

| <u>From</u> <u>To</u> | <u>Rock Type</u> | <u>Texture and Structure</u> | <u>Angle to</u> <u>Core Axis</u> | <u>Alteration</u> | <u>Sulphides</u> | <u>Remarks</u> |
|--------------------------|--|---|-------------------------------------|---|------------------|---|
| 0 to 12.2 | Overburden | | | | | |
| 12.2 to 26 | Amygdaloidal feldspar andesite porphyry flow | <ul style="list-style-type: none"> Colour - purple Grain Size - aphan. - 15% amygdules up to 2cm long - amygdules filled with creamy border phase and gray crystalline core - 15% feldspar laths up to 8mm long - some amygdules have cavities in core - occasional larger gas cavity rimmed with secondary minerals (<4cm) - fragments of andesite in soft weakly consolidated matrix - fragments up to 35cm with sharp contacts - gradational contact with underlying flow breccia | | <ul style="list-style-type: none"> - feldspars have speckled appearance and are apple green colour - groundmass unaltered | barren | BCD 3201 14.0-17.0m. - non magnetic |
| 26 to 42.0 | Amygdaloidal andesite | <ul style="list-style-type: none"> Colour - purple Grain Size - aphan. - 10% amygdules rimmed with green mineral and filled with white mineral; oval to irregular shapes <1cm. - flow top breccia from 26 to 35.4m. - 7% euhedral feldspar laths | | <ul style="list-style-type: none"> - flecks of bright green mineral - altered feldspars? | barren | - non magnetic |
| 42.0 to 42.7 | Fracture Zone | <ul style="list-style-type: none"> Colour - red - weakly consolidated altered volcanic and 10cm zone of red mud | | | | |

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|--------------------|--|--|-------------------------------|--|------------------|--|
| 42.7 to 51.6 | Amygda- loidal Andesite | - same as 26 to 42.0m. - basal flow breccia with sharp contact | 27° | | | |
| 51.6 to 55.6 | Feldspar Andesite Dike | Colour - gray Grain Size - aphan. - top contact sharp with chill zone (\ll 2mm) - a 5cm band of volcanic conglom- erate at contact with fragments of underlying flow and other fragments - 7% square subhedral to euhedral green-white feldspar phenocrysts (\ll 4mm) - 5% gray euhedral laths of feldspar(?) - small elongate amygdules (\ll 5mm) | | - feldspar phenocrysts may be altered - light green alteration on fractures | barren | - non-magnetic - the volcanic conglomerate has no bedding or sorting and appears similar to "pebble dikes" or "lapilli-tuff dikes" lower in the hole |
| 55.6 to 65.6 | Feldspar Andesite Porphyry Flow | Colour - red Grain Size - aphan. - top contact sharp - partly brecciated - 1 to 5% round amygdules filled with gray and white secondary minerals (silica) - 15% euhedral feldspar laths up to 3mm long | 30° | - trace carbonate veinlets - approximately 1/3 of feldspars altered to soft, light greenish- white mineral | barren | |
| 65.6 to 71.7 | Feldspar Andesite Porphyry Flow | Colour - gray Grain Size - aphan. - same as above unit but no breccia | | | barren | |

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|-----------------------|---------------------------------|--|---------------------------|---|------------------|--|
| 71.7 to 73.2 | Trachy-andesite dike | Colour - purple Grain Size - aphan. - feldspar laths up to 2cm - trachytic texture weakly developed - contacts poorly preserved | | | barren | - Core badly broken from 72.1 to 74.5m. |
| 73.2 to 82.6 | Feldspar Andesite Porphyry Flow | Colour - gray Grain Size - aphan. - same as 65.6 to 71.7m. | | | barren | 80.3-80.8 tracyandesite dike - basal contact 60° to core angle |
| 82.6 to 84.6 | Feldspar Trachy-Andesite Dike | - sharp top contact - feldspar laths grade from 5mm at top contact to 2cm in core - microvesicular - same as 71.7 to 73.2m. | 40° | - alteration along contacts as thin seam of greenish-white secondary minerals | barren | |
| 84.6 to 92.5 | Feldspar Andesite Porphyry Flow | Colour - light gray Grain Size - aphan. - same as 73.2 to 82.6m - basal 1/2 metre is reddish | | | barren | - core at basal contact poorly consolidated, contact not clearly defined |
| POSSIBLE UNCONFORMITY | | | | | | |
| 92.5 to 111.7 | Biotite Quartz Dacite Flow | Colour - light gray Grain Size - aphan. - irregular upper contact - flow top breccia from 92.5 to 94.5 with unimodal composition but matrix is strongly altered to white clays - all phenocrysts <2mm - 2% black flakes of biotite - light gray amygdules filled with silica? (< 1 1/2mm) - subhedral rounded quartz eyes < 1 1/2mm - sugary groundmass - basal contact sharp | | | barren | BCD 3204 101.2-103.7 - ground or broken core from 107.9 to 112.8m |

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|--------------------|---|--|-------------------------------|--|-----------------------------------|---|
| 111.7 to 118.0 | Altered Andesite Tuff - Breccia (Dike?) | Colour - red and white Grain Size - aphan. - subangular fragments of aphanitic microvesicular andesite in softer matrix - fragments are generally monomictic but a few fragments have feldspar laths - weak chill zone? at upper contact | | - hematite is pervasive throughout matrix - 112.8 to 114.1 is bleached a white colour due to clay alteration (kaolinite?) with a gray matrix which consists of pyrite and chert | <3% pyrite in bleached section | BCD 3206 112.8 to 114.0 - alteration of andesite flow produces pseudo- breccia texture |
| 118.0 to 119.1 | Unconsolid- ated Sand and Silt | Colour - gray Grain Size - f.g. | | | barren | - caused drilling problems and was eventually cemented - possibly filling fracture or fault |
| 119.1 to 119.6 | Altered Andesite Tuff Breccia | - upper contact lost in drilling - same as 111.7 to 118.0 | | | barren | |
| 119.6 to 124.1 | Biotite Quartz Feldspar Dacite | Colour - brown-gray Grain Size - f.g. - 5% white feldspar laths (<2mm) - 3% gray subhedral quartz eyes (<1mm) - 1% black biotite (<1mm) - similar to 92.5 - 111.7m. | | | barren | - ground and broken core from 119.5 to 130.2 |
| 124.1 to 128.9 | Cave, Sand, Fragments of Quartz Dacite | | | | | - hole triconed from approxi- mately 125 to 128m preparatory to cement job - cave due to sand seam higher in hole - probably quartz dacite in hole |

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|--------------------|--|--|-------------------------------|-------------------|------------------|--|
| 128.9 to 153.9 | Biotite Quartz Dacite Flow | <ul style="list-style-type: none"> - same 119.6 to 124.1m. - gray feldspars are less abundant - from 149 to 153m reddish-gray - weak banding over basal 20cm defined by overgrowths on quartz phenocrysts (spherulites) - basalt contact sharp with 1cm chill zone | 35° 25° | | barren | BCD 3207 134.6-137.0m - banding is probably flow banding in basal glassy layer |
| 153.9 to 154.2 | Volcanic Sandstone and Andesite Breccia | <ul style="list-style-type: none"> Colour - red and gray - reddish hematite sandstone at both contacts - basal sandstone has weak graded bedding indicates tops towards top of hole - core of unit is unimodal andesite breccia which appears to be in situ - andesite fragments with scattered (<2%) feldspar phenocrysts (<1 1/2mm) - basal contact sharp and slightly irregular | 35° | | barren | - andesite breccia could be alteration feature |
| 154.2 to 154.5 | Feldspar Andesite Porphyry | <ul style="list-style-type: none"> - flow or fragment - 20% feldspar laths (<4mm) - reddish hematite at basal contact | | | barren | |

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|--------------------|-------------------------------|--|-------------------------------|-------------------|------------------|---|
| 154.4 to 157.6 | Altered Andesite Flow | Colour - gray Grain Size - aphan. - massive andesite with rare feldspar phenocrysts and micro- amygdules - andesite fractured and grades into a breccia similar to textures seen at Equity Silver Mine - breccia is unimodal with fragments from <4mm to <1mm in size - top and base of flow (1 1/2m each) less fractured - basal contact not well preserved in core | | | barren | - a pseudobreccia caused by alter- ation along fractures |
| 157.6 to 164.9 | Feldspar Andesite Flow | Colour - gray Grain Size - f.g. - minor autobreccia and purplish colour over top 1/3m - 3% amygdules - 10% feldspar laths (<2mm) - 5% altered ferromagnesian pheno- crysts - basal 1/3m reddish with some fragments | | fresh | barren | -non-magnetic BCD 3209 116.4 - 163.0 |
| 164.9 to 165.1 | Amygda- loidal Andesite | - same as 167.6 to 183.0 | | | | |

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|----------------|--------------------------------|---|---------------------------|--|------------------|--|
| 183.0 to 199.9 | Trachy-andesite Sill | Colour - purple Grain Size - f.g. - top contact sharp with alteration and small patch of lapilli-tuff dike - 5-15% feldspar laths (<5mm) - weak fluidal texture - from 193.3 to 194.9 there are fragments of underlying flow with 4mm chilled rim of trachyandesite bordering clasts | 25° | | barren | - a sill intruding along a conformable contact and picking up fragments of underlying flow |
| 199.9 to 204.0 | Feldspar Andesite | Colour - gray Grain Size - f.g. - 7% euhedral feldspar phenocrysts (2 1/2mm) - scarce amygdules - basal contact obscured by alteration and lapilli-tuff dikes 0.4m above and 2.0m below basal contact | | - basal 5m are variably altered to red and white adjacent to fractures | barren | |
| 204.0 to 208.4 | Trachy-andesite Dike | - sharp contacts | | | barren | |
| 208.4 to 215.5 | Altered Hornblende Dacite Flow | Colour - whitish-gray Grain Size - aphan. - 3% accicular hornblende phenocrysts (<1mm) - 5% glassy feldspar(?) phenocrysts (<2mm) - sections have clear fragmental texture while others are more massive | | - some gray veinlets - soft | barren | BCD 3213 210 - 213.1m BCD 3214 208.9 - 210.2 |
| 215.5 | E.O.H. | | | | | |

Conclusions

1. The DEEPEM anomaly was caused by clay-rich altered flow breccias in the Tertiary volcanic rocks and the mud seam at 42.0 to 42.7m.
2. The hole reaches the Equity Silver Mine Goosly Sequence rocks but does not intersect any significant mineralization or alteration.
3. Altered andesite flows exhibit textures which are very similar to Equity Silver Mine host rocks but alteration is weak and different.
4. The base of the hole is in the upper part of the volcanic flow division of the Equity Silver Mine.

LITHOGEOCHEMISTRY

MAJOR OXIDES

TRACE ELEMENTS

| SAMPLE NUMBER | FROM (m) | TO (m) | MAJOR OXIDES | | | | | | | | | | TRACE ELEMENTS | | | | | Rock Type | Alt | Min | Grid | ppm Sr |
|----------------------------|------------|----------|--------------------------------------|--------------------------------|-----|-----|-------------------|------------------|-----|-----|------------------|-------------------------------|----------------|--------|--------|--------|--------|-----------|-----|-----|------|--------|
| | | | SiO ₂ | Al ₂ O ₃ | CaO | MgO | Na ₂ O | K ₂ O | FeO | MnO | TiO ₂ | P ₂ O ₅ | ppm Cu | ppm Zn | ppm Pb | ppm Ag | ppm Ba | | | | | |
| 3201 | 14.0 | 17.0 | | | | | 3.81 | 3.07 | | | 0.65 1.07 | | 22 | 120 | 12 | 0.2 | 2010 | | | | | 1150 |
| Amygdaloidal feldspar | | | andesite porphyry flow - Buck Creek? | | | | | | | | | | | | | | | | | | | |
| 3203 | 66.3 | 69.4 | | | | | 3.60 | 2.73 | | | 1.17 | | 40 | 110 | 18 | 0.2 | 1220 | | | | | 1030 |
| Feldspar andesite porphyry | | | flow - Goosly Lake? | | | | | | | | | | | | | | | | | | | |
| 3204 | 101.2 | 103.7 | | | | | 0.84 | 3.46 | | | 0.13 | | 8 | 33 | 16 | 0.2 | 375 | | | | | 130 |
| Biotite quartz dacite | | | flow - Tip Top Hill?? | | | | | | | | | | | | | | | | | | | |
| 3207 | 134.6 | 137.0 | | | | | 1.18 | 3.72 | | | 0.13 | | 8 | 32 | 16 | 0.2 | 395 | | | | | 136 |
| Quartz dacite flow - | | | Tip Top Hill?? | | | | | | | | | | | | | | | | | | | |
| 3209 | 161.4 | 163.0 | | | | | 3.57 | 3.41 | | | 1.01 | | 41 | 87 | 16 | 0.2 | 1170 | | | | | 940 |
| Feldspar andesite flow | | | | | | | | | | | | | | | | | | | | | | |
| 3212 | 177.5 | 180.6 | | | | | 3.09 | 3.52 | | | 1.39 | | 35 | 106 | 18 | 0.2 | 1470 | | | | | 575 |
| Amygdaloidal andesite | | | | | | | | | | | | | | | | | | | | | | |
| 3213 | 210 | 213.1 | | | | | 1.09 | 3.90 | | | 0.33 | | 8 | 56 | 28 | 0.2 | 815 | | | | | 690 |
| Altered hornblende dacite | | | (Pseudobreccia) | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
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Hole No. BEN 1

Entered by D. V. Lefebure

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CERTIFICATE OF ANALYSIS

TO : CORPORATION FALCONBRIDGE COPPER
ATTN: ALEX DAVIDSON OR DAVID WATKINS
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V4K 4E2

CERT. # : A8511188-001-A
INVOICE # : I8511188
DATE : 28-MAR-85
P.O. # : NONE
80-319

ATTN: IRENE KING

| Sample description | Mo ppm (ICP) | W ppm (ICP) | Zn ppm (ICP) | P ppm (ICP) | Pb ppm (ICP) | Bi ppm (ICP) | Cd ppm (ICP) | Co ppm (ICP) | Ni ppm (ICP) | Ba ppm (ICP) | Fe % (ICP) | Mn ppm (ICP) | Cr ppm (ICP) | Mg % (ICP) | V ppm (ICP) | Al % (ICP) | Be ppm (ICP) | Ca % (ICP) | Cu ppm (ICP) | Hg ppm AAS | Ti % (ICP) | Sr ppm (ICP) | Na % (ICP) | K % (ICP) |
|--------------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|------------|-------------|------------|--------------|------------|--------------|------------|---------------|--------------|------------|-----------|
| BCD 3201 | <1 | <10 | 120 | 2520 | 12 | <2 | <0.5 | 15 | 31 | 2010 | 3.50 | 530 | 46 | 1.22 | 163 | 9.19 | <0.5 | 3.64 | 22 | <0.2 | 0.645/0.71150 | 2.73 | 3.81 | 3.55 |
| BCD 3203 | <1 | <10 | 110 | 2200 | 18 | <2 | <0.5 | 19 | 54 | 1220 | 4.03 | 495 | 90 | 2.07 | 154 | 8.86 | 0.5 | 3.35 | 40 | <0.2 | 0.699/1.71030 | 2.57 | 3.60 | 2.27 |
| BCD 3204 | <1 | <10 | 33 | 105 | 16 | <2 | <0.5 | <1 | 2 | 375 | 0.66 | 183 | 52 | 0.18 | 7 | 6.50 | 0.5 | 0.13 | 8 | <0.2 | 0.079/0.13130 | 0.65 | 0.84 | 2.87 |
| BCD 3207 | <1 | <10 | 21 | 95 | 16 | <2 | <0.5 | 1 | 2 | 395 | 0.61 | 215 | 49 | 0.18 | 5 | 6.76 | 0.5 | 0.16 | 8 | <0.2 | 0.075/0.13136 | 0.84 | 1.18 | 3.09 |
| BCD 3209 | <1 | <10 | 87 | 1930 | 16 | <2 | <0.5 | 16 | 48 | 1170 | 3.64 | 648 | 98 | 2.05 | 134 | 8.39 | 0.5 | 4.20 | 41 | <0.2 | 0.603/1.01940 | 2.55 | 3.57 | 2.83 |
| BCD 3212 | <1 | <10 | 106 | 2660 | 18 | <2 | <0.5 | 9 | 7 | 1470 | 3.54 | 905 | 12 | 1.54 | 140 | 7.74 | 1.0 | 3.05 | 35 | <0.2 | 0.825/1.39575 | 2.21 | 3.09 | 2.92 |
| BCD 3213 | <1 | <10 | 56 | 420 | 28 | <2 | <0.5 | 5 | 11 | 815 | 1.15 | 235 | 11 | 1.14 | 16 | 8.41 | 1.5 | 1.67 | 8 | <0.2 | 0.193/0.33690 | 0.78 | 1.09 | 3.24 |

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SUMMARY LOG - BEN 1

0 - 12.2 overburden
12.2 - 26 amygdaloidal feldspar andesite porphyry flow
26 - 42 amygdaloidal andesite
42 - 42.7 fracture zone - including 10cm zone of red mud
42.7 - 51.6 amygdaloidal andesite
51.6 - 55.6 feldspar andesite dike
55.6 - 92.5 feldspar andesite porphyry flow
unconformity?
92.5 - 111.7 biotite quartz dacite flow
111.7 - 118.0 altered andesite tuff-breccia
118.0 - 119.1 unconsolidated sand and silt
119.1 - 119.6 altered andesite tuff-breccia
119.6 - 153.9 biotite quartz dacite flow
unconformity?
153.9 - 154.2 volcanic sandstone and andesite breccia
154.2 - 157.6 altered andesite flow
157.6 - 165.1 feldspar andesite flow
165.1 - 167.6 trachyandesite dike
167.6 - 183.0 amygdaloidal andesite
183.0 - 199.9 trachyandesite sill
199.9 - 204.0 feldspar andesite
204.0 - 208.4 trachyandesite dike
208.4 - 215.5 altered hornblende dacite flow

Formations - BEN 1

0 - 12.2 overburden
12.1 - 92.5 Tertiary volcanic flows - Buck Creek, Goosly Lake
unconformity
92.5 - 153.9 Upper Cretaceous Tip Top Hill
unconformity
154.2 - 215.5 Middle Jurassic to Upper Cretaceous, Kasalka Group,
Goosly Sequence, volcanic flow division