

**GEOLOGICAL CONSULTANTS LTD
DIAMOND DRILL CORE LOG**

Sheet No. 1

UTM CO-ORDINATES 5406175 N 0522392 E
 GRID CO-ORDINATES L224 E 61+75 N
 ELEVATION ~ 190 m
 DIP AT COLLAR -50°
 BEARING 180°
 TOTAL DEPTH 260.6 m CORE SIZE NQ
 REMARKS The depth 256.5, drilled with metric rods but marked as if drilled with Imperial rods

Tests Depth	Dip	Magnetic Bearing	Corrected Bearing
<u>251.5 m</u>	<u>-47.5°</u>	<u>211°</u>	<u>234°</u>

Project No. B Vol. 1, Fol. 61 Hole No. LS-2K-001
 Property Buchans - Little Sandy
 NTS 12A/15 Grid Name Little Sandy
 Date started 27/02/2000 Completed 01/03/2000
 Contractor Lantech Drilling Services
 Logged by J. Harris - 2000

Depth & Lithology	Description	Alteration	Mineralization
0 - 3.0 m	Overburden		
3.0 - 6.0 m	Rhyolite - pale pink to pale green, fine grained - small quartz phenos - fairly sharp contact at about 50° to the core, with some mixing and chloritic veining	moderate quartz - sericite alteration, some quartz stockwork veining more sericite at the lower contact	2 - 3% pyrite, disseminated as thin stringers and associated with quartz veining
6.0 - 9.2 m	Felsic to intermediate volcanic - grey-green chloritic - in part prominent quartz dacite - 6.0 - 7.1 m - fine grained, rare quartz phenos, chlorite spots, looks like some units at Woodmans Brook - grades into a more felsic prominent quartz unit - @ 7.6 m - apparent intrusive contact between finer grained sericitic unit and prominent quartz unit, <0.10 m of the finer unit	moderate sericite - chlorite ± quartz alteration	2 - 4% pyrite, disseminated, as coarse clots with chlorite, and as thin stringers, minor sp and ga with pyrite
9.2 - 11.9 m	Mafic dyke - chilled, black dyke, moderately magnetic		≈ 2% pyrrhotite as disseminated blebs and discontinuous stringers
11.9 - 20.0 m	Rhyolite and rhyolite flow breccia - grey-green to buff - a few prominent quartz phenos, small quartz phenos throughout - matrix to fragments is sericitic and locally chloritic "tuff"? - a few flow banded fragments - chilled mafic dyke vein @ 16.7 m	moderate to strong sericitic alteration local chloritic alteration flecked with epidote near 20.0 m	2 - 3% pyrite down to about 13.5 m than <1% pyrite

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Depth & Lithology	Description	Alteration	Mineralization
20.0 - 38.0 m	Interbedded fine grained tuffs and sediments - overall green to grey-green with a few light grey and pink beds - bedding at 45 - 50° to the core down to about 34 m - mafic to felsic tuffs and fine grained cherty sediments - 34.4 - 38.0 m - mainly interbedded black carbonaceous sediment and grey-green chert, bedding @ 65 - 75° to the core	common epidote blotches and stringers down to 34.4 m some chloritic alteration below 34.4 m thin pyrite seams are conductive	20.0 - 21.5 m - 2-3% pyrite as disseminated clots and disseminated in thin beds 21.5 - 34.4 m - generally minor pyrite, locally to 1% over short intervals 34.4 - 38.0 m - 3-6% py disseminated, as thin stringers and as thin beds, increasing downward 37-38 ~ 10% py 37.75 - 37.85 m - semi-massive py with 2-3% sp, ga and cpy, "massive sulphide horizon"?
38.0 - 48.0 m	Felsic tuff - some interbedded chert and intermediate tuff - mainly grey - mostly fine to medium grained rhyolitic lithic tuff - 38.0 - 38.8 m - crystal-lithic tuff with pink feldspar crystals or felsic alteration - 44.7 - 48.3 m - intermediate flow or dyke, chlorite blobs, other possible flows, i.e. 40.4 - 41.9 m - 42.5 - 43.7 m - sheared to brecciated along core - purple cherty 43.8 - 43.9 m and 47.8 - 48.0 m - fault gouge @ 48.0 m, (5 cm)	moderate quartz - sericite ± chlorite alteration	1 - 2% disseminated pyrite minor sp, ga and cpy down to 41.0 m
48.0 - 55.7 m	Mafic sill or flow - fine grained, grey-green, massive - bleached and altered - upper 0.6 - 0.7 m looks like "intermediate" zones in the above unit - 53.5 - 55.7 m - fractured with some quartz-calcite veining and gouge coated fractures - fault gouge and breccia @ 55.7 m	moderate sericitic ± chloritic alteration	about 1% pyrite, finely disseminated and as clots with chlorite, locally 2%, local chalcopyrite
55.7 - 118.1 m	Rhyolite, rhyolite breccia and lapalli tuff - grey to buff and grey-green - varies from hard to soft - 55.7 - 57.1 m - fractured to brecciated, some black chlorite infill - 55.7 - 67.6 m - lapalli tuff and breccia, wispy lapalli, some flow banded fragments, some chloritic and sericitic pumice, rhyolitic matrix - below 67.6 m - generally more massive, with local fragmental zones - local flow banding, common leucoxene flecks - 83.9 - 84.3 m - more chloritic matrix, white alteration blotches of carbonate and silica - 89.5 - 89.9 m - fractured to brecciated, some fault breccia - 86.3 - 86.4 m - chloritic and sericitic lithic tuff bed - 112.7 - 113.0 m - narrow shear at 5 - 10° to the core - not a sharp contact, units merge over 0.2 m	moderate quartz-sericite ± chlorite alteration chlorite mainly as blebs or associated with fractures	1 - 3% pyrite, finely disseminated and as disseminated cubes some disseminated sphalerite and galena throughout 68.3 - ~ 83 m to 1% sphalerite and galena

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Sheet No. 3

Depth & Lithology	Description	Alteration	Mineralization
118.1 - 136.1 m	Mafic flow or sill - dark green fine to medium grained - finer grained near contacts - flecked with chlorite and epidote, may be epidotized feldspar phenos locally - lower contact merges with underlying felsic over 0.2 - 0.4 m	weak to moderate chloritic and epidote alteration fractures are commonly coated with black chlorite	1-3% pyrite, mainly as coarse disseminations but locally as stringers local sphalerite along or near fractures, associated with pyrite and/or calcite, i.e. @ 124.9 and 128.9 m
136.1 - 155.2 m	Felsic volcanic - rhyolite to dacite - similar to above the mafic - pink, buff and grey, commonly fragmental - 136.1 - 141.5 m - hard, rhyolitic and pink to buff - 141.5 - 149.8 m - softer grey fragmental - 149.8 - 151.7 m - as for 136.1 - 141.5 m - 151.7 - 155.2 m - as for 141.5 - 149.8 m - gradational contacts - soft grey zones may be in part altered mafic - 142.0 - 144.0 m - minor faulting at low angles to the core	@ 145.6 m - 0.3 m of overburden, caved into the hole when the rods were pulled. Casing not in bedrock, reamed in later weak to moderate sericite - quartz ± chlorite alteration	~ 1% disseminated pyrite locally to 2%
155.2 - 172.5 m	Mafic sill or flow - light grey-green to brown altered - ~ 161.0 - 162.8 m is fine grained, weakly magnetic and looks intrusive, gradational (alteration) contacts - 155.2 - 161.0 m highly fractured, sheared and locally brecciated - light grey, may include some felsic to intermediate - shearing appears to be @ 45 - 50° to the core - 162.8 - 167.7 m grey to brown, looks intermediate to felsic, fleck with blobs of chlorite - 167.7 - 172.5 m grey-green, fine grained, massive fractured with thin calcite infill	155.2 - 161.0 m - moderate sericitic and chloritic alteration, at least in part related to shearing 162.8 - 167.7 m - moderate sericitic and chloritic alteration, possible weak silicification 167.7 - 172.5 m - weak sericitic and chloritic alteration	155.2 - 161.0 m - 1-2% pyrite, disseminated and as coarse clots with green chlorite 161.0 - 162.8 m - rare pyrite 162.8 - 167.7 m - ~ 1% pyrite associated with chlorite 167.7 - 172.5 m - ~ 1% disseminated pyrite
172.5 - 174.5 m	Volcanic breccia - fragments of mafic volcanic, pink rhyolite, prominent quartz rhyolite and grey rhyolite - chloritic matrix with some large quartz grains - fragments are angular to subrounded - mafic fragments resemble overlying unit - some prominent quartz clasts are close to granitic texture - could be Sandy Lake Fm.?		<1% disseminated pyrite and a few flecks of sphalerite
174.5 - 181.9 m	Mafic to intermediate sill or flow - grey-green to brownish - 174.5 - 179.9 m - grey-green, fine grained with a few bleached zones, which look felsic - 179.9 - 181.9 m - grey-brown, fine grained, moderately magnetic - becomes pink over lower 0.1 m		174.5 - 179.9 m - about 1% disseminate pyrite, rare sphalerite with pyrite blebs

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Sheet No. 4

Depth & Lithology	Description	Alteration	Mineralization
181.9 - 194.1 m	Rhyolite to dacite - grey-green to pink, bright pink over first meter (baked) - fine grained, fairly massive rock with abundant flecks and clots of green and black chlorite, some to 3 x 5 cm - 190.9 - 191.1 m - fragmental zone, mostly primary fragmental but 5 - 8 cm shear at 190.0 m @ 80 - 90° to the core	moderate chloritic alteration (190.9 - 191.1 m 5 - 10% pyrite as fine grained clasts and as fine disseminations with the shear)	some magnetite "veining" along fractures over the upper 1.5 - 2 cm @ 182.1 m bleb of pyrite and sphalerite with chlorite, red, grey and honey coloured sphalerite 1% or less of pyrite as coarse blebs with chlorite, local sp, ga and cpy with the pyrite
194.1 - 210.2 m	Mafic sill or dyke - mostly fine grained and dark grey to black, but 203.2 to 206.0 m is medium grained and plagiophyric - moderately to strongly magnetic, medium grained zone is strongly magnetic (2 - 3% magnetite) - 209.5 - 209.7 m - rhyolite inclusion	local weak chloritic alteration	194.1 - 203.9 m - 1-2% disseminated pyrite, decreasing downward 206.7 - 206.8 m - chloritic zone with 6-7% pyrite and pyrrhotite 206.8 - 210.0 m - to 1% disseminated pyrite 210.0 - 210.2 m - ≈ 10% fine pyrite
210.2 - 240.6 m	Rhyolite, similar to 181.9 - 194.1 m - grey-green to pink - fine grained glassy rock with common flecks and blobs of chlorite - commonly "shattered" with hairline fractures - fault breccia zones @ 211.9, 217.7 - 217.9 and 233.2 - 233.5 m - a few angular, chloritic mafic fragments - 223.0 - 224.0 m - fractured, porous, spary calcite infill - 235.4 - 237.0 m - grey, bleached mafic to intermediate - 240.1 - 240.3 m - intermediate fragmental - rhyolite is baked @ 240.6 m	weak quartz-sericite alteration, moderate chlorite alteration (225.8 - 230.1 m core box was dropped, core is mixed)	1 - 2% pyrite down to 217.9 m mostly as coarse disseminations with chlorite below 217.9 m generally 1% or less pyrite 240.1 - 240.3 m - 5-6% disseminated pyrite
240.6 - 242.3 m	Intermediate dyke or sill - brown, fine grained with small amphibole? phenos - weakly magnetic		
242.3 - 244.5 m	Rhyolite, similar to 210.2 - 240.6 m - fractured to brecciated with a number of thin gouge zones - strongly sheared and brecciated at 244.5 m		2 - 3% pyrite
244.5 - 246.5 m	Intermediate dyke, as for 240.6 - 242.3 m - not sheared like surrounding units		

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Sheet No. 5

Depth & Lithology	Description	Alteration	Mineralization
246.5 - 258.2 m	Shear zone - strongly sheared mafic and felsic rocks - shearing mostly at 50 - 75° to the core, but fabric wraps around some rhyolite fragments - clasts of rhyolite and bleached mafic to intermediate - one prominent quartz rhyolite clast - uncertain protolith		local fine pyrite a few flecks of sp and ga at 254.1 m
258.2 - 260.6 m	Mafic fragmental, sheared - light green, lapilli tuff? matrix is lighter and siliceous - a few small silica "amygdules", possible quartz grains in the matrix - 260.6 m E.O.H. -		

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GEOLOGICAL CONSULTANTS LTD.
DIAMOND DRILL CORE ASSAYS

SHEET NO. 1 of 1

PROJECT NO.

HOLE NO. LS-2K-001

PROPERTY Little Sandy - Buchans

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