

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

Sheet No. 1

LATITUDE _____	Tests	Dip	Magnetic	Corrected	Project No. _____
DEPARTURE <u>10.166N 13.441E</u>	Depth		Bearing	Bearing	Hole No. <u>1606</u>
ELEVATION <u>3805</u>	_____	_____	_____	_____	Property <u>Buchans - Middle Branch</u>
DIP AT COLLAR <u>-90°</u>	_____	_____	_____	_____	NTS _____ Grid Name <u>Mine Grid</u>
BEARING _____	_____	_____	_____	_____	Date started <u>1957</u> Completed _____
TOTAL DEPTH <u>1792</u> Ax <u>89 - 930</u>	_____	_____	_____	_____	Contractor _____
CORE SIZE Ex <u>930 - 1792</u>	_____	_____	_____	_____	
REMARKS _____	_____	_____	_____	_____	Logged by <u>J. Harris - 1996</u>
	_____	_____	_____	_____	

Depth & Lithology	Description	Alteration	Mineralization
0 - 79'	- Overburden		
79 - 133'	- Mafic volcanic - Dark green chloritic - moderately foliated at 65 - 70° to the core - Calcite bands parallel to foliation - mainly <5% - A few sericitic - felsic interbands 123 - 125 and 128 - 129	Chloritic throughout weakly silicified near the base	Minor Py. - especially in felsic bands
133 - 159'	- Mafic to intermediate volcanic - prominent to semi-prominent quartz - dacite? tuff - Gritty, almost sedimentary look - Weakly foliated 60 - 70° to the core		
159 - 249'	- Mafic volcanic - Dark green - chloritic - moderately foliated - mostly 60 - 70° to the core but locally 45 - 50° - Flecked with dark chlorite phenos. - Wispy calcite stringers throughout	chloritic alteration	
249 - 607'	- Dacitic tuff or flow? Prominent quartz and coarse altered feldspars - Also some chlorite phenos. - Pink to green colour - 500 - 508 - fragmental - or xenoliths - 1 or 2 of mafic volcanic - 600 - 607 - mainly mafic volcanic, 603 - 607 - some fault gouge, - Carbonate vein breccia (infill) and well foliated black chloritic rock - Foliation @ ≈ 50° to the core	Bleached - sericitic alteration of feldspars and patchy chloritic alteration 315 - 317 silicified with lost core - local patchy pale grey to grey green silicification over 1 - 3'. Patchy black chlorite on fractures. 603 - 607' - strong black chloritic alteration or graphitic shale	To 1% Pyrite - mainly as stringers in chloritic zones - @ 370' 1 - 2" vein of Py, cpy. and Pb-Zn in quartz at ≈ 45° to the core. More sulphides than quartz @ 515' 1" clast of massive Py. 603 - 607' 1 - 2% Pyrite
Fault -			

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Depth & Lithology	Description	Alteration	Mineralization
607 - 708'	- Agglomerate - Mainly grey to pink - prominent quartz - but also quite a few mafic volcanic and some smaller pink rhyolitic clasts in a dacitic tuff matrix - Mafic clasts vary - fine grained to locally amygdoidal with pink calcite - Mafic clasts or zones locally foliated @ $\approx 60^\circ$ to the core - Becomes more chloritic and less fragmental towards base - Possible chloritic breccia over lower 8' - also some lost core $\approx 3'$	Chloritic alteration locally and some weak to moderate silicification Earthy hematite on some fractures towards base	Minor Py. Small discontinuous band @ 666'
708 - 909'	- Arkosic conglomerate - As before - Down to about 800' - is commonly fractured and rubbly with epidote - silica flooding, fracture infill and vein breccias - Local shearing evident - lost core locally, especially 708 - 727' and 771 - 779 and 784 - 805 - Lessor epidote silica infill to base - Some beds of finer grained arkose from 880 - 907', also some cherts beds - bedding at $\approx 70^\circ$ to the core.		
909 - 996'	- Rhyolite, maroon porphyritic rhyolite - $\approx 9"$ lost core at upper contact - abundant tiny plagioclase phenos. throughout - through - epidote and epidote - silica veinlets and fracture infill common - 926 - 928 - sheared to brecciated with epidote - silica cement at $\approx 50^\circ$ to the core - 954 - 956 - brecciated by hairline epidote - silica stringers.		
996 - 1118'	- Dacitic tuff (ore horizon like - Thurlow) - Grey green tuffaceous matrix with a variety of clasts or fragments - 3 rhyolitic intrusions or flows as for 909 - 995 between 1017 - 1036' - contacts are not chilled, and a number of clasts of the rhyolite occur in the tuff below 1036' (1036 - $\approx$ 1040) - Clasts are often angular but sometimes rounded and include - felsic and mafic volcanic, some of dacitic tuff and occasional small granitic clasts - Some grey cherts clasts with very fine Pyrite may be Pyritic siltstone - from 1096 - 1115 - mainly bedded tuffaceous sandstone and siltstone - 1117.5 - 1118 - sheared - some gouge - foliation at $\approx 50^\circ$ to the core	Weak sericitic and chloritic alteration of groundmass 1096 - 1118' - black chloritic fracture coating	<1% Pyrite as local concentrations of disseminated Pyrite in clasts and/or matrix. Sections or inclusions of tuff between the rhyolite have 1 - 2% disseminated hematite 1096 - 1118' - increase in Pyrite to 2 - 3% @ 1109 and 1110 - very thin Pyritic beds
1118 - 1185'	- Arkosic conglomerate - Variety of clasts - abundant prominent quartz clasts		

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Depth & Lithology	Description	Alteration	Mineralization
1185 - 1338.5'	- Hetrolithic conglomerate to breccia - Variety of fragment types including plenty of granite - Matrix is dacitic tuff commonly - especially down to about 1290' - Then some sedimentary matrix - fragments tightly packed with very little matrix below 1290' - Mafic dyke 1226 - 1227' - Upper contact appears to be conformable, but some lost core, also calcite vein breccia along core from about 1185.3 - 1190'	Weak to moderate chloritic and sericitic alteration in dacitic matrix	<1% grains of Pyrite in matrix - locally very fine disseminated Py. in matrix. Some Pyritic fragments (low percentage) Blue "clay" mineral disseminated in matrix.
1338.5 - 1600'	- Rhyolite, pink to locally pale green, massive, lightly flecked with chlorite - Calcite stringers locally - Faint feldspar (plagioclase) phenos apparent locally - Upper contact lost, lower contact - grey - baked by diabase	Weak sericitic alteration, especially in pale green zones Poor core recovery locally	
1600 - 1730'	- Mafic dyke - diabase - dark grey to black - Locally cut by calcite veining - Locally amygdoidal with calcite ringed with chlorite - 1645.8 - 1646 xenolith of prominent quartz - Lower contact 3.5' lost core	Poor core recovery locally	
1730 - 1792'	- Arkosic conglomerate		

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