

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

Sheet No. 1

LATITUDE _____	Tests Depth	Dip	Magnetic Bearing	Corrected Bearing	Project No. _____ Hole No. <u>2846</u>
DEPARTURE <u>15016.11E</u> <u>10018.60N</u>					Property <u>Buchans - Airport</u>
ELEVATION <u>3886.18</u>					NTS <u>12A/15</u> Grid Name <u>Mine Grid</u>
DIP AT COLLAR <u>-90°</u>					Date started <u>1971</u> Completed _____
BEARING _____					Contractor _____
TOTAL DEPTH <u>2264'</u> CORE SIZE <u>Ax</u>					
REMARKS _____					Logged by <u>J. Harris (1996)</u>

Depth & Lithology	Description	Alteration	Mineralization
0 - 31'	Overburden		
31 - 79'	Mafic volcanic - tuff - Dark to medium green - Foliated - mainly at 35 - 40° to the core but some folding and disruption of foliation - faint, altered plagioclase phenos. - minor quartz and carbonate veining		minor Pyrite
79 - 405'	Mainly felsic volcanic - dacite - light grey and grey green, some short mafic to intermediate sections - chloritic - tuffaceous - at least in part - local short zones with prominent quartz - ≈ 94 - 95' - carbonate cemented breccia - 96 - 106' - only 3.5 - 4' recovered - 153 - ≈ 166' - mottled fragmental texture - white silicified "clasts" in chloritic groundmass - most likely alteration, not primary - waxy altered feldspars locally - 316 - 374' ≈ 10' core recovered - well foliated - "sheared" lower contact	moderate to strong silicification and sericitic alteration throughout below 153' all strongly silicified - local "preserved"? prominent quartz phenos.	py. <1% 79 - ≈ 155' - minor cpy. @ 91' 155 - 161' ≈ 5 - 8% disseminated blebs of pyrite 180 - 201' 3 - 5% disseminated and stringer pyrite @ 231.5' minor Pb-Zn and cpy. also @ 222.5' below 155' generally 1- 3% pyrite 300 - 300.5' ≈ 1% Pb-Zn @ 346' minor cpy., sections with 3 - 5% py. 316 - 374'
405 - 412'	Felsic porphyry dyke - light brown, flecked with white altered feldspars and minor chlorite		

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Depth & Lithology	Description	Alteration	Mineralization
412 - 585' may be Buchans River Fm.	Arkose - mainly coarse sand sized grains - may be in part crystal tuff - pink to brown colour - considerable epidote - silica veining and fracture infill - mafic dykes @ 443 - 446', 451.5 - 474', 478.5 - 482', 516 - 518, 541 - 543', 492.5 - 504' - maybe mafic flow - below 482 - "Arkose" becomes more tuffaceous and has abundant plagioclase crystals - <u>similar to Buchans River Fm. dacite</u> tuff - also similar to zone in 2651	482 - 585' - sericitic alteration of groundmass	
585 - 598'	Mafic dyke - pale grey-green altered - locally amygdoidal - calcite rimed with chlorite - chilled sharp contact @ 25° to the core at 598'		
598 - 656'	Felsic volcanic - silicified - mostly white to buff with dark chloritic blotches - some buff areas have faint quartz phenos. - also local faint feldspars - likely an altered quartz - feldspar porphyry - may be prominent quartz formation? fractured - "sheared" ? 598 - 600 (similar to parts of 79 - 405' above)	strongly silicified	<1% pyrite down to ≈ 602' to 1% disseminated light brown mineral - sphalerite? <u>sample 604 - 609</u>
656 - 660.5'	Felsic dyke - light brown with faint feldspar phenos.	sericitic alteration	
660.5 - 672'	Dacitic crystal tuff or arkose - k-spar plagioclase and some quartz grains in a sericitic groundmass similar to 412 - 585' above - ≈ 6" sheared chloritic rock at 660.5' thrust fault?	sericitic alteration of groundmass	
672 - 692.5'	Mafic dyke, dark green, fine grained, locally amygdoidal		
692.5 - 989	Dacitic crystal tuff and/or arkose - 692.5 - ≈ 711' - abundant plagioclase and some k-spar and quartz crystals in a sericitic matrix (Arkose) - 711 - 853' - as for 692.5 - 711' but without the k-spar (dacitic) - 853 - 857' - arkose - 859 - 984' - grey tuff to Arkose - hint of layering at ≈ 50° to the core - mafic dykes @ 750 - 755', 756.5 - 769', 781 - 786', 794 - 796', 839 - 853', 857 - 859' - 984 - 989' - dacitic tuff - silicified - lower contact epidotized - shear?	patchy silica - epidote alteration, especially 769 - 800' 880 - 989' - locally silicified	minor py. with alteration

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Sheet No. 3

Depth & Lithology	Description	Alteration	Mineralization
989 - 2167' Probably Ski Hill	Mafic volcanic - dark green locally bleached to light grey-green - mainly amygdoidal basalts - some possible tuffaceous sections - amygdules filled with silica and carbonate - but mostly carbonate - 1045 - 1060' - red hematitized basalt - 1054 - 1092' - $\approx$ 10' of core recovered, some highly fractured - fault? - 1274 - 1278' - foliated and chloritic, sheared - @ 1369 - small chloritic shear - 1369 - 1512' - commonly brecciated with carbonate cement - alteration - 1550 - $\approx$ 1600' - primary fragmental - pillow breccia - 1649 - $\approx$ 1668' - dacitic crystal tuff - some clasts of amygdoidal basalt - more mafic than in Buchans River Fm. - 1982 - 2069' - more massive, amygdoidal basalt - very little calcite or silica-epidote veining or alteration - 2069 - 2107' - fine grained grey-black massive - probably a mafic dyke - but no distinct contacts - similar dyke? @ 2157 - 2164' - 2107 - 2167' - amygdoidal basalt as above with calcite and silica epidote infill between "clasts" - lower contact @ 2167' sharp and conformable at $\approx$ 65° to the core	considerable patchy and wormy silica and silica-epidote alteration and veining - some silica-carbonate veining	
2167 - 2174'	Volcanic breccia or conglomerate - hematitic - upper 1' is mainly dacitic crystal vitric tuff - some tuffaceous matrix throughout - felsic and intermediate clasts often rounded in a matrix of quartz and feldspar chips and hematite - some reddish jasper? - iron formation clasts	some sericitic alteration of matrix - strong hematitic "alteration"	
2174 - 2181'	Rhyolite - reddish brown rhyolite - very tiny plagioclase phenos. in an aphanitic groundmass	somewhat hematitized	
2181 - 2264'	Felsic to intermediate tuff - mainly light grey-green colour, very hard and silicic - faint tiny feldspar and a few quartz phenos. - indistinct fragments locally - 233 - 2241' brownish - rhyolitic - more quartz phenos. - epidote cemented breccias at or near contacts - lower 5' more mafic	moderate silica - epidote alteration	
	2264' - E.O.H. -		

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