

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

Sheet No. 1

GPS CO-ORDINATES 13808.4 E 9051 N
GRID CO-ORDINATES L138 E 91+00 N
ELEVATION 267.05
DIP AT COLLAR -70°
BEARING 180°
TOTAL DEPTH 140 m CORE SIZE NQ
REMARKS _____

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

Project No. B-4293 Hole No. BE-97-22
Property Buchans East
NTS 12A/15 Grid Name Buchans East
Date started Nov. 27/97 Completed Nov. 29/97
Contractor Logan Drilling
Logged by P. Saunders/J. Harris

Depth & Lithology	Description	Alteration	Mineralization								
0 - 7.3	Overburden										
7.3 - 52.5	Felsic - intermediate tuffs - pale grey - medium greenish grey, fine grained - strongly foliated @ 80 - 90° TCA, wavy, some kink bands - foliation defined by wispy sericite chlorite - 7.3 - 13 m, rubbly core. Narrow intervals of gouge, esp. @ 9.6, 9.8, 10.7 - vague hint of layering suggested by sericitic vs. siliceous bands, possibly fine tuff. Rare quartz eyes - small, soft, clay rich blebs may be pumiceous fragments 10.9 - 14.3 - somewhat more chloritic, less siliceous - sericite persists - probably reflects compositional change from felsic to intermediate - @ 11 m, 2 cm layer of grey, soft, clay rich (?) strongly pyritic rock 15.0 - 17.1 - siliceous, sericitic felsic tuff. Foliation 80 - 85° @ 16.5 m 1 - 10 cm fault gouge @ 15.9 m 17.1 - 23.1 - mainly chloritic with narrow (10 - 20 cm) felsic bands - a few quartz eyes (augen) intermediate composition - general impression of alternating felsic and intermediate tuffs with gradational contacts 23.1 - 31.9 - felsic tuff/fragmental - strong foliation persists, mainly ~ 80° TCA. Locally kinked - many 1 - 2 cm bands or augen resemble fragments - rock is probably a deformed, coarse, lapilli tuff - 24.3 - 5 cm fault gouge - matrix appears to be more heavily altered and pyritized	7.3 - 52.5 - strongly altered, quartz - sericite - pyrite occasional thick (to 4 cm) quartz ± epidote chlorite, pyrite veins from 11 - 12.5 m minor bright green mica - moderate - strong silica - sericite - pyrite alteration continuous chlorite-rich intervals probably reflect primary composition rather than alteration occasional calcite stringers in chlorite schist strong sericite - pyrite alteration continues trace bright green mica widely spaced, narrow quartz veins 25.1 - very soft, white mineral on fracture - gypsum?	7.3 - 5 - 10% pyrite overall, locally to 25% - occurs as fine bands parallel to foliation, stringers and heavily disseminated and network style Some fracture coatings with fine gr - py <table><tr><td>SG @ 10.5 m</td><td>2.90</td></tr><tr><td>SG @ 11.1 m</td><td>2.84</td></tr><tr><td>SG @ 14.1 m</td><td>3.00</td></tr><tr><td>SG @ 25.9 m</td><td>2.99</td></tr></table> 18.4 - 18.6 - mirror chalcopyrite splashe within or associated with narrow quartz veins and siliceous alteration 5 - 10% banded and disseminated pyrite in chloritic unit 23.9 - 24.3 - minor sp on fractures strongly pyritized (10 - 15% locally 25%) in bands parallel to foliation, stringers and heavily disseminated 28.0 - 28.15 - intensely sericitized with a 1 cm thick semi-massive to massive pyrite band	SG @ 10.5 m	2.90	SG @ 11.1 m	2.84	SG @ 14.1 m	3.00	SG @ 25.9 m	2.99
SG @ 10.5 m	2.90										
SG @ 11.1 m	2.84										
SG @ 14.1 m	3.00										
SG @ 25.9 m	2.99										

HOLE NO. BE-97-22

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

Sheet No. 2

Depth & Lithology	Description	Alteration	Mineralization
7.3 - 52.5 (cont'd)	31.9 - 34.5 - intermediate - mafic tuff (?) - moderate to strongly chloritic 34.5 - 52.5 - felsic tuff/fragmental with local mafic bands - appearance of coarse fragmental as for 23.1 - 31.9 - strongly foliated 70° @ 37 m - large fragment @ 39.9 displaced along calcite-filled fracture - 2 cm fault gouge @ 40.65 - foliation seems to be stronger with depth. Veins - fragments boudinaged - some kink folds. Foliation 70° @ 43.7. In places foliation is terminated against fragment boundary - frequent narrow green chlorite bands appear to be matrix to more siliceous fragments - below about 43 m, unit appears more massive, increasingly difficult to distinguish fragments from matrix - minor gouge @ 46.4 - foliation steepening 55° TCA @ 48 m 45.9 - 46.6 - thin mafic flows, or fragments? 48.5 - 49.2 - mafic flow - dark green, fine-medium grained, calcite amygdulites - lower contact ~ 80° TCA 49.2 - 52.5 - felsic volcanic - below 49.2, rock becomes progressively finer grained and more strongly sheared 52.0 - 53.0 - (approx.) broken, rubbly core and fault gouge	light - moderate alteration, mainly pyrite ± sericite, clays? A few chlorite stringers, quartz-chlorite veins and calcite veins strongly altered - silica - sericite - pyrite. Alteration affects both felsic fragments and matrix, but most intense in matrix a few calcite veins minor, bright green mica(?) Local strongly chloritic band (green) appear to be matrix rather than alteration silica-sericite-pyrite alteration remains strong in felsic rocks calcite veins	29.1 - 31.2 - trace - 1% sp as narrow stringers parallel to foliation and disseminated trace cp splashes and disseminated over same interval a 1 cm band at 30.8 has 5 - 10% sp mainly 1 - 3% py, locally 5% disseminated, flattened lenses and narrow heavily disseminated bands overall 10 - 15% py in places heavily disseminated fine grained py in matrix, somewhat like BE-11, but mainly in discrete bands 35.6 - 35.7 - minor stringer and disseminated sp and cp several larger (to 5 cm) quartz ± py veins (eg. 40.9) Occasion 1 - 2 cm quartz - py veins throughout 10-15% py overall. Heavily disseminated, network and stringers
52.5 - 58.0	Mafic - intermediate flow - dark green, fine grained, well fractured, foliated and veined - some intermittent felsic bands with sharp contacts (eg. 53.6) 55.5 - 56.5 - rubbly core, gouge, fractured rock - brittle fracture and small gouge zones throughout - local small (1-2 min) quartz eyes - intermediate (?)	abundant pink and white calcite veins, rare quartz veins 4 cm thick calcite veins @ 57.8	5 - 10% py in felsic sections, elsewhere trace
58.0 - 60.7	Felsic tuff - pale grey, med - coarse grained - well foliated - 80° TCA @ 58.8 m 58.8 - 10 cm mafic flow(?) fragment(?)	Strong silica - sericite - pyrite alteration bright green mica	py 2-5% overall, 10% locally, disseminated
60.7 - 65.3	Mafic volcanic medium to dark green, soft and chloritic strongly foliated @ about 80° to the core, locally folded local felsic to intermediate bands from 1 to 10 cm	strong sericite - quartz pyrite alteration of felsic bands. Weak to moderate chlorite in mafic	py generally < 1% but 5-6% in felsic to intermediate zones
65.3 - 69.0	Felsic and intermediate volcanics as above light grey and grey-green - strongly foliated tuffs? foliation @ = 80° to the core	strong sericite - quartz - pyrite alteration	py 5-6% as disseminations and wispy bands parallel to foliation

HOLE NO. BE-97-22

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

Sheet No. 3

[illegible]

HOLE NO. BE-97-22

J. TUACH GEOLOGICAL CONSULTANTS, INC.
DIAMOND DRILL CORE ASSAYS

SHEET NO. _____

PROJECT NO. _____

HOLE NO. BE-97-22

PROPERTY Buchans River Ltd.

[illegible]