

**J. TUACH GEOLOGICAL CONSULTANTS, INC.
DIAMOND DRILL CORE LOG**

Sheet No. 1

LATITUDE _____
 DEPARTURE 10.181.24N 13.942.08E
 ELEVATION 3788.5'
 DIP AT COLLAR -90°
 BEARING _____
 TOTAL DEPTH 1650 CORE SIZE Ax
 REMARKS _____

Tests Depth	Dip	Magnetic Bearing	Corrected Bearing
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
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_____	_____	_____	_____

Project No. _____ Hole No. 1683
 Property Buchans - Middle Branch
 NTS _____ Grid Name Mine grid
 Date started 1957-58 Completed _____
 Contractor _____

 Logged by J. Harris - 1996

Depth & Lithology	Description	Alteration	Mineralization
0 - 58'	- Overburden		
58 - 779'	- Not Logged		
779 - 782'	- Felsic dyke - Pale green - soft - very faint plag. phenos., occasional quartz phenos - Lower contact faulted? some lost core	Green sericitic alteration - moderate to strong	Minor Py
782 - 813'	- Felsic fragmental - Agglomerate - Pink to green - prominent quartz - tuffaceous matrix - Large and small clasts of rhyolite - rhyolite porphyry - Some mafic volcanic clasts as well - 782 - 788 - light grey - altered - dominantly mafic - @ 810' sheared mafic ≈ 6" foliation at 85 - 90° to the core	Minor local silicification, black chlorite on fractures especially over upper 6'	Py - to 1% disseminated and with silicification along fractures
813 - 818'	- Mafic volcanic, tuffaceous? - Medium to dark green - foliated weakly at ≈ 80 - 85° to the core - Flecked with dark chlorite		
818 - 842'	- As for 782 - 813' - but with fewer clasts - 835 - 837' - mafic tuff	Sericitic alteration increasing downhole lower 1 - 2' silicified	Py. 1% disseminated

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Sheet No. 2

Depth & Lithology	Description	Alteration	Mineralization
842 - 847'	- $\approx$ 2' of core - Blue grey altered and brecciated rock - Cemented by milky white carbonate and quartz - Fault zone	Silicified and sericitic	
847-1140'	- Arkosic conglomerate - Rounded to subrounded cobbles of volcanics in a matrix of generally more angular chips and grains - clasts of felsic volcanic with some mafic vol. and granitic - 847 - 868' Grey green colour - locally foliated @ 80 - 85° to the core - 868 - 919' Reddish to purple colour overall - 919 - 945' Finer grained - coarse sandstone - bedding @ 85 - 90° to core - one 2' green chert bed - 945 - 1085' Arkosic conglomerate - 1085 - 1113' Coarse sandstone to local pebble conglomerate - 1113 - 1140' Mainly green sandstone with some pink arkose interbeds - bedded @ $\approx$ 85° to the core - some interbedded conglomerate 1131 - 1140	847 - 868 - sericitic alteration of groundmass. Some silicified clasts 868 - hematitic alteration with reddish stringers and fracture infill (123 - 1154 - core box has been mixed up)	Pyrite generally <1% but locally to 1% disseminated
1140 - $\approx$ 1177'	- Rhyolite - maroon to pink colour - orange to white feldspar phenos - cut by hairline epidote and epidote silica stringers locally brecciating the rhyolite		
1177 - 1206'	- Felsic tuff - dacite (crystal vitric tuff) - Grey green colours mainly - abundant plagioclase crystals and small lithic fragments - Upper 5' gradational becomes like overlying rhyolite - alteration? - More sediment than tuff over lower 2 - 3'	Soft green sericitic alteration of matrix black chlorite on fractures	Disseminated hematite locally. Some Py fragments or disseminated towards base
1206 - 1271'	- Rhyolite breccia and rhyolite conglomerate - Grey green to pinkish, clast supported - variety of rhyolite clasts and a few local mafic volcanic clasts - Matrix locally appears to be welded tuff - also at some places the clasts appear welded together - Some clasts with altered rims - also some of flow banded rhyolite - Some lost core throughout, but poor recovery 1220 - 1241 (1225 - 1229 3' lost) (1234 - 1239 3' lost) (1239 - 1241 1.5' lost)	1206 - 1225 - generally grey green with moderate silicification and sericitic alteration. 1225 - 1270 pink to green local sericitic groundmass	Matrix Pb-Zn and barite throughout <1% - also <1% Py. also local disseminated and stringer Pb, Zn, and/or barite in altered clasts. 1258 - 1259 quite a few barite clasts and one fairly large 2" x 1/2" black ore clast
1271 - 1320'	- Rhyolite breccia to conglomerate - Similar to 1206 - 1221 - but mostly all pink rhyolite clasts - Locally appears to be autobrecciated rhyolite with only local silty or tuffaceous matrix - Local "conglomerate beds"	Local silicification and local sericite alteration of matrix Some epidote veining to fracture infill	Some local areas with dissem. sphalerite <1% associated with silicification ie. 1284 - 1286 1297 - 1302 conglomeratic with some barite and Py. fragments in matrix - also barite at 1314 - 1319

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Sheet No. 3

Depth & Lithology	Description	Alteration	Mineralization
1320 - 1398'	- Rhyolite and rhyolite breccia - Gradational from above unit - pink and maroon rhyolite and brecciated rhyolite for the most part appears autobrecciated with some hematitic and locally chloritic infill - Weakly porphyritic with orange feldspars and a few quartz phenos		
1398 - 1650'	- Arkosic conglomerate and Arkose - Overall pinkish colour - abundant lithic fragments - Mainly rhyolite and prominent quartz rhyolite but some mafic volcanic and a few granitic - 1431 - 1455 - rhyolite - dyke or sill? Poor core recovery - Mafic dyke 1464 - 1469 Poor core recovery - 1398 - 1410 - poor recovery - some sheared mafic to intermediate tuff? - filiation @ $\approx 60^\circ$ to the core - Bedding at $80 - 90^\circ$ to the core - Not Logged 1541 - 1650		

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[illegible]