basalts.	<0.01	<5	7.11	0.06	0.001	<0.002	2.42	<0.001	0.003	0.027	0.005	5.22	2.6	4.01	0.284	<0.001	1.08	0.011	0.031	0.038	0.49	0.013	0.049
28	MC1120	Khujiriin gol	49°08′19″	103°38′39″	quartz vein in granodiorite with malachite and hematite.	<0.01	50	0.68	0.01	<0.001	<0.002	0.07	<0.001	<0.001	0.038	1.380	4.63	0.2	0.05	0.010	<0.001	<0.05	<0.001	0.041	0.001	<0.05	0.002	0.041
29	MC1129③	Khujiriin gol	49°08′52″	103°37′09″	float stone of quartz vein.	<0.01	<5	0.38	<0.01	<0.001	<0.002	0.05	<0.001	<0.001	0.023	0.001	0.46	0.1	0.07	0.012	<0.001	0.06	0.001	<0.001	0.001	<0.05	<0.001	<0.002
30	MC1133	Khujiriin gol	49°07′50″	103°37′18″	quartz vein and stockwork with hematite in syenite.	<0.01	<5	2.79	0.03	0.001	<0.002	0.53	<0.001	<0.001	0.024	0.005	1.37	1.0	0.40	0.058	<0.001	0.72	0.001	0.018	0.013	0.14	0.003	0.024

Results of Ore analysis in the western Erdenet area, Mongolia.

Ser. No.	Sample No.	Location (Area)	Coordination		Description	Au	Ag	Al	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	Pb	Sr	Ti	V	Zn
			N	E		(g/t)	(ppm)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
31	MC1134	Khujiriin gol	49°07′54″	103°37′18″	quartz vein and stockwork with malachite and hematite in syenite.	<0.01	16	6.05	0.04	0.002	<0.002	0.92	<0.001	0.001	0.019	0.198	3.31	1.7	1.09	0.176	<0.001	1.89	0.002	0.112	0.029	0.27	0.007	0.062
32	MC1135	Khujiriin gol	49°07′57″	103°37′18″	brecciated syenite with quartz veinlets and stockwork with malachite and goethite.	<0.01	30	4.52	0.03	0.001	<0.002	1.92	<0.001	<0.001	0.018	0.303	2.00	1.2	0.95	0.124	<0.001	1.35	0.001	0.437	0.013	0.15	0.003	0.032
33	MC1136	Khujiriin gol	49°07′58″	103°37′18″	brecciated syenite with quartz veinlets and stockwork with malachite.	<0.01	14	6.09	0.03	0.002	<0.002	1.11	<0.001	0.003	0.020	0.674	4.45	0.9	2.37	0.267	<0.001	1.79	0.003	0.090	0.018	0.19	0.005	0.119
34	MC1138①	Khujiriin gol	49°08′18″	103°38′49″	quartz vein, N60E75N	<0.01	<5	3.83	0.03	<0.001	<0.002	1.12	<0.001	<0.001	0.021	0.006	1.86	0.7	0.69	0.046	<0.001	0.68	0.002	0.004	0.028	0.26	0.006	0.007
35	MA1118	Danbataseren	48°51′45″	103°47′13″	strongly silicified rock (secondary quartzite?)	<0.01	<5	0.13	<0.01	<0.001	<0.002	<0.05	<0.001	<0.001	0.042	0.004	4.36	<0.1	<0.05	0.008	<0.001	0.06	<0.001	0.003	0.005	0.12	0.003	0.003
36	MA1130	Undrakh	48°42′07″	102°45′49″	pink, fine grained, aplitic granite	<0.01	<5	1.23	<0.01	<0.001	<0.002	0.06	<0.001	<0.001	0.020	0.011	0.36	0.2	<0.05	0.010	<0.001	0.35	<0.001	0.002	0.003	<0.05	<0.001	0.002
37	MB1131	Tsookher mert	48°45′32″	103°15′42″	quartz vein with malachite in syenite. N73E48N	0.29	48	2.11	0.02	<0.001	0.004	1.17	0.002	<0.001	0.031	0.247	1.03	0.5	0.14	0.028	<0.001	0.25	<0.001	0.169	0.003	0.06	0.002	0.081
38	MB1132	Tsookher mert	48°45′28″	103°15′39″	quartz vein with malachite in syenite. N73E48N	0.02	<5	1.70	0.02	<0.001	<0.002	0.14	<0.001	<0.001	0.036	0.020	0.63	0.5	<0.05	0.013	<0.001	0.32	<0.001	0.041	0.002	<0.05	<0.001	0.005
39	MC1157②	Tsookher mert	48°45′38″	103°19′26″	weakly altered granodiorite.	<0.01	<5	2.77	<0.01	<0.001	<0.002	0.79	<0.001	<0.001	0.022	0.006	1.04	0.2	0.30	0.021	<0.001	0.78	0.002	0.005	0.025	0.10	0.002	0.004
40	MC1162	Tsookher mert	48°45′28″	103°16′02″	quartz veinlets in granite with malachite, azurite, hematite.	1.49	538	0.86	0.01	<0.001	<0.002	0.07	0.008	<0.001	0.030	0.116	0.49	0.2	0.05	0.014	<0.001	0.05	<0.001	2.088	0.002	<0.05	<0.001	0.682
41	MC1163	Tsookher mert	48°45′29″	103°16′01″	quartz vein with malachite, hematite, iron oxides.	0.23	365	0.95	0.01	<0.001	0.017	0.07	0.004	<0.001	0.038	0.123	0.53	0.2	0.06	0.007	0.001	<0.05	0.001	6.737	0.007	<0.05	<0.001	0.066

Appendix 7 Results of chemical analysis for rock samples in the western Erdenet area

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E	Geogical Unit	Description	Au (ppb)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
1	MA1045	Zuukhiin gol	49°15'28"	104°14'25"	γδ1P2-T1s	granodiorite with magnetite	4	5	7.9	91	<0.5	7.27	733	15.0	<2	1.36	<0.5	8	124	7	2.40	1.50	0.49	552	<1	2.09	5	685	57	247	0.23	29	<10	47
2	MA1050	Zuukhiin gol	49°15'44"	104°15'24"	γδ1P2-T1s	diorite	<1	<1	9.4	60	<0.5	9.40	292	5.6	<2	5.91	<0.5	29	89	39	6.94	0.42	2.21	1,205	<1	2.13	8	1,282	64	592	0.70	208	<10	87
3	MA1052	Zuukhiin gol	49°15'28"	104°15'34"	P1hn1	basalt	<1	6	8.4	62	<0.5	7.37	458	8.9	<2	2.49	<0.5	20	60	10	6.31	0.83	1.54	1,620	<1	2.39	6	1,572	50	260	0.69	152	<10	111
4	MA1054	Zuukhiin gol	49°14'05"	104°12'22"	γδ1P2-T1s	granodiorite with hornblende and biotite	<1	<1	5.6	44	<0.5	7.09	751	14.3	<2	1.37	<0.5	4	145	7	2.11	1.59	0.41	691	<1	2.16	7	504	57	220	0.20	20	<10	53
5	MA1055	Zuukhiin gol	49°15'03"	104°13'55"	γδ1P2-T1s	granodiorite	<1	10	4.6	48	<0.5	6.85	908	15.8	<2	0.73	<0.5	3	225	11	1.79	1.68	0.15	404	<1	2.15	12	502	53	125	0.13	9	<10	46
6	MA1056	Zuukhiin gol	49°13'27"	104°13'23"	γ2P2-T1s	coarse grained granodiorite	<1	<1	10.4	87	<0.5	8.28	724	16.5	<2	3.02	<0.5	14	158	23	3.75	1.51	1.22	725	<1	2.05	15	1,553	59	615	0.35	82	<10	69
7	MA1058	Zuukhiin gol	49°13'03"	104°13'05"	γ2P2-T1s	silicified granodiorite with malachite along the fractures	1	4	<0.2	50	2.0	7.68	748	21.7	<2	0.73	1.7	28	157	11,740	2.23	1.33	0.80	1,604	2	1.77	21	1,117	60	582	0.17	45	12	405
8	MA1059	Zuukhiin gol	49°12'52"	104°12'54"	γ2P2-T1s	granodiorite in trench	3	3	12.4	71	<0.5	7.83	753	18.4	<2	1.90	<0.5	9	145	255	2.77	1.17	0.85	390	<1	1.70	18	835	64	591	0.27	53	<10	51
9	MA1061	Zuukhiin gol	49°13'07"	104°17'55"	γ2P2-T1s	granodiorite with malachite along the fracture	1	3	9.3	37	1.4	7.81	650	18.1	<2	0.42	2.1	8	134	4,709	2.42	1.39	0.93	482	<1	1.66	20	1,018	71	443	0.17	52	<10	336
10	MA1062	Zuukhiin gol	49°12'40"	104°12'29"	γ2P2-T1s	granodiorite	2	<1	10.9	35	<0.5	7.87	771	19.1	<2	1.89	<0.5	9	145	144	2.88	1.31	0.93	485	<1	1.69	15	952	80	566	0.32	55	<10	49
11	MA1064	Zuukhiin gol	49°13'15"	104°12'18"	γ2P2-T1s	granodiorite with hornblende and biotite	4	<1	8.3	33	<0.5	8.15	851	17.1	<2	1.98	<0.5	8	148	129	2.68	1.17	0.89	341	<1	1.75	16	1,024	60	621	0.27	53	<10	39
12	MA1068	Zuukhiin gol	49°13'25"	104°12'54"	γ2P2-T1s	granodiorite	<1	5	19.7	33	<0.5	7.90	655	18.8	<2	1.60	<0.5	10	134	274	2.48	1.30	0.85	492	<1	1.70	16	859	56	549	0.23	50	<10	57
13	MB1046	Zuukhiin gol	49°14'34"	104°12'26"	P1hn1	strongly silicified rock with andesite	1	3	7.2	20	<0.5	5.78	900	10.7	<2	0.89	<0.5	<1	133	4	1.03	1.84	0.14	422	<1	2.02	4	214	29	228	0.16	8	<10	37
14	MB1048	Zuukhiin gol	49°14'27"	104°12'59"	γ2P2-T1s	biotite granite	<1	<1	<0.2	27	<0.5	5.91	825	13.0	<2	0.40	<0.5	<1	131	29	1.58	2.24	0.08	310	<1	2.09	6	288	34	71	0.11	5	<10	47
15	MB1054	Zuukhiin gol	49°13'06"	104°15'29"	γ3P2-T1s	granite or syenite	<1	11	3.2	65	<0.5	6.33	639	9.1	<2	0.70	<0.5	2	136	16	1.36	2.62	0.24	179	<1	1.82	8	292	50	251	0.14	27	<10	49
16	MB1057	Zuukhiin gol	49°14'05"	104°15'50"	γδ1P2-T1s	granite or syenite with epidote	<1	<1	10.5	27	<0.5	6.16	290	7.9	<2	2.45	<0.5	6	182	8	2.17	0.94	0.37	402	<1	1.95	9	642	39	776	0.26	69	<10	26
17	MB1058	Zuukhiin gol	49°13'47"	104°15'25"	dyke	andesite with chlorite	<1	<1	2.3	61	<0.5	8.42	878	9.5	2	3.27	1.1	23	141	44	5.29	1.17	2.64	859	<1	2.14	56	1,825	55	740	0.63	139	<10	92
18	MB1059	Zuukhiin gol	49°13'40"	104°15'30"	γδ1P2-T1s	granite or syenite	<1	<1	11.8	89	<0.5	7.55	569	7.4	<2	2.83	<0.5	10	105	29	3.40	1.42	1.20	624	<1	1.91	11	782	48	519	0.36	100	<10	63
19	MB1060	Zuukhiin gol	49°14'05"	104°13'17"	γδ1P2-T1s	granite or syenite with epidote	1	<1	12.0	25	<0.5	7.32	318	8.9	<2	2.28	<0.5	4	127	4	2.73	0.84	0.53	743	<1	2.47	4	664	73	386	0.22	48	<10	42
20	MB1061	Zuukhiin gol	49°14'00"	104°13'15"	dyke	andesite with malachite veinlets	1	<1	3.1	125	0.9	8.58	841	9.9	<2	1.67	<0.5	5	65	714	4.47	1.96	1.34	1,051	<1	2.39	4	2,029	117	505	0.27	49	<10	156
21	MB1062	Zuukhiin gol	49°13'45"	104°13'22"	γδ1P2-T1s	fine grained granite	1	<1	19.1	78	<0.5	8.87	615	14.1	4	2.59	5.3	46	2,795	121	5.86	1.58	1.18	1,114	<1	2.42	1,371	1,225	126	687	0.33	96	<10	331
22	MB1063	Zuukhiin gol	49°13'48"	104°13'41"	γδ1P2-T1s	granite	2	3	11.6	54	<0.5	8.28	657	7.6	<2	4.02	<0.5	11	102	37	2.84	1.69	0.58	511	<1	2.04	10	914	59	556	0.38	105	<10	38
23	MC1069	Zuukhiin gol	49°14'53"	104°12'03"	P1hn1	andesite porphyry weakly silicified with sericite	<1	14	5.0	55	<0.5	5.65	684	14.1	<2	0.68	<0.5	2	136	5	1.19	0.73	0.11	435	2	1.26	11	424	68	106	0.14	11	<10	36
24	MC1070	Zuukhiin gol	49°14'54"	104°12'00"	P1hn1	andesite porphyry weakly silicified with sericite and K-alteration	1	<1	4.8	13	<0.5	6.93	592	14.6	<2	3.24	0.5	5	94	<1	4.79	0.56	0.74	1,152	<1	1.09	6	2,209	68	438	0.57	54	<10	117
25	MC 1074	Zuukhiin gol	49°15'24"	104°12'46"	δ1P2-T1s	Granodiorite	<1	<1	18.4	<10	<0.5	7.25	423	8.7	4	5.24	0.8	25	112	24	6.13	0.40	2.20	1,165	<1	1.10	12	796	69	397	0.43	187	<10	91
26	MC1075	Zuukhiin gol	49°15'09"	104°13'01"	δ1P2-T1s	weakly altered granodiorite	<1	<1	9.5	<10	<0.5	7.22	275	7.4	3	5.83	<0.5	22	147	48	5.88	0.32	2.33	1,172	<1	1.05	19	666	63	393	0.44	185	<10	87
27	MC1076	Zuukhiin gol	49°15'05"	104°13'16"	δ1P2-T1s	granodiorite porphyry weakly altered with chlorite and sericite	<1	<1	6.9	28	<0.5	6.42	763	12.9	<2	1.63	<0.5	<1	137	6	1.94	0.72	0.37	533	<1	1.26	6	590	59	211	0.17	21	<10	45
28	MC1077	Zuukhiin gol	49°14'59"	104°13'26"	δ1P2-T1s	granite porphyry weakly altered with epidote, chlorite, K-alteration	<1	3	9.2	70	<0.5	5.92	658	9.6	<2	1.68	<0.5	1	160	4	1.51	0.85	0.18	446	<1	1.14	7	405	48	164	0.10	9	<10	31
29	MC1078	Zuukhiin gol	49°13'22"	104°13'16"	γ2P2-T1s	granodiorite weakly altered	4	2	5.3	26	<0.5	6.72	558	19.8	<2	1.70	<0.5	5	128	253	2.54	0.76	0.81	327	<1	1.12	14	954	77	471	0.22	46	<10	48
30	MC1079	Zuukhiin gol	49°13'05"	104°13'35"	γ2P2-T1s	weak altered, granodiorite with malachite along the fracture	4	<1	8.0	47	1.0	6.96	563	18.7	<2	0.83	0.6	3	105	1,874	1.66	0.86	0.86	219	<1	1.19	17	980	68	449	0.17	48	<10	74
31	MC1080	Zuukhiin gol	49°12'57"	104°13'58"	γ2P2-T1s	granodiorite weakly altered with silicification, chlorite and sericite	2	<1	11.9	74	<0.5	6.74	204	12.9	<2	2.32	0.5	6	130	36	2.09	0.77	0.66	796	<1	0.78	13	951	155	139	0.17	39	<10	205
32	MC1081	Zuukhiin gol	49°12'42"	104°14'28"	γδ1P2-T1s	granodiorite weakly altered with epidote and chlorite	7	25	12.9	158	<0.5	7.19	368	10.2	<2	1.76	<0.5	8	123	11	2.88	0.41	1.10	746	<1	1.54	14	1,088	81	417	0.33	87	<10	98
33	MC1082	Zuukhiin gol	49°12'29"	104°15'05"	γδ1P2-T1s	granodiorite weakly altered with chlorite	<1	3	17.5	23	<0.5	7.09	570	8.9	2	3.10	0.5	12	95	36	3.83	0.64	1.33	759	<1	1.20	15	1,037	87	630	0.36	104	<10	75
34	MC1083	Zuukhiin gol	49°12'18"	104°15'25"	dyke	dasalt dyke weakly altered with chlorite	<1	6	7.3	72	<0.5	7.79	1,136	13.3	2	4.07	0.5	14	62	35	5.23	0.58	1.72	765	<1	1.27	26	4,322	95	1,841	0.54	124	<10	112
35	MC1084	Zuukhiin gol	49°12'42"	104°12'57"	γδ1P2-T1s	granodiorite weakly altered with chlorite, epidote and K-alteration	<1	1	6.6	89	<0.5	6.83	637	21.1	<2	2.13	<0.5	7	170	17	2.50	0.75	0.78	473	<1	1.22	18	882	70	512	0.21	47	<10	52
36	MC1086	Zuukhiin gol	49°12'41"	104°12'28"	γδ1P2-T1s	granodiorite weakly altered with chlorite and K-alteration	<1	9	12.2	66	<0.5	7.15	664	19.2	<2	1.75	<0.5	7	113	101	2.59	0.77	0.82	425	<1	1.16	12	910	89	491	0.23	47	<10	46
37	MC1087	Zuukhiin gol	49°12'17"	104°12'53"	dyke	basalt to andesite weakly altered with chlorite	<1	<1	10.1	70	<0.5	7.35	434	7.7	4	5.64	1.0	27	231	27	6.21	0.40	3.10	856	<1	0.86	112	2,187	62	635	0.64	154	<10	113
38	MC1089	Zuukhiin gol	49°12'15"	104°13'12"	dyke	basalt moderately altered with sericite and silicification	<1	14	35.8	35	1.4	5.90	738	10.9	<2	0.08	<0.5	2	83	4	0.77	2.13	0.15	131	2	0.08	4	200	65	25	0.07	8	10	132
39	MC1090	Zuukhiin gol	49°12'03"	104°13'31"	δ1P2-T1s	granodiorite weakly altered with chlorite and K-alteration	<1	<1	13.4	69	<0.2	7.46	578	8.0	<2	3.05	<0.5	7	126	27	3.54	0.88	1.25	614	<1	1.46	11	915	51	561	0.36	94	<10	46
40	MA1069	Mogoin gol	49°09'35"	103°45'44"	P1-2	basalt to andesite	<1	<1	11.5	35	<0.5	6.73	602	6.8	<2	5.35	<0.5	16	113	18	4.73	0.56	0.82	600	<1	0.82	14	1,364	47	760	0.42	137	<10	53

Ser. No.	Sample No.	Location (Area)	Coordination		Geogical Unit	Description	Au (ppb)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
			N	E																													
41	MA1070	Mogoin gol	49°09′29″	103°45′34″	P1-2	basalt	<1	14	8.5	39	0.9	6.92	748	18.7	<2	0.81	<0.5	2	195	13	1.16	1.65	0.10	572	2	1.61	18	280	63	234	0.14	15	<10	40
42	MA1076	Mogoin gol	49°10′12″	103°46′31″	P1-2	basalt	<1	<1	10.1	77	<0.5	9.10	451	7.8	3	6.55	<0.5	31	199	54	6.84	0.47	2.50	1,708	<1	1.30	35	1,443	50	702	0.67	163	<10	112
43	MA1077	Mogoin gol	49°10′40″	103°46′12″	P1-2	andesite to basalt with plagioclase phenocryst	<1	3	0.9	42	1.2	7.15	843	18.1	<2	0.50	<0.5	1	197	5	1.28	1.55	0.10	302	<1	1.58	12	308	76	229	0.17	13	<10	52
44	MA1078	Mogoin gol	49°10′15″	103°46′00″	P1-2	basalt	<1	20	<0.2	33	<0.5	7.20	1,112	13.8	<2	0.22	<0.5	1	112	4	1.22	1.37	0.06	394	2	1.54	4	389	58	96	0.24	5	<10	43
45	MA1079	Mogoin gol	49°10′07″	103°45′44″	P1-2	altered rock with strong silicification and iron oxidation	<1	<1	<0.2	46	<0.5	2.11	53	<0.5	3	0.16	<0.5	<1	436	16	9.71	0.10	<0.01	58	<1	0.05	8	3,109	26	805	0.02	44	<10	13
46	MA1080	Mogoin gol	49°10′08″	103°45′42″	P1-2	strong altered rock with quartz network	1	4	<0.2	<10	0.5	4.68	70	1.3	<2	0.14	<0.5	<1	291	13	1.22	0.19	<0.01	169	2	0.10	19	2,760	51	258	0.07	54	<10	13
47	MA1081	Mogoin gol	49°10′03″	103°45′29″	P1-2	brown to white secondary quartzite with lim + hematite + goethite	<1	5	<0.2	35	<0.5	1.10	530	<0.5	<2	0.08	<0.5	1	347	11	1.99	0.16	0.01	40	2	0.05	8	889	19	384	0.04	21	<10	17
48	MA1082	Mogoin gol	49°10′15″	103°45′00″	P1-2	basalt with pyrite dissemination	4	10	13.0	38	<0.5	7.61	374	8.8	2	5.71	<0.5	46	142	31	6.03	0.52	2.40	1,549	<1	1.18	29	1,314	66	614	0.55	167	<10	125
49	MA1083	Mogoin gol	49°10′29″	103°44′36″	P1-2	basalt (fresh)	1	4	15.5	65	<0.5	7.74	1,048	14.2	<2	2.25	<0.5	11	187	16	3.95	0.76	0.91	1,279	<1	1.44	15	1,460	61	662	0.35	63	<10	88
50	MA1085	Mogoin gol	49°09′55″	103°45′32″	P1-2	altered rock	<1	4	<0.2	56	<0.5	0.96	151	1.0	<2	0.07	<0.5	<1	428	19	7.16	0.16	0.01	92	<1	0.05	13	1,261	25	108	0.03	30	<10	17
51	MB1064	Mogoin gol	49°12′19″	103°47′18″	γ3T1s	granite or syenite	<1	<1	<0.2	67	<0.5	6.84	428	22.4	<2	0.28	<0.5	<1	86	7	1.99	2.92	0.16	397	<1	1.76	3	317	49	108	0.17	9	<10	25
52	MB1067	Mogoin gol	49°12′28″	103°45′19″	γ δ2T1s	granite or syenite	1	<1	2.6	70	<0.5	7.44	531	23.1	<2	1.42	<0.5	4	108	32	2.71	2.63	0.52	491	<1	1.96	14	896	50	187	0.33	34	<10	53
53	MB1069	Mogoin gol	49°11′45″	103°46′10″	P1-2	andesite weakly silicified	<1	<1	2.8	57	<0.5	9.69	685	20.5	<2	2.36	<0.5	12	63	18	4.69	1.57	0.52	460	<1	2.23	12	1,276	59	568	0.52	126	<10	71
54	MB1070	Mogoin gol	49°11′28″	103°46′04″	δ1T1s	porphyrite with chlorite and epidote	1	<1	3.7	67	<0.5	7.96	610	11.2	<2	1.68	<0.5	1	112	50	3.95	1.90	1.50	1,283	<1	1.91	10	1,079	52	368	0.48	86	<10	119
55	MB1073	Mogoin gol	49°11′18″	103°45′54″	P1-2	silicified rock with specularite.	1	8	<0.2	326	<0.5	5.45	336	0.5	<2	0.06	<0.5	<1	247	5	1.61	0.20	<0.01	53	<1	0.30	7	1,393	208	1,752	0.09	79	<10	6
56	MB1074	Mogoin gol	49°11′22″	103°45′29″	P1-2	silicified rock with pyrite dissemination	1	3	<0.2	84	<0.5	0.22	136	0.6	<2	0.08	<0.5	3	308	23	2.66	0.08	<0.01	170	10	0.04	9	230	21	26	0.18	23	<10	23
57	MB1075	Mogoin gol	49°11′11″	103°45′14″	P1-2	andesite with plagioclase phenocryst	1	<1	4.6	136	<0.5	9.67	355	8.2	3	6.07	<0.5	17	71	4	5.89	0.94	1.81	1,181	<1	2.60	10	1,680	52	813	0.80	182	<10	76
58	MC1095	Mogoin gol	49°12′04″	103°46′39″	P1-2	basalt to andesite weakly altered with silicification	<1	13	4.8	45	<0.5	7.08	611	15.6	<2	1.74	<0.5	9	109	18	4.37	0.85	0.60	1,244	<1	1.15	5	1,614	98	323	0.50	39	<10	166
59	MC1096	Mogoin gol	49°11′55″	103°47′06″	P1-2	basalt to andesite weakly altered with chlorite	1	3	<0.2	62	<0.5	7.99	880	14.4	<2	1.96	<0.5	3	64	25	4.08	2.83	0.89	971	<1	1.82	4	1,411	55	475	0.50	42	<10	82
60	MC1098	Mogoin gol	49°12′27″	103°45′04″	δ1T1s	diorite weakly altered	<1	8	7.8	73	<0.2	6.77	550	14.5	<2	2.65	<0.5	4	127	20	4.82	1.27	1.08	1,106	<1	1.57	10	1,468	65	302	0.55	77	<10	114
61	MC1100	Mogoin gol	49°12′08″	103°45′04″	P1-2	basalt to andesite weakly altered with chlorite	1	6	13.7	30	<0.5	8.43	959	16.1	<2	1.50	<0.5	3	74	8	3.29	2.19	0.54	739	<1	2.78	4	1,320	53	418	0.36	33	<10	52
62	MC1101	Mogoin gol	49°11′01″	103°45′12″	δ1T1s	diorite weakly altered with quartz veinlets	<1	14	7.9	40	<0.5	3.16	116	7.0	<2	0.40	<0.5	3	149	26	1.06	0.87	0.27	118	<1	0.10	10	1,367	28	21	0.17	32	<10	18
63	MC1103	Mogoin gol	49°11′52″	103°45′13″	P1-2	brecciated andesite porphyry weal altered	1	<1	3.0	69	<0.2	7.21	574	17.6	<2	0.94	<0.5	11	109	32	6.88	0.97	0.57	1,391	<1	0.54	10	1,567	61	195	0.49	61	<10	107
64	MC1109	Mogoin gol	49°11′18″	104°12′46″	P1-2	andesite moderately altered with sericite	<1	3	<0.2	62	<0.5	4.70	762	0.7	3	0.18	<0.5	<1	197	40	7.97	0.52	0.05	102	<1	0.23	4	1,290	35	484	0.35	127	<10	18
65	MC1110	Mogoin gol	49°15′24″	104°48′37″	γ δ2T1s	granodiorite porphyry weakly altered with chlorite and K-alteration	<1	<1	7.8	21	<0.5	6.91	577	18.8	<2	1.23	<0.5	6	109	9	2.26	2.45	0.47	564	<1	1.91	9	535	52	202	0.28	28	<10	65
66	MC1111	Mogoin gol	49°11′28″	103°47′35″	γ δ2T1s	granodiorite moderately altered with silicification and sericite	<1	5	0.5	38	<0.5	5.87	669	16.5	<2	0.26	<0.5	3	179	11	0.94	2.43	0.13	252	2	1.51	5	284	47	132	0.12	10	<10	26
67	MC1112	Mogoin gol	49°11′31″	103°47′24″	P1-2	basalt andesite strongly altered with silicification and sericite	<1	9	<0.2	53	<0.5	0.33	41	<0.5	<2	0.03	<0.5	1	470	17	1.50	0.09	<0.01	99	4	0.05	12	181	13	46	0.38	17	<10	6
68	MA1088	Khujiriin gol	49°07′11″	103°39′42″	T2-J1	andesite	1	<1	12.5	420	<0.2	9.13	532	8.7	2	4.14	<0.5	22	74	66	5.94	0.89	1.82	1,178	<1	2.21	13	1,900	63	713	0.65	141	<10	77
69	MA1089	Khujiriin gol	49°07′06″	103°39′18″	T2-J1	tuffbreccia	<1	5	8.7	137	<0.2	8.21	790	15.8	<2	1.20	<0.5	6	33	2	3.54	1.60	0.73	809	<1	2.33	5	1,434	60	365	0.54	60	<10	78
70	MA1090	Khujiriin gol	49°07′00″	103°39′56″	T2-J1	basalt weakly silicified with epidote vein	<1	15	11.2	154	<0.2	8.37	313	8.5	<2	3.66	<0.5	15	62	39	5.07	0.73	1.67	913	<1	2.08	14	1,193	52	633	0.57	144	<10	63
71	MA1091	Khujiriin gol	49°07′30″	103°39′46″	δ1T1s	granodiorite with iron oxidation and weak chloritization	<1	<1	<0.2	56	<0.5	7.88	265	8.6	<2	0.54	<0.5	14	119	22	4.05	0.30	0.67	866	<1	2.19	17	1,746	62	333	0.25	87	<10	81
72	MA1092	Khujiriin gol	49°07′26″	103°38′30″	T2-J1	basalt with chlorite	<1	15	6.9	75	<0.2	7.84	868	14.8	2	2.01	<0.5	7	73	7	5.54	1.13	0.62	1,838	<1	2.61	6	2,633	58	475	0.73	61	<10	145
73	MA1093	Khujiriin gol	49°07′71″	103°38′56″	γ δ2T1s	granodiorite with strong silicification	<1	3	11.4	43	1.4	2.17	82	5.9	<2	0.06	<0.5	2	264	17	1.09	0.31	0.07	118	140	0.05	12	295	252	24	0.07	34	<10	36
74	MA1095	Khujiriin gol	49°07′54″	103°39′29″	γ δ2T1s	granodiorite fresh	<1	3	4.8	87	<0.2	7.33	558	39.0	<2	0.84	<0.5	8	121	33	2.76	2.20	0.63	512	<1	2.33	14	1,302	71	276	0.32	44	<10	54
75	MA1096	Khujiriin gol	49°07′46″	103°40′08″	γ δ2T1s	granodiorite	<1	<1	0.6	27	<0.2	7.22	499	26.1	<2	0.33	<0.5	4	112	10	2.33	2.35	0.27	354	<1	2.00	8	1,558	82	94	0.24	21	<10	46
76	MA1097	Khujiriin gol	49°07′30″	103°40′06″	γ δ2T1s	granodiorite moderately silicifrf with iron oxidation	1	<1	1.4	48	0.7	7.41	650	24.8	<2	0.28	<0.5	1	87	18	2.22	2.14	0.26	312	<1	1.76	6	597	59	148	0.30	20	<10	46
77	MA1099	Khujiriin gol	49°07′29″	103°40′43″	γ δ2T1s	granodiorite	<1	4	2.2	46	<0.2	6.69	368	27.6	<2	0.20	<0.5	<1	111	11	1.83	1.99	0.14	112	<1	1.40	6	2,666	87	90	0.16	13	<10	35
78	MA1100	Khujiriin gol	49°08′24″	103°38′03″	γ δ2T1s	andesite to basalt with weak silicification	<1	31	17.6	63	<0.5	8.25	534	13.0	<2	3.41	<0.5	26	132	52	5.69	0.61	2.46	1,830	<1	1.45	46	2,014	169	743	0.72	161	<10	477
79	MA1101	Khujiriin gol	49°08′27″	103°35′32″	γ δ2T1s	granodiorite with silicification	<1	<1	<0.2	70	<0.5	6.35	1,077	15.9	<2	0.35	<0.5	20	193	76	4.38	0.97	1.29	2,588	<1	0.78	32	1,247	118	241	0.19	58	<10	436
80	MA1102	Khujiriin gol	49°08′23″	103°35′16″	γ δ2T1s	granodiorite	<1	3	1.5	38	<0.5	5.67	1,909	12.1	<2	0.49	<0.5	17	229	15	4.24	1.12	1.35	3,320	<1	0.43	36	1,423	272	292	0.32	81	<10	532

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E	Geogical Unit	Description	Au (ppb)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
81	MA1103	Khujiriin gol	49°08′56″	103°34′53″	γδ2T1s	medium grained granodiorite	<1	<1	11.0	25	<0.5	7.95	777	30.4	<2	2.97	<0.5	18	197	34	3.95	1.02	1.48	632	<1	1.45	42	1,583	92	660	0.50	86	<10	99
82	MA1104	Khujiriin gol	49°08′15″	103°34′08″	γδ2T1s	medium grained granodiorite	<1	8	12.3	23	<0.5	7.04	582	42.3	<2	1.26	<0.5	5	152	19	2.79	1.04	0.52	567	<1	1.16	12	950	93	326	0.32	41	<10	74
83	MA 1105	Khujiriin gol	49°08′18″	103°34′48″	γδ2T1s	Granodiorite	<1	9	4.8	14	<0.5	8.37	864	32.2	<2	1.17	<0.5	<1	155	21	2.25	3.10	0.47	671	<1	3.11	9	807	114	427	0.34	33	<10	92
84	MA1106	Khujiriin gol	49°08′17″	103°35′05″	γδ2T1s	granodiorite, medium grained	321	3	6.8	90	18.4	7.10	786	25.8	16	1.84	0.6	6	157	25	2.90	2.97	0.96	515	<1	2.44	25	1105	71	517	0.40	66	<10	101
85	MA1107	Khujiriin gol	49°09′50″	103°39′13″	γδ2T1s	granodiorite with iron oxidation	1	<1	4.4	73	0.8	6.56	706	12.3	<2	0.41	<0.5	4	156	20	2.12	1.49	0.57	453	<1	1.74	11	1,013	58	226	0.23	46	<10	41
86	MA1108	Khujiriin gol	49°10′09″	103°39′03″	P1-2	basalt strongly silicified	1	10	4.7	52	1.6	5.62	591	10.8	<2	0.23	0.5	<1	98	7	0.81	1.80	0.08	166	1	1.35	9	162	57	134	0.09	8	<10	42
87	MA1110	Khujiriin gol	49°11′12″	103°39′37″	P1-2	basalt with chlorite	<1	<1	2.1	60	<0.2	7.50	781	14.5	<2	4.49	<0.5	10	97	29	5.91	0.73	1.10	2,127	<1	1.68	6	2,462	54	563	0.87	100	<10	147
88	MA1111	Khujiriin gol	49°11′08″	103°40′18″	P1-2	basalt weakly altered with chlorite	103	<1	3.1	64	2.1	7.70	847	17.1	17	1.54	<0.5	<1	119	6	3.70	1.68	0.37	1533	<1	2.93	3	1186	58	444	0.22	5	<10	165
89	MA1112	Khujiriin gol	49°10′29″	103°41′10″	γδ2T1s	fine grained granodiorite	1	13	6.3	58	0.5	6.54	451	15.2	<2	0.53	<0.5	2	82	18	1.93	1.50	0.11	355	<1	1.64	5	448	62	134	0.18	15	<10	44
90	MA1113	Khujiriin gol	49°10′23″	103°42′32″	γδ2T1s	medium grained granodiorite	<1	<1	15.3	73	<0.2	7.28	606	15.6	<2	2.42	<0.5	9	132	8	3.10	1.14	0.98	524	<1	1.57	10	929	68	460	0.29	70	<10	54
91	MA1114	Khujiriin gol	49°06′21″	103°41′26″	T2-J1	basaltic tuff breccia to lapilli tuff	2	6	2.3	50	<0.2	6.96	979	13.1	24	2.06	<0.5	13	100	6	4.04	1.89	1.04	822	<1	2.34	41	1542	43	780	0.49	110	<10	95
92	MB1076	Khujiriin gol	49°06′16″	103°38′26″	T2-J1	basalt with magnetite and chalcedony	<1	<1	5.3	62	<0.2	7.99	287	6.6	<2	4.73	<0.5	13	53	10	6.60	0.24	1.88	1,033	<1	1.59	2	1,496	59	567	0.68	175	<10	92
93	MB1077	Khujiriin gol	49°06′44″	103°38′21″	T2-J1	andesite weakly silicified with limonite	<1	63	4.2	73	<0.2	6.56	540	9.6	<2	0.19	<0.5	3	78	9	2.30	1.27	0.25	170	<1	1.62	2	746	51	142	0.23	29	<10	32
94	MB1079	Khujiriin gol	49°07′21″	103°38′35″	T2-J1	aphanitic basalt	1	<1	<0.2	54	<0.2	7.21	742	10.8	<2	0.47	<0.5	22	26	7	7.66	1.42	1.81	1,220	<1	0.11	4	1,553	57	38	0.81	81	<10	156
95	MB1080	Khujiriin gol	49°07′23″	103°38′33″	δ1T1s	granite porphyry	2	10	<0.2	89	<0.5	8.43	511	14.4	<2	0.19	<0.5	<1	64	6	3.39	1.99	0.60	166	<1	1.79	4	871	69	92	0.22	67	<10	42
96	MB1082	Khujiriin gol	49°07′28″	103°37′56″	T2-J1	basalt with magnetite	<1	4	5.2	89	<0.2	9.15	344	8.4	<2	5.81	0.7	24	96	66	6.90	0.32	1.57	1,355	<1	1.46	19	1,700	54	754	0.82	219	<10	90
97	MB 1083	Khujiriin gol	49°07′15″	103°37′53″	δ1T1s	Diorite	1	2	12.9	91	<0.5	8.88	613	15.1	3	4.68	<0.5	21	112	30	5.44	1.38	2.32	973	<1	2.72	32	1,922	60	958	0.51	147	<10	84
98	MB1084	Khujiriin gol	49°06′48″	103°37′40″	T2-J1	basalt	<1	<1	3.8	79	<0.2	7.27	331	7.6	<2	1.78	0.7	20	41	40	8.36	0.37	2.71	1,281	<1	1.68	8	1,399	49	307	0.85	238	<10	78
99	MB1085	Khujiriin gol	49°07′29″	103°36′54″	γδ2T1s	granodiorite with hornblende	<1	<1	4.3	181	<0.5	8.36	898	19.8	2	2.61	<0.5	14	77	47	4.97	2.16	1.87	1,128	<1	2.79	27	2,002	62	747	0.51	120	<10	79
100	MB1086	Khujiriin gol	49°07′16″	103°35′58″	γδ2T1s	granite or syenite with epidote and chlorite	<1	<1	2.8	114	<0.5	8.02	763	38.3	<2	0.33	<0.5	2	101	27	2.78	2.73	0.53	447	<1	2.26	12	1,065	73	132	0.20	43	<10	54
101	MB1087	Khujiriin gol	49°07′50″	103°36′44″	γδ2T1s	coarse grained granite	<1	<1	14.3	82	<0.5	8.03	788	33.6	<2	1.85	<0.5	13	154	25	3.32	2.24	1.15	705	<1	2.46	26	1,225	83	559	0.35	67	<10	77
102	MB1088	Khujiriin gol	49°07′42″	103°36′05″	γδ2T1s	granite or syenite with epidote and chlorite	<1	<1	7.8	149	<0.5	7.22	279	15.0	<2	0.18	<0.5	11	244	21	1.11	1.09	1.69	449	<1	2.84	75	661	67	33	0.04	32	<10	89
103	MB1089	Khujiriin gol	49°07′39″	103°35′42″	γδ2T1s	granodiorite to syenitic granodiorite	33	6	<0.2	28	<0.2	6.38	458	36.0	3	0.61	<0.5	1	76	16	2.20	3.73	0.30	504	<1	2.33	8	913	61	210	0.34	33	<10	69
104	MB1090	Khujiriin gol	49°07′30″	103°34′33″	γδ2T1s	silicified granite with quartz-malachite	21	241	113.7	97	27.8	2.88	254	14.0	<2	0.32	3.9	4	260	1,936	1.35	0.76	0.44	1,024	5	0.52	8	373	5,386	91	0.09	19	<10	561
105	MB 1093	Khujiriin gol	49°07′39″	103°34′05″	γδ2T1s	Grantic syenite	1	2	7.1	80	<0.5	7.65	701	34.2	<2	1.31	<0.5	4	95	16	2.17	1.96	0.47	518	<1	2.02	15	778	87	358	0.28	34	<10	59
106	MB1100	Khujiriin gol	49°07′59″	103°35′30″	γδ2T1s	quartz vein with malachite in syenite. N73E48N	<1	8	16.4	97	1.5	5.65	1,493	13.8	<2	1.01	0.8	12	262	870	3.71	1.79	0.93	1,966	13	0.77	26	999	632	396	0.23	57	18	985
107	MB1101	Khujiriin gol	49°07′54″	103°35′30″	γδ2T1s	altered rock in trench	1	<1	5.4	62	1.2	3.93	513	10.0	3	2.29	0.9	6	224	183	5.95	0.91	0.81	2,164	<1	0.75	16	539	284	197	0.14	54	49	843
108	MC1113	Khujiriin gol	49°07′31″	103°37′06″	γδ2T1s	syenite moderately altered with quartz veinlets	<1	17	1.1	70	0.6	7.01	479	13.8	<2	0.15	<0.5	5	112	20	1.72	2.99	0.43	377	<1	1.89	13	625	81	53	0.18	24	<10	80
109	MC1114	Khujiriin gol	49°07′37″	103°37′21″	γδ2T1s	syenite weakly altered	<1	18	7.4	66	1.2	6.60	451	12.8	<2	0.32	<0.5	3	88	6	1.64	1.02	0.27	391	<1	2.10	6	678	88	91	0.23	21	<10	192
110	MC1115	Khujiriin gol	49°07′38″	103°37′21″	γδ2T1s	syenite with quartz network	9	<1	4.7	45	0.9	3.72	496	10.7	<2	0.16	<0.5	4	202	90	1.37	2.25	0.47	1,010	8	0.39	10	394	386	62	0.09	23	<10	446
111	MC1117	Khujiriin gol	49°07′51″	103°37′18″	γδ2T1s	weak altered, granodiorite with malachite along the fracture	<1	4	<0.2	383	22.0	5.71	800	17.4	<2	0.53	2.5	9	189	4,897	3.29	2.31	0.86	1,995	8	1.42	23	890	5,258	176	0.26	45	38	5,664
112	MC1119①	Khujiriin gol	49°08′07″	103°38′18″	γδ2T1s	stockwork quartz vein in basalts.	<1	18	25.5	49	<0.5	8.17	208	16.9	<2	4.78	0.5	4	155	21	3.52	1.35	0.54	1,359	<1	2.13	14	817	134	1,845	0.34	68	<10	201
113	MC1121②	Khujiriin gol	49°06′19″	103°38′39″	dyke	andesite weakly altered with chlorite and K-alteration	<1	4	7.7	141	<0.2	7.38	1,374	16.7	<2	1.71	<0.5	11	122	194	4.11	1.83	1.29	2,808	<1	1.17	25	1,864	226	579	0.40	94	<10	427
114	MC1122	Khujiriin gol	49°08′55″	103°39′31″	P1-2	basalt weakly altered with chlorite and epidote	1	49	4.2	83	<0.2	7.33	857	9.7	<2	3.19	<0.5	13	113	23	6.31	0.74	0.61	569	<1	1.97	4	2,815	50	525	0.81	125	<10	18
115	MC1123	Khujiriin gol	49°09′11″	103°39′46″	γδ2T1s	syenitic granodiorite	1	21	12.6	75	<0.2	7.36	1,059	18.9	<2	2.48	<0.5	14	133	4	3.54	1.19	1.33	763	<1	1.49	29	1,489	59	587	0.45	78	<10	72
116	MC1124	Khujiriin gol	49°08′30″	103°37′09″	δ1T1s	andesite moderately altered with silicification and sericite	2	8	3.9	17	0.9	7.31	22	30.9	<2	0.17	<0.5	4	89	15	1.63	0.19	0.07	93	2	4.98	8	237	36	73	0.16	17	<10	13
117	MC1125	Khujiriin gol	49°08′42″	103°36′42″	δ1T1s	andesite moderately altered with silicification and sericite	2	22	7.0	106	2.7	5.38	573	11.5	<2	0.21	<0.5	3	98	19	0.88	2.49	0.15	170	1	1.18	8	204	131	100	0.10	14	<10	99
118	MC1126	Khujiriin gol	49°08′57″	103°13′21″	γδ2T1s	granodiorite to syenitic granodiorite weakly altered with chlorite and silicification	<1	3	11.3	<10	<0.5	8.06	1,032	19.7	<2	2.79	<0.5	4	64	17	2.16	2.00	1.39	462	<1	2.68	24	1,443	63	705	0.50	68	<10	44
119	MC1127	Khujiriin gol	49°09′15″	103°36′05″	γδ2T1s	granodiorite weakly altered with sericite	1	<1	12.1	15	<0.2	8.19	878	13.8	<2	3.23	0.6	15	91	13	4.01	0.86	1.54	640	<1	2.01	25	1,683	68	739	0.56	92	<10	58
120	MC1128	Khujiriin gol	49°09′14″	103°36′30″	δ1T1s	andesite porphyry weakly altered with sericite and silicification	<1	18	20.3	75	<0.2	7.67	780	18.3	<2	2.89	<0.5	10	91	12	3.15	1.12	1.54	619	<1	1.94	23	1,549	67	556	0.47	100	<10	62

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E	Geogical Unit	Description	Au (ppb)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
121	MC1129①	Khujiriin gol	49°08′52″	103°37′09″	γδ2T1s	granodiorite weakly altered with chlorite	<1	14	16.7	37	<0.2	8.24	666	16.0	<2	3.79	<0.5	11	89	6	4.13	0.71	1.77	539	<1	2.12	28	1,785	67	952	0.53	95	<10	49
122	MC1130	Khujiriin gol	49°08′52″	103°37′35″	γδ2T1s	syenite porphyry moderately altered	<1	13	15.9	145	<0.5	8.22	932	16.9	2	2.43	<0.5	5	73	7	3.83	1.97	1.37	453	<1	2.77	23	1,655	57	579	0.50	90	<10	56
123	MC1131	Khujiriin gol	49°08′11″	103°38′09″	P1-2	basalt weakly altered with chlorite	2	<1	6.3	31	<0.2	8.05	233	8.0	<2	6.11	1.1	28	107	80	7.66	0.34	2.57	1,473	<1	1.25	35	1,529	49	532	0.89	260	<10	95
124	MC1132	Khujiriin gol	49°08′59″	103°38′28″	γδ2T1s	syenitegranodiorite weakly altered with silicification	<1	18	9.2	85	<0.5	7.78	1,086	18.9	<2	2.14	<0.5	5	111	15	3.19	2.03	1.45	552	<1	2.50	30	1,506	52	462	0.49	80	<10	49
125	MC1136	Khujiriin gol	49°07′57″	103°37′18″	γδ2T1s	brecciated syenite with quartz veinlets and stockwork with malachite	5	2	8.4	75	9.2	6.29	438	16.9	<2	1.49	1.9	13	175	5,072	3.07	1.69	1.52	1,877	<1	1.73	17	826	480	257	0.20	41	<10	841
126	MC1137	Khujiriin gol	49°08′15″	103°38′50″	γδ2T1s	fine grained granodiorite	<1	<1	12.5	58	<0.5	8.68	540	14.0	2	3.78	0.6	18	80	24	4.46	1.02	1.75	798	<1	2.29	20	1,474	58	999	0.35	110	<10	81
127	MC1138②	Khujiriin gol	49°08′18″	103°38′49″	γδ2T1s	quartz vein, N80E75N	<1	10	9.0	85	<0.5	6.26	750	12.6	<2	1.03	<0.5	14	221	108	3.24	1.31	1.07	1,154	<1	1.67	25	1,336	51	354	0.29	76	<10	175
128	MA1024	Tsagaan Chuluut	49°04′15″	103°58′53″	T3-J1mg	basalt	2	15	<0.2	17	1.1	9.29	428	1.6	<2	0.10	<0.5	<1	65	208	1.47	0.12	0.01	19	6	0.14	4	1,434	73	1,807	0.49	62	<10	10
129	MA1025	Tsagaan Chuluut	49°04′47″	103°00′17″	T3-J1mg	andesite-basalr porphyry with plagioclase phenocryst	<1	<1	6.7	40	0.8	8.50	776	18.4	<2	2.47	<0.5	19	108	105	4.28	2.30	1.52	956	<1	3.09	26	1,529	54	916	0.55	108	<10	100
130	MA1028	Tsagaan Chuluut	49°03′21″	104°01′14″	T3-J1mg	granite with strong weathering	1	31	<0.2	71	<0.5	1.74	968	<0.5	<2	0.06	<0.5	<1	292	377	11.47	0.31	0.04	12	<1	0.06	4	1,290	52	244	0.06	186	<10	25
131	MA1029	Tsagaan Chuluut	49°03′40″	104°01′52″	T3-J1mg	andesitic basalt with moderate oxidation	2	<1	2.9	25	<0.5	8.40	1,005	15.0	<2	1.10	<0.5	21	147	36	4.64	1.49	0.92	716	<1	3.76	45	1,560	66	951	0.54	107	<10	99
132	MA1030	Tsagaan Chuluut	49°03′41″	104°02′18″	T3-J1mg	volcanic breccia with plagioclase phenocryst	<1	5	<0.2	75	<0.5	9.29	73	10.1	<2	0.28	<0.5	2	429	19	0.79	1.65	<0.01	78	3	1.07	9	3,071	60	1,471	0.48	128	<10	20
133	MA1031	Tsagaan Chuluut	49°03′40″	104°01′38″	T3-J1mg	altered rock with strong silicification	5	6	0.6	46	0.7	1.40	78	1.4	<2	0.04	<0.5	3	297	22	0.47	0.08	<0.01	124	12	0.04	15	406	35	175	0.08	10	<10	30
134	MA1032	Tsagaan Chuluut	49°03′41″	104°00′43″	T3-J1mg	altered rock, volcanic breccia with strong silicification	1	11	<0.2	62	1.0	0.57	582	1.6	<2	0.06	<0.5	<1	1,029	32	4.18	0.17	0.01	67	<1	0.04	13	1,788	4	135	0.06	48	<10	13
135	MA1033	Tsagaan Chuluut	49°02′43″	104°00′18″	T3-J1mg	andesite with strong silicification	<1	1	1.5	46	<0.5	8.28	859	12.3	<2	1.48	<0.5	13	158	38	4.09	1.86	1.57	698	<1	2.84	28	1,502	65	750	0.53	101	<10	104
136	MA1034	Tsagaan Chuluut	49°03′53″	104°00′05″	T3-J1mg	andesite porphyry with iron oxidation along the fracture	1	<1	9.8	27	<0.5	8.37	815	15.2	<2	3.06	<0.5	19	116	41	4.24	1.88	1.85	846	<1	2.45	38	1,538	70	800	0.58	106	<10	95
137	MA1035	Tsagaan Chuluut	49°03′53″	104°59′48″	T3-J1mg	altered volcanic rock	3	33	<0.2	66	<0.5	2.21	711	<0.5	<2	0.07	<0.5	<1	290	13	1.23	0.19	<0.01	100	4	0.10	13	800	42	503	0.93	36	<10	17
138	MA1036	Tsagaan Chuluut	49°03′43″	103°58′51″	T3-J1mg	basalt to andesite	5	<1	10.6	40	<0.5	8.21	909	10.9	<2	3.96	<0.5	31	201	46	6.22	1.22	2.55	659	<1	1.95	67	2,900	69	1,582	0.73	160	<10	114
139	MA1037	Tsagaan Chuluut	49°03′46″	103°59′10″	T3-J1mg	brecciated basalt with moderate silicification	2	15	<0.2	98	<0.5	7.56	65	1.4	<2	0.07	<0.5	<1	290	17	0.40	1.53	<0.01	181	4	0.34	28	1,019	71	474	0.42	197	<10	39
140	MA1039	Tsagaan Chuluut	49°03′41″	103°59′42″	T3-J1mg	andesite to basalt	<1	<1	1.1	84	<0.5	7.63	684	20.2	<2	0.86	<0.5	12	178	23	3.61	1.68	1.32	657	<1	2.27	29	1,393	64	486	0.40	78	<10	88
141	MA1041	Tsagaan Chuluut	49°03′18″	103°59′28″	T3-J1mg	altered rock in big alteration zone	3	16	1.8	46	1.1	7.02	84	1.6	<2	0.24	<0.5	2	155	7	0.42	1.06	<0.01	122	4	0.60	13	1,824	54	1,074	0.26	142	<10	24
142	MA1042	Tsagaan Chuluut	49°03′33″	103°59′03″	T3-J1mg	altered volcanic rock	9	<1	7.5	83	<0.5	7.24	748	8.7	<2	3.38	<0.5	21	224	45	5.14	1.09	2.21	1,315	<1	1.82	56	1,739	59	1,444	0.63	112	<10	93
143	MA1043	Tsagaan Chuluut	49°02′58″	103°59′45″	T3-J1mg	brecciated volcanic rock with iron oxidation	<1	7	<0.2	42	1.4	6.74	883	13.8	<2	0.22	<0.5	6	224	11	1.69	1.86	0.24	421	<1	1.59	29	541	72	139	0.18	20	<10	63
144	MB1026	Tsagaan Chuluut	49°04′27″	104°02′25″	γδ2P2-T1s	granite with epidote and chlorite	<1	<1	<0.2	59	<0.5	8.47	553	15.7	<2	1.51	<0.5	10	93	<1	4.54	1.56	1.46	1,811	<1	2.74	16	1,222	61	347	0.48	89	<10	158
145	MB1028	Tsagaan Chuluut	49°04′47″	104°04′23″	γδ2P2-T1s	andesite with strong silicification	<1	13	<0.2	23	0.5	6.58	97	6.8	<2	0.04	<0.5	<1	330	3	0.25	1.98	0.01	26	3	0.22	3	186	65	91	0.03	9	<10	7
146	MB1029	Tsagaan Chuluut	49°03′33″	104°03′00″	T3-J1mg	coarse tuff with silicification	<1	5	<0.2	41	<0.5	6.66	126	3.2	<2	0.20	<0.5	<1	433	8	1.37	1.10	<0.01	29	<1	0.50	7	2,485	47	1,323	0.59	112	<10	11
147	MB1030	Tsagaan Chuluut	49°03′34″	104°02′45″	T3-J1mg	strongly silicified rock with andesite	<1	13	<0.2	43	<0.5	0.47	131	<0.5	<2	0.04	<0.5	<1	565	6	2.84	0.16	<0.01	33	<1	0.07	7	77	7	31	0.25	21	<10	6
148	MB1031	Tsagaan Chuluut	49°03′34″	104°02′45″	T3-J1mg	strongly silicified rock with andesite	<1	5	<0.2	45	<0.5	8.06	74	9.9	<2	0.30	<0.5	<1	162	6	0.37	1.82	<0.01	23	2	0.92	4	1,545	60	727	0.19	80	<10	4
149	MB1033	Tsagaan Chuluut	49°04′17″	104°04′51″	γδ2P2-T1s	aplite with silicification	<1	7	<0.2	29	<0.5	7.43	840	16.3	<2	0.50	<0.5	<1	142	3	1.28	1.99	0.12	217	<1	3.55	5	403	44	138	0.19	5	<10	23
150	MB1034	Tsagaan Chuluut	49°04′17″	104°04′56″	δ1P2-T1s	granite	1	3	3.8	140	<0.5	7.40	692	13.1	<2	1.35	<0.5	4	169	15	2.48	2.19	0.55	591	<1	2.69	8	682	47	276	0.31	46	<10	62
151	MB1035	Tsagaan Chuluut	49°04′04″	104°03′58″	γδ2P2-T1s	aplite with epidotization	<1	11	<0.2	126	<0.5	6.53	98	1.7	<2	0.13	<0.5	<1	232	<1	0.48	1.54	<0.01	17	2	0.59	4	1,407	53	649	0.47	103	<10	7
152	MB1036	Tsagaan Chuluut	49°03′38″	104°03′28″	T3-J1mg	lapilli tuff silicified	1	5	<0.2	47	<0.5	2.65	478	<0.5	2	0.08	<0.5	<1	818	34	4.88	0.50	<0.01	75	<1	0.13	11	1,071	26	378	0.45	59	<10	11
153	MB1037	Tsagaan Chuluut	49°03′45″	104°03′11″	T3-J1mg	strongly silicified rock with andesite	2	<1	<0.2	52	<0.5	0.11	1,700	0.6	<2	0.09	<0.5	<1	853	<1	0.79	0.08	<0.01	40	<1	0.04	9	35	<2	8	0.68	3	<10	6
154	MB1038	Tsagaan Chuluut	49°03′58″	104°04′15″	γδ2P2-T1s	syenite with biotite	1	<1	10.9	54	<0.5	7.78	640	11.9	<2	2.44	0.5	9	162	6	4.16	1.91	1.11	843	<1	2.46	9	1,022	42	465	0.49	92	<10	70
155	MC 1034	Tsagaan Chuluut	49°02′15″	104°04′09″	γδ2P2-T1s	silicified granite porphyry with chlorite, epidote, sericite and pyrite dissemination	<1	16	0.7	54	0.7	7.36	73	3.1	<2	0.56	<0.5	<1	124	12	2.37	0.88	0.02	32	1	0.41	3	2,903	84	750	0.07	128	<10	7
156	MC 1035	Tsagaan Chuluut	49°02′21″	104°04′09″	γδ2P2-T1s	silicified granite porphyry with chlorite, epidote, sericite and pyrite dissemination	<1	7	7.2	22	0.8	7.99	1,094	0.9	<2	0.04	<0.5	<1	117	10	0.23	0.10	<0.01	14	4	0.10	6	451	93	520	0.09	55	<10	5
157	MC 1036	Tsagaan Chuluut	49°02′29″	104°03′56″	γδ2P2-T1s	brecciated granite porphyry with sericite and silicification	<1	1	<0.2	101	<0.5	6.58	404	6.5	<2	0.18	<0.5	1	146	36	4.35	0.32	0.04	51	4	0.18	6	1,437	70	744	0.35	92	<10	9
158	MC1037	Tsagaan Chuluut	49°02′33″	104°03′38″	γδ2P2-T1s	granite porphyry with sericite and silicification	2	22	8.6	67	0.7	0.21	790	0.9	<2	0.12	<0.5	1	372	23	0.99	0.08	<0.01	117	14	0.04	12	369	4	19	0.04	5	<10	10
159	MC1038	Tsagaan Chuluut	49°02′31″	104°02′43″	T3-J1mg	basaltic to andesitic tuff	<1	<1	13.6	79	<0.5	7.95	536	11.4	<2	2.59	<0.5	8	103	18	4.11	0.60	1.47	883	<1	1.70	19	1,122	59	547	0.44	103	<10	86
160	MC1040	Tsagaan Chuluut	49°02′25″	104°02′21″	T3-J1mg	andesitic tuff	<1	21	8.7	<10	0.7	1.28	283	1.1	<2	0.16	<0.5	1	328	11	1.01	0.17	0.06	80	4	0.15	10	253	21	119	0.04	13	<10	9

Ser. No.	Sample No.	Location (Area)	Coordination N	Coordination E	Geogical Unit	Description	Au (ppb)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
161	MC1041	Tsagaan Chuluut	49°02′16″	104°01′03″	T3-J1mg	andesite porphyry with chlorite and epidote	1	1	17.5	107	<0.5	7.61	562	14.9	2	2.80	<0.5	20	118	33	4.48	0.85	1.85	825	<1	1.47	31	2,129	86	615	0.52	109	<10	91
162	MC1042	Tsagaan Chuluut	49°02′22″	104°00′25″	γδ2P2-T1s	granite with chlorite	<1	<1	10.6	58	<0.5	7.37	602	15.5	<2	1.98	<0.5	12	147	62	3.44	1.02	1.07	545	<1	1.31	17	1,096	68	527	0.33	76	<10	69
163	MC1044	Tsagaan Chuluut	49°02′31″	103°59′37″	T3-J1mg	basalt weakly altered	<1	<1	4.3	34	<0.5	8.16	1,143	14.4	2	2.50	0.8	11	115	18	4.86	1.14	1.47	716	<1	1.69	24	2,450	70	1,317	0.63	133	<10	93
164	MC1046	Tsagaan Chuluut	49°03′12″	104°01′39″	λπT1—J1	granite porphyry with sericite and silicification	<1	19	7.6	26	1.4	6.82	75	0.8	<2	0.11	<0.5	<1	202	9	1.35	0.86	0.01	51	59	0.39	7	1,309	87	477	0.05	48	<10	4
165	MC1047	Tsagaan Chuluut	49°03′09″	104°01′56″	λπT1—J1	granodiorite silicified and sericitized	1	13	7.1	58	0.6	9.22	60	1.3	<2	0.06	<0.5	<1	190	4	0.14	1.00	<0.01	39	8	0.51	5	669	190	535	0.03	36	<10	6
166	MC1048	Tsagaan Chuluut	49°02′50″	104°02′21″	λπT1—J1	granite silicified and sericitized	<1	27	6.4	58	1.4	5.47	80	4.3	<2	0.06	<0.5	<1	190	5	0.93	0.68	0.01	67	8	0.30	9	549	80	190	0.07	13	<10	5
167	MC1049	Tsagaan Chuluut	49°02′52″	104°01′59″	T3-J1mg	basalt with chlorite and epidote	1	21	10.8	60	<0.5	7.59	560	13.2	2	2.48	<0.5	25	126	21	5.04	0.24	1.68	1,191	<1	1.86	33	1,337	59	590	0.45	117	<10	139
168	MC1050	Tsagaan Chuluut	49°02′53″	104°01′37″	λπT1—J1	granite strongly silicified with sericite	1	11	1.2	<10	0.5	0.40	875	<0.5	<2	0.04	<0.5	1	268	15	0.51	0.10	<0.01	77	6	0.04	11	195	9	63	0.13	8	<10	7
169	MC1053	Tsagaan Chuluut	49°02′55″	104°00′20″	λπT1—J1	myronitic granite strongly silicified with sericite	<1	30	2.8	53	1.2	6.85	103	1.8	<2	0.08	<0.5	1	142	9	1.41	0.67	<0.01	34	4	0.32	6	1,389	128	698	0.05	29	<10	6
170	MC1056	Tsagaan Chuluut	49°03′12″	104°00′14″	T3-J1mg	fine grained granite moderately alterated with silicification and sericite	1	8	4.9	49	<0.5	4.53	166	2.6	<2	0.12	<0.5	<1	189	4	0.48	0.47	0.01	47	3	0.28	5	1,134	47	478	0.15	72	<10	6
171	MC1057	Tsagaan Chuluut	49°03′13″	104°00′33″	T3-J1mg	andesite porphyritic tuff weakly altered	1	5	1.1	25	<0.5	7.25	655	17.0	<2	1.28	<0.5	12	197	21	3.37	1.04	1.06	623	<1	1.72	26	1,233	60	327	0.36	66	<10	80
172	MC1058	Tsagaan Chuluut	49°03′10″	104°00′49″	λπT1—J1	fine grained granite moderately alterated with silicification and sericite	<1	8	2.7	26	<0.5	0.38	49	2.6	<2	0.08	<0.5	<1	324	11	1.15	0.10	0.03	78	2	0.08	11	170	16	21	0.08	8	<10	12
173	MC1059	Tsagaan Chuluut	49°03′10″	104°01′02″	λπT1—J1	fine grained granite moderately alterated with silicification and sericite	<1	1	4.3	528	0.8	6.46	111	1.4	<2	0.07	<0.5	<1	208	4	0.36	0.73	<0.01	68	7	0.32	7	769	77	363	0.06	34	<10	4
174	MC1060	Tsagaan Chuluut	49°02′11″	104°01′14″	λπT1—J1	syenitic diorite with chlorite, epidote and K-alteration	1	1	11.6	83	<0.5	7.39	562	13.8	<2	2.36	<0.5	10	147	46	3.10	0.86	1.01	617	<1	1.38	15	921	70	627	0.23	70	<10	59
175	MC1063	Tsagaan Chuluut	49°04′16″	104°00′59″	T3-J1mg	andesite porphyry weakly silicified with sericite	<1	14	<0.2	74	<0.5	6.37	89	2.9	<2	0.13	<0.5	<1	257	6	1.43	0.65	<0.01	168	5	0.30	19	1,800	77	798	0.23	107	<10	8
176	MC1064	Tsagaan Chuluut	49°04′22″	104°01′27″	T3-J1mg	andesitic basaltic tuff weakly silicified	<1	<1	13.6	36	<0.5	7.64	2,083	13.0	3	5.30	<0.5	22	97	12	5.80	0.97	2.49	778	<1	0.97	31	3,274	80	1,983	0.62	150	<10	101
177	MC1066	Tsagaan Chuluut	49°04′27″	104°02′30″	T3-J1mg	andesite porphyry weakly silicified with sericite	<1	10	0.4	21	<0.5	4.28	173	1.8	<2	0.08	<0.5	<1	367	5	0.77	0.43	0.01	127	<1	0.26	16	678	48	413	0.43	77	<10	11
178	MA1005	Erdenet Mine	48°59′16″	104°10′17″	λδπP2-T1e	granodiorite with silicification and iron oxide	10	16	15.9	170	5.2	8.22	893	12.3	<2	1.32	1.1	3	196	14,225	1.34	2.21	0.35	329	3	3.48	13	539	638	671	0.14	26	<10	140
179	MA1008	Erdenet Mine	48°59′26″	104°10′05″	γδ2P2s	Granodiorite in iron oxidation zone	2	5	0.5	40	1.1	8.83	606	17.3	<2	0.79	<0.5	12	85	67,776	5.01	1.67	1.59	557	10	3.28	23	2,290	159	677	0.49	127	17	258
180	MA1012	Erdenet Mine	48°59′52″	104°09′33″	γδ2P2s	Granodiorite	2	9	<0.2	50	1.9	6.96	751	12.6	<2	0.10	<0.5	<1	218	185	0.95	2.78	0.11	225	<1	2.66	14	290	126	155	0.13	11	<10	71
181	MA1014	Erdenet Mine	48°59′25″	104°09′56″	γδ2P2s	Granodiorite with azurite and malachite	9	392	163.0	19	10.1	6.12	275	12.7	<2	0.29	<0.5	22	171	16,920	1.38	1.66	0.26	127	188	1.16	9	2,606	189	126	0.06	39	55	686
182	MB1004	Erdenet Mine	49°00′09″	104°09′01″	λδπP2-T1e	Float of granodiorite with biotite	<1	6	9.3	11	<0.5	8.11	888	12.5	<2	1.47	<0.5	1	127	2,728	2.12	1.50	0.49	362	<1	2.78	10	806	44	747	0.20	42	<10	70
183	MB1009	Erdenet Mine	48°57′49″	104°12′03″	λδπP2-T1e	leucocratic and pegmatitic granite	<1	3	3.4	50	<0.5	7.21	587	14.8	<2	0.59	<0.5	<1	138	169	0.96	2.11	0.07	49	1	2.18	3	210	42	432	0.14	20	<10	27
184	MB1010	Erdenet Mine	48°58′23″	104°12′28″	λδπP2-T1e	granitoic aplite	<1	9	0.3	34	<0.5	6.73	875	18.3	<2	0.41	<0.5	<1	126	9	1.49	2.04	0.09	553	<1	2.44	4	398	46	131	0.14	7	<10	52
185	MB1011	Erdenet Mine	48°58′37″	104°12′26″	P1hn1	porphyritic andesite	1	8	<0.2	14	<0.5	7.26	812	21.8	<2	1.17	<0.5	<1	174	9	2.82	1.93	0.20	779	<1	2.56	6	900	55	209	0.45	15	<10	71
186	MC1012	Erdenet Mine	49°00′42″	104°08′13″	γδ2P2s	granodiorite weakly altered with chlorite, epidote and K-alteration	32	7	15.9	65	7.7	5.10	693	11.5	<2	0.07	<0.5	5	192	608	1.80	1.23	0.29	142	101	0.09	14	427	58	34	0.14	79	<10	55
187	MC1014	Erdenet Mine	49°00′51″	104°09′02″	γδ2P2s	granodiorite porphyry	<1	<1	12.8	89	<0.5	8.34	583	11.3	3	4.22	<0.5	17	113	123	4.70	0.55	1.73	832	<1	1.79	18	1,447	60	815	0.49	119	<10	80
188	MC 1015	Erdenet Mine	48°58′21″	104°11′10″	γδ2P2s	silicified granite porphyry with chlorite, epidote and pyrite dissemination	<1	17	25.9	164	<0.5	7.35	788	11.3	<2	1.77	<0.5	4	105	142	3.54	0.97	0.83	1,020	<1	1.54	15	753	142	493	0.26	64	14	110
189	MC 1021	Erdenet Mine	48°53′07″	104°11′17″	λδπP2-T1e	silicified granite porphyry with chlorite, epidote and pyrite dissemination	<1	12	4.7	40	0.7	6.95	512	15.5	<2	0.45	<0.5	<1	96	40	1.05	1.31	0.09	88	1	1.37	7	238	64	306	0.20	27	<10	59
190	MC 1027	Erdenet Mine	48°57′55″	104°11′39″	λδπP2-T1e	silicified granite porphyry with chlorite, epidote and pyrite dissemination	<1	8	11.4	33	0.7	7.87	861	8.3	<2	0.84	<0.5	<1	60	86	0.72	0.80	0.14	129	1	2.20	8	263	84	619	0.14	20	<10	23
191	MC 1029	Erdenet Mine	48°57′50″	104°11′39″	λδπP2-T1e	silicified granite porphyry with chlorite, epidote and pyrite dissemination	<1	73	4.0	48	2.3	7.81	981	7.0	<2	0.06	<0.5	<1	79	47	1.98	1.43	0.37	82	9	0.15	4	351	66	55	0.10	52	<10	13
192	MA1116	Danbatseren	48°52′16″	103°46′48″	δ1T1s	granodiorite in trench	<1	<1	10.3	27	<0.5	8.13	748	15.5	<2	2.00	<0.5	8	136	43	3.30	2.24	1.19	561	<1	2.83	22	985	56	492	0.34	76	<10	76
193	MA1118	Danbatseren	48°51′45″	103°47′13″	λJ1	strongly silicified rock (secondary quartzite?)	1	19	<0.2	86	<0.5	0.14	47	<0.5	<2	0.04	<0.5	<1	360	39	3.77	0.10	<0.01	58	<1	0.06	8	246	27	36	0.11	31	<10	13
194	MA1119	Danbatseren	48°51′54″	103°47′33″	γδ2T1s	granodiorite	<1	<1	4.7	47	<0.5	8.33	851	15.2	2	2.12	<0.5	7	163	103	3.38	2.46	1.25	383	<1	2.97	23	1,051	50	553	0.35	77	<10	43
195	MB1103	Danbatseren	48°53′03″	103°47′46″	αβT2-J1	andesite with plagioclase phenocryst	<1	13	11.1	84	<0.5	7.81	829	16.5	<2	1.23	<0.5	9	153	20	3.09	1.27	0.42	603	<1	2.40	24	1,664	66	400	0.38	68	<10	58
196	MC1145	Danbatseren	49°51′56″	103°46′15″	αλP1-2	andesite weakly silicified	<1	3	2.7	60	<0.5	6.91	73	7.6	<2	0.45	<0.5	1	170	13	1.20	0.17	0.15	641	<1	4.00	21	675	48	147	0.20	10	<10	48
197	MA1128	Undrakh	48°42′03″	102°45′45″	γδ1PZ1	granite with moderate silicification and weak iron oxidation	<1	1	1.0	36	0.5	5.75	975	12.2	<2	0.26	<0.5	2	293	189	0.31	2.46	0.04	43	3	1.17	6	387	44	129	0.03	3	<10	15
198	MA1131	Undrakh	48°41′44″	102°45′55″	γδ1PZ1	fine grained granite (dyke)	<1	<1	0.7	41	0.6	5.89	217	14.2	<2	0.28	<0.5	<1	203	54	0.30	2.67	<0.01	38	<1	1.40	3	137	51	37	0.03	<1	<10	8
199	MA1133	Undrakh	48°52′40″	102°46′17″	γδ1PZ1	diorite	<1	12	9.1	70	<0.5	7.98	667	12.8	<2	1.58	<0.5	2	141	15	1.50	1.28	0.45	206	<1	2.81	12	473	38	380	0.14	18	<10	24
200	MC1171	Undrakh	48°42′43″	102°46′51″	γ2D2	granite moderately alterated with silicification	<1	4	0.7	64	<0.5	6.32	1,148	10.9	<2	0.51	<0.5	1	109	4	0.52	2.43	0.04	233	2	1.36	4	995	105	200	0.05	4	<10	30

Ser. No.	Sample No.	Location (Area)	Coordination		Geogical Unit	Description	Au (ppb)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
			N	E																													
201	MC1174	Undrakh	48°42'36"	102°47'02"	γ2D2	granite weakly silicified	<1	3	11.6	72	<0.2	6.54	673	12.3	<2	0.66	1.2	4	208	9	1.34	1.93	0.15	13,449	3	2.13	4	701	61	193	0.11	13	11	109
202	MC1175	Undrakh	48°42'31"	102°46'53"	γ2PZ1	granite weakly silicified	<1	9	2.3	55	0.5	8.32	2,448	11.6	<2	0.56	<0.5	<1	144	6	1.40	2.19	0.11	496	<1	2.73	4	553	63	197	0.16	5	<10	33
203	MA1120	Tsookher mert	48°46'13"	103°16'38"	γξ3P2-T1s	granodiorite with volcanic rock xenolith	1	<1	4.6	23	<0.5	7.96	757	10.3	<2	2.06	<0.5	4	158	21	2.39	2.17	0.81	521	<1	2.46	17	1,108	49	432	0.22	54	<10	67
204	MA1125	Tsookher mert	48°48'47"	103°15'07"	γξ3P2-T1s	granodiorite plagioclase phenocryst	1	34	6.1	32	<0.5	7.73	869	16.2	<2	1.80	<0.5	6	170	30	3.09	2.44	0.96	864	<1	2.43	19	1,022	52	428	0.29	64	<10	57
205	MA1126	Tsookher mert	48°48'06"	103°15'17"	γξ3P2-T1s	granodiorite with hornblende	<1	<1	10.0	27	<0.5	7.94	808	14.7	<2	2.26	<0.5	6	206	11	3.09	2.32	0.86	642	<1	2.52	13	948	46	444	0.34	66	<10	47
206	MB1113	Tsookher mert	48°45'20"	103°15'24"	δ1P2-T1s	syenite to granite with hornblende and biotite	<1	1	9.6	78	<0.5	6.78	817	10.8	<2	1.37	<0.5	6	152	6	1.89	1.39	0.59	472	1	1.41	14	525	60	310	0.17	36	<10	44
207	MB1115	Tsookher mert	48°45'31"	103°14'49"	γξ3P2-T1s	syenite with epidote network	<1	2	5.1	87	0.6	5.79	617	13.8	<2	0.52	<0.5	2	109	11	1.12	1.57	0.21	312	<1	1.01	7	250	56	170	0.11	14	<10	37
208	MB 1117	Tsookher mert	48°46'22"	103°14'32"	γξ3P2-T1s	syenite with biotite	<1	13	11.3	72	<0.5	7.94	723	13.5	<2	3.09	<0.5	10	104	28	4.37	0.99	1.28	612	<1	1.62	15	1,363	63	550	0.33	99	<10	64
209	MB 1120	Tsookher mert	48°45'47"	103°15'10"	γ3P2-T1s	syenite with biotite	1	9	5.3	48	<0.5	6.84	830	13.4	<2	1.02	<0.5	2	94	5	1.52	1.37	0.34	257	<1	1.45	6	417	60	239	0.14	23	<10	29
210	MB 1122	Tsookher mert	48°45'48"	103°15'15"	γ3P2-T1s	syenite with quartz veinlets	1	2	4.7	54	0.8	1.66	18	3.1	<2	0.19	<0.5	<1	149	6	0.58	0.14	0.01	142	<1	0.51	9	76	25	36	0.03	7	<10	13
211	MB 1125	Tsookher mert	48°45'53"	103°15'24"	γ3P2-T1s	aplite with silicification and sericitization	<1	<1	2.6	22	0.8	6.09	728	9.8	<2	0.12	<0.5	<1	83	3	0.80	1.40	0.17	192	2	0.72	4	148	167	62	0.14	19	<10	49
212	MB 1128	Tsookher mert	48°45'44"	103°15'52"	γξ3P2-T1s	syenite with biotite	<1	<1	6.0	40	<0.5	6.09	584	12.6	<2	0.67	<0.5	2	210	3	1.16	1.23	0.29	213	<1	1.12	8	390	49	179	0.10	17	<10	37
213	MB 1130	Tsookher mert	48°45'32"	103°15'42"	γξ3P2-T1s	granodiorite with biotite and hornblende	1	3	10.8	35	<0.5	6.78	738	10.8	<2	1.88	<0.5	8	150	13	2.30	0.99	0.86	485	<1	1.28	20	667	73	364	0.18	47	<10	138
214	MC1152	Tsookher mert	48°44'59"	103°17'51"	γξ3P2-T1s	granodiorite weakly altered with chlorite, K-alteration and silicification	<1	<1	6.1	47	<0.5	7.33	596	9.6	<2	1.72	<0.5	8	115	4	2.15	1.42	0.59	363	<1	2.29	17	762	48	413	0.24	54	<10	29
215	MC1161	Tsookher mert	48°45'16"	103°16'13"	γξ3P2-T1s	basalt moderately alteration with silicification	<1	6	4.9	72	<0.5	6.18	1,154	9.9	<2	0.80	<0.5	3	109	8	1.10	2.67	0.19	229	<1	1.18	8	264	40	274	0.10	16	<10	22
216	MC1164	Tsookher mert	48°45'01"	103°16'06"	γ3P2-T1s	quartz vein with malachite, azurite, hematite, iron oxides	<1	6	13.1	64	<0.5	2.92	438	4.8	<2	0.09	0.6	1	173	9	0.54	1.12	0.04	392	1	0.57	21	82	24	41	0.04	7	<10	17
217	MC1166	Tsookher mert	48°45'14"	103°16'27"	γ3P2-T1s	granite with weakly altered with epidote, chlorite, silicification and K-alteration	<1	<1	<0.2	64	<0.5	6.36	867	10.7	<2	0.27	<0.5	2	108	3	0.90	2.25	0.09	133	<1	1.46	4	193	43	140	0.11	10	<10	16