

## Appendix B - Sample Descriptions

Sample No. <sup>1</sup>	Distance <sup>2</sup> (km)	General Location	Analysis	Description
RUT-1	-2.50	Ruttan mine area	XRD+Metals	Intermediate to felsic ash tuff/volcaniclastic, 30% pyrite
RUT-2	-0.50	Ruttan mine area	XRD	Intermediate ash tuff, moderate chlorite alteration; within lapilli tuff/agglomerate, blocky juvenile and probably exotic fragments, crystal ash matrix
RUT-3	-0.20	Ruttan mine area	XRD	Intermediate ash tuff, moderate to strong chlorite alteration, possible staurolite
RUT-4	-0.10	Ruttan mine area	XRD	Intermediate ash tuff, moderate to strong chlorite alteration, possible staurolite
RUT-5	0.25	Ruttan mine area	XRD	Well bedded intermediate crystal ash tuff/phyllite
RUT-6	0.65	Ruttan mine area	XRD	
RPE91-6-3065	0.70	Ruttan mine area	XRD+Metals	Sericite-pyrite schist, minor garnet, cordierite, 3-7% pyrite, chalcopyrite, pyrrhotite,
RUT-7	1.10	Magazine #1 shed	XRD	Intermediate ash tuff with slight chlorite alteration; within interbedded crystal ash tuff and
RUT-8	1.25	Magazine #4 shed	XRD	Intermediate ash and crystal ash tuff, 1% pyrite, slight silicification along fractures
RPE89-3-1630	1.50	Ruttan mine area	XRD+Metals	Intermediate ash tuff, 2-5% pyrite and pyrrhotite
RUT-9	1.55	NW 300m from Mag. #4	XRD	Intermediate ash and crystal ash tuff, 1% pyrite, slight silicification along fractures
RUT-10	1.75	NW 550m from Mag. #4	XRD	Intermediate ash and crystal ash tuff, 1% pyrite, slight silicification along fractures
RUT-11	1.90	East of Ruttan mine area	XRD	Well bedded intermediate volcaniclastic ?crystal ash tuff, slight silicification along fractures
RUT-12	2.22	East of Ruttan mine area	XRD	Intermediate volcaniclastic/schist, slight silicification
RUT-13	2.50	East of Ruttan mine area	XRD	Intermediate ash tuff/volcaniclastic/schist, slight epidote alteration and silicification
RUT-14	2.80	East of Ruttan mine area	XRD	
RUT-15	2.95	East of Ruttan mine area	XRD+Metals	
RUT-16	3.10	East of Ruttan mine area	XRD+Metals	Siliceous intermediate ash tuff/exhalite, 5% pyrite
RUT-17	3.10	East of Ruttan mine area	XRD	Intermediate ash crystal tuff
RUT78-20	29.30	East of Rat River	XRD	Intermediate ash tuff/volcaniclastic/schist, with chlorite and tremolite-actinolite
RUT88-117	53.20	East of Rat River	XRD+Metals	Intermediate fine-grained volcaniclastic/graywacke/phyllite
RUT89-124	55.90	East of Rat River	XRD	Intermediate ash tuff/schist, trace epidote
RUT89-65	55.90	East of Rat River	XRD	Intermediate fine-grained volcaniclastic/graywacke/phyllite
RUT89-90	55.90	East of Rat River	XRD+Metals	Intermediate schist with 15% pyrite and pyrrhotite, 1-3% garnet
RUT79-107	56.40	East of Rat River	XRD+Metals	Semi-massive sulfide, 30% pyrrhotite+pyrite, 2% chalcopyrite in intermediate volcanic, moderate chlorite alteration, possible minor cordierite
RUT79-204	56.40	East of Rat River	XRD	Well layered intermediate schist/gneiss
RUT79-233	56.40	East of Rat River	XRD	Intermediate ash tuff/volcaniclastic/schist, with chlorite and tremolite -actinolite
RUT86-103	57.20	East of Rat River	XRD+Metals	Semi-massive sulfide, 25% pyrit+pyrhotite and minor chalcopyrite, within intermediate to
RUT86-121	57.20	East of Rat River	XRD	Intermediate ash tuff/metapelite
RUT86-48	57.20	East of Rat River	XRD	Intermediate ash tuff/metapelite
RUT85-105	59.30	East of Rat River	XRD	
RUT85-27	59.30	East of Rat River	XRD	Intermediate ash tuff/metapelite
RUT85-83	59.30	East of Rat River	XRD+Metals	Intermediate ash tuff/metapelite, 5% pyrrhotite and pyrite
RUT87-110	69.30	East of Rat River	XRD+Metals	Massive sulfide, with 50% pyrrhotite+pyrite and trace chalcopyrite, within intermediate ash
RUT87-140	69.30	East of Rat River	XRD	Well layered intermediate ash tuff, trace pyrite along fractures
RUT87-60	69.30	East of Rat River	XRD	Intermediate ash tuff/schist, trace epidote
RUT80-68	75.50	East of Rat River	XRD+Metals	Semi-massive sulfide, 25% pyrrhotite+pyrite, trace chalcopyrite and sphalerite in intermediate schist with moderate chlorite alteration
RUT4-235	-2.80	Dar1 Zone Area	XRD+Metals	Semi-massive sulfide, predominantly pyrrhotite and pyrite, chlorite, muscovite, ?tremolite-
RUT4-35	-2.80	Dar1 Zone Area	XRD	Intermediate ash tuff, slight silicification along fractures

RUT15-160	-2.49	Dar1 Zone Area	XRD+Metals	Intermediate ash tuff/volcaniclastic, 5% pyrite and pyrrhotite, 1+% magnetite, with trace
RUT15-310	-2.49	Dar1 Zone Area	XRD	Intermediate ash tuff/volcaniclastic
RUT6-302	-2.44	Dar1 Zone Area	XRD+Metals	Semi-massive sulfide, 30% pyrrhotite and pyrite, ?5% garnet
RUT6-435	-2.44	Dar1 Zone Area	XRD	Intermediate ash tuff, probably moderate sodium depletion, schistose, strong lineation
RUT6-60	-2.44	Dar1 Zone Area	XRD	Intermediate ash tuff, trace pyrite along fractures
RUT8-200	-1.78	Dar1-Dar2	XRD+Metals	
RUT8-320	-1.78	Dar1-Dar2	XRD	
RUT8-40	-1.78	Dar1-Dar2	XRD	Well layered intermediate ash tuff/volcaniclastic
RUT11-185	-1.00	Dar1-Dar2	XRD+Metals	Sulfidic intermediate ash tuff, 20% pyrite and pyrrhotite, 3% garnet, possible hornblende
RUT11-360	-1.00	Dar1-Dar2	XRD	Well laminated intermediate ash tuff/volcaniclastic
RUT11-70	-1.00	Dar1-Dar2	XRD	
RUT12-190	-0.73	Dar1-Dar2	XRD+Metals	Garnet chlorite schist with 2-5% pyrite and pyrrhotite
RUT12-350	-0.73	Dar1-Dar2	XRD	Intermediate ash tuff/volcaniclastic, with tremolite-actinolite
RUT12-70	-0.73	Dar1-Dar2	XRD	Intermediate ash tuff/volcaniclastic, moderate chlorite alteration, with tremolite-actinolite
RUT13-138	-0.49	Dar1-Dar2	XRD+Metals	Intermediate sulfidic ash tuff, 15% pyrite and pyrrhotite, with amphibole (tremolite-actinolite)
RUT13-35	-0.49	Dar1-Dar2	XRD	Well bedded intermediate ash tuff/volcaniclastic
RUT46-520	-0.34	Dar2 Zone Area	XRD	Intermediate ash crystal tuff, moderate sodium depletion, incipient garnet, schistose
RUT46-610	-0.34	Dar2 Zone Area	XRD+Metals	Semi-massive sulfide, 35% pyrrhotite, pyrite, minor chalcopyrite, sphalerite, with garnet,
RUT46-685	-0.34	Dar2 Zone Area	XRD	Well layered intermediate ash tuff, slight chlorite alteration, with tremolite-actinolite, trace
RUT22-150	-0.12	Dar2 Zone Area	XRD	Intermediate-felsic ash crystal tuff, trace pyrite
RUT22-380	-0.12	Dar2 Zone Area	XRD+Metals	semi-massive sulfide: 20-40% pyrite-pyrrhotite-chalcopyrite-sphalerite in altered
RUT22-700	-0.12	Dar2 Zone Area	XRD	Intermediate-felsic ash crystal tuff/volcaniclastic, well bedded
RUT45-55	-0.12	Dar2 Zone Area	XRD	Intermediate ash tuff, trace pyrite
RUT47-120	-0.12	Dar2 Zone Area	XRD	Intermediate ash tuff, well laminated, slight-moderate chlorite alteration, with tremolite-
RUT20-15	0.07	Dar2 Zone Area	XRD	Felsic-intermediate crystal ash tuff
RUT20-240	0.07	Dar2 Zone Area	XRD+Metals	Sulfide-rich altered intermediate ash tuff
RUT20-450	0.07	Dar2 Zone Area	XRD	Felsic-intermediate crystal ash tuff, 1% pyrite, trace garnet
RUT44-35	0.07	Dar2 Zone Area	XRD	Well layered intermediate ash tuff, trace epidote along fractures
RUT23-420	0.22	Dar2 Zone Area	XRD+Metals	Altered intermediate tuff with 2-5% pyrite, pyrrhotite, minor to trace chalcopyrite, sphalerite
RUT23-670	0.22	Dar2 Zone Area	XRD	Intermediate to felsic ash crustal tuff, trace pyrite
RUT49-45	0.22	Dar2 Zone Area	XRD	Well layered intermediate ash tuff, trace epidote along fractures
RUT26-120	2.07	Dar3 Zone Area	XRD	Altered intermediate schist/phyllite with garnet, muscovite, possible sillimanite, 1% pyrite
RUT26-187	2.07	Dar3 Zone Area	XRD+Metals	Siliceous pyritic felsic ash tuff/exhalite with 15% pyrite and pyrrhotite and 3% magnetite
RUT26-460	2.07	Dar3 Zone Area	XRD	Felsic ash tuff/volcaniclastic, 0.2% pyrite
RUT28-260	2.29	Dar3 Zone Area	XRD+Metals	Intermediate to felsic ash tuff/volcaniclastic with 10% pyrite and pyrrhotite, 5% fine-grained
RUT28-450	2.29	Dar3 Zone Area	XRD	Intermediate to felsic ash tuff/volcaniclastic
RUT28-50	2.29	Dar3 Zone Area	XRD	Altered intermediate tuff/volcaniclastic, with possible trace garnet, trace staurolite, tremolite-
RUT32-160	3.46	Dar3 Zone Area	XRD	
RUT32-220	3.46	Dar3-Dar4	XRD+Metals	Intermediate to felsic ash tuff/volcaniclastic with 10% pyrite and pyrrhotite, 5% fine-grained
RUT32-380	3.46	Dar3-Dar4	XRD	
RUT33-110	4.66	Dar4 Zone Area	XRD	Well-bedded intermediate ash tuff, 0.3% pyrite
RUT33-135	4.66	Dar4 Zone Area	XRD+Metals	Altered intermediate ash tuff with 2-5% pyrite, pyrrhotite, chalcopyrite, trace sphalerite;
RUT33-350	4.66	Dar4 Zone Area	XRD	Well bedded intermediate ash tuff, possible incipient garnet, possible iron carbonate

<sup>1</sup>RUT1, etc from outcrop, the remainder from drillholes, with name reflecting DDH number and interval

<sup>2</sup>along strike from Ruttan mine shaft or from central DAR2 zone