

**GEOLOGICAL CONSULTANTS LTD
DIAMOND DRILL CORE LOG**

Sheet No. 1

UTM CO-ORDINATES 514125.9E, 5409354.0N
 GRID CO-ORDINATES L14100E, 9400N
 ELEVATION 285.4
 DIP AT COLLAR -70°
 BEARING 180°
 TOTAL DEPTH 264.4 CORE SIZE NQ

Tests Depth	Dip	Magnetic Bearing	Corrected Bearing
<u>264.0m</u>	<u>-69°</u>	<u>207°</u>	<u>230°</u>

Project No. _____ Hole No. BR-2K-05-01
 Property Buchans East, Middle Branch East Zone
 NTS 12A/15 Grid Name Buchans East Grid
 Date started 31/02/2000 Completed 04/04/2000
 Contractor Lantech Drilling Services
 Logged by J. Harris

REMARKS Box 3 and Box 6 lost while being transported from the drill. Most of box 6 retrieved; also ~ 1/2 of box 3
The depth 259.1, drilled with metric rods but marked as if drilled with Imperial rods

Depth & Lithology	Description	Alteration	Mineralization
0 - 3.6	Overburden	Box 3 12.0 - 16.6m Box 6 24.8 - 28.6m	disseminated magnetite throughout - rare pyrite in grey and white calcite veins
3.6 - 54.5	Intermediate volcanic - dark grey-green, purple tint locally - hard, fine grained, siliceous matrix, at least locally - strongly magnetic - dacite to andesite, rhyolitic locally - local weak foliation at 65° to the core - local bleaching to pink, and more felsic looking, near quartz and quartz epidote veins - local small phenos of plag, commonly weakly epidotized - 29.0 - 29.3 minor fracturing and faulting - 40.8 - 42.0 pink calcite vein along the core	patchy epidote alteration	
54.5 - 63.7	Mafic volcanic - dark green to grey-green - no distinct contacts with units above and below - fairly soft and chloritic - common calcite veining - strongly magnetic		
63.7 - 74.4	Intermediate volcanic - as for 3.6 - 54.5 - some interbanded mafic volcanic	patchy epidote	

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Sheet No. 2

Depth & Lithology	Description	Alteration	Mineralization
74.4 - 89.7	- Mafic volcanic - as for 54.5 - 63.7 - some interbanded intermediate - sharp contact at ~ 80° to the core at 74.4 - ~ 81.0 - 83.0 intermediate - ~ 83.0 - 86.0 fractured with some rubbly core		89.2 - 89.3 cpy in a 1 cm qtz vein
89.7 - 108.1	- Interbanded mafic and intermediate volcanics - commonly strongly magnetic - grey and green with some bleached light grey zones, may be felsic - sheared at 30° to the core at 95.2m - 96.0 - 102.0 commonly fractured with pink calcite infill also some epidote - 93.0 - 94.0 fragmental, may be primary	89.7 - 90.9 moderate quartz sericite alteration	89.7 - 90.9 ~ 5-8% fine pyrite 94.4 - 97.0 <1% py
108.1 - 114.5	- Intermediate lithic tuff or sediment - grey to grey-green - layered and/or foliated at 80- 85° to the core - some flattening of fragments, also some rounded fragments - mafic and felsic to intermediate fragments - 110.8 - 112.9 mafic tuff or flow, green, chloritic, fragmental texture to 111.7m	some quartz-sericite-pyrite altered fragments	108.1 - 109.6 2-3% pyrite and minor sp, ga, and cpy 109.6 - 110.8 2-3% py and 5-6% sp, ga and cpy, mostly look like flattened clasts and matrix grains 110.8 - 112.9 2-3% py 112.9 - 113.8 3-5% py and 2.3% sp, ga and cpy 113.8 - 114.5 1-2% py
114.5 - 123.3	- Mafic volcanic, tuff - light to dark green - common fragmental textures, flattened to foliated at ~ 80-85° to the core - some flows or large fragments - up to 0.6m - locally magnetic - minor shear/fault at 116.6 at 30° to the core - occasional felsic fragment - stronger foliation at 85° to the core from 122.5 - 123.3 sheared?	epidote veining and zones	minor py

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Sheet No. 3

Depth & Lithology	Description	Alteration	Mineralization
123.3 - 175.7	Mafic to intermediate fragmental - green to brown - mafic and felsic fragments, commonly flattened - some darker mafic fragments are strongly magnetic - moderately sheared - some rounding of fragments but looks tuffaceous, maybe due to shearing - 123.3 - 127.9 about 30-40% felsic fragments - below 127.9 only minor felsic to intermediate fragments - strongly magnetic below 127.9 - local porphyritic andesite to dacite fragments - mainly green mafic tuff and breccia below ~ 155m - some zones of lapilli tuff with a calcite rich matrix - 172.7 - 172.8 felsic band (or altered mafic) - a few other felsic looking bands below 172.8 - moderate shear and minor breccia at 175.7m	quartz-sericite-pyrite alteration of fragments below 127.9 common epidote veining and blotches	123.3 - 127.9 3-8% pyrite minly in altered fragments below 127.9 minor pyrite, disseminated magnetite throughout rare fleck cpy 172.7 - 172.8 1-2%py 172.8 - 175.7 to 1% py
175.7 - 195.9	Interlayered mafic and felsic tuffs - green and grey - foliated and "layered?" at 80-90° to the core - mainly fine grained but some coarser fragments - may include some fine grained sediments - 184.2 - 184.7 small calcite "amygdules?" may be a mafic flow - 185.5 - 186.0 fault breccia, moderate shearing at 185.5m - 187.8 - 190.0 fractured with white calcite infill some fault breccia, generally mafic to intermediate - 18.8 - 189.2 felsic zone	moderate to strong quartz sericite alteration, especially of "felsic zones" - some orange felsic alteration	4-5% fine pyrite locally 10-15%, local disseminated and stringer sp, ga and barite and cpy down to 187.5 187.5 - 195.9 1-2% pyrite concentrated in more altered zones 184.2 - 184.7 minor py also 185.5 - 186.9 188.8 - 189.2 minor sp-ga, some barite "veining" 193.7 - 193.9 4-5% py
195.9 - 199.0	Mafic dyke - black to grey-green, chilled contacts - magnetic - 198.8 - 199.0 brecciated with calcite cement		fine pyrite along fractures
199.0 - 208.0	Mafic volcanic - light to dark green, foliated at 80-90° to the core - may be tuff - elongate calcite amygdules locally - below 201.0 - black zones could be fine grained sediments	weak to moderate chloritic - sericite alteration	199.0 - 201.0 ~ 1% py 201.0 - 204.5 2-3% fine pyrite

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Sheet No. 4

Depth & Lithology	Description	Alteration	Mineralization
208.0 - 211.4	Intermediate dyke - grey brown, fine to medium grained - diorite - granodiorite - sheared "felsic" inclusion 209.5 - 210.2, small fault gouge at 210.0		
211.4 - 221.5	Foliated mafic volcanic as for above the dyke, may include some fine sediments - 216.1 - 216.8 intermediate dyke - 217.8 - 219.7 altered mafic to intermediate	217.8 - 219.7 moderate chlorite-sericite alteration	< 1% pyrite, except 2-3% 217.8 - 219.7
221.5 - 224.1	Fault gouge and breccia - developed in fine grained mafic volcanic or sediment	some sericite-chlorite pyrite alteration	2-3% fine pyrite
224.1 - 224.6	Felsic volcanic or cherty sediment - grey, fractured - fine grained and hard	quartz-sericite alteration	2-3% pyrite
224.6 - 240.9	Sheared mafic volcanic - medium to dark green - well foliated at 75-85° to the core but locally along the core - may include some fine grained sediments, especially 229.3 - 230.6 - 225.4 - 226.2 brown intermediate dyke along the core - 230.3 - 230.6 brown felsic to intermediate dyke	weak chlorite-sericite alteration	minor pyrite, locally 1-2%
240.9 - 253.2	Interbanded tuffs and sediments - grey, green and pink - banded and foliated at ~75° to the core - 240.9 - 247.1 mainly mafic tuff or sediment - small pink felsic fragments - 247.1 - 248.1 pink cherty sediment of felsic volcanic - small fault gouge at 246.1 - 248.1 - 253.2 grey and green fine grained sediments or tuffs - fractured and brecciated - 252.0 - 254.4 cemented fault breccia		240.9 - 247.1 minor pyrite 247.1 - 248.1 <1% py minor sp, ga and cpy

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Sheet No. 5

Depth & Lithology	Description	Alteration	Mineralization
253.2 - 264.0	Dacite to rhyolite - dark grey to almost black - fine grained, a few plag phenos - magnetic - commonly fractured to brecciated, local fault breccia, sometimes cemented - some calcite veining - 264.0 end of hole		

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**GEOLOGICAL CONSULTANTS LTD.
DIAMOND DRILL CORE ASSAYS**

SHEET NO. 1 of 1

PROJECT NO. _____

HOLE NO. BR-2K-05-01

PROPERTY Buchans East

Sample No.	From (metres)	To (metres)	Length (metres)	DESCRIPTION	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
36360	89.7	90.9	1.2	Vint. 5 to 8% py	38	-10	74	-0.3	5	185
DUP-36360					35	-10	75	-0.3	3	182
36361	108.1	109.6	1.5	Vint. frag, 2 to 3% py, minor sp, ga & cpy	174	20	248	4.1	39	635
36362	109.6	110.8	1.2	Vint. frag, 2 to 3% py, 3 to 4% sp, ga & cpy	1180	7680	35670	113	1300	6130
36363	110.8	111.8	1.0	Vint. frag, 2 to 3% py	38	-10	138	0.7	10	1010
36364	111.8	112.9	1.1	Vint. frag, 1 to 2% py	29	-10	94	0.3	10	859
36365	112.9	113.8	0.9	Vint. frag, 2 to 3% py, 2 to 3% sp, ga & cpy	572	1530	9310	21.3	1130	3050
36366	113.8	114.8	1.0	Vint. frag, 2 to 3% py	69	-10	163	0.5	72	560
36367	123.3	124.8	1.5	Vint. Frag, 3 to 5% py	68	-10	126	-0.3	7	68
36368	124.8	126.3	1.5	Vint. Frag, 3 to 5% py	102	48	378	0.5	12	74
36369	126.3	127.8	1.5	Vint. Frag, 3 to 5% py	63	-10	83	-0.3	6	79
36370	175.6	177.1	1.5	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	268	477	1010	2.1	235	1710
36371	177.1	178.6	1.5	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	96	49	177	0.8	88	407
36372	178.6	180.1	1.5	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	109	34	212	1.1	38	530
DUP-36372					107	33	213	1.4	36	523
36373	180.1	181.6	1.5	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	110	114	379	1.7	23	726
36374	181.6	183.1	1.5	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	129	75	205	1.8	13	922
36375	183.1	184.7	1.7	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	132	43	171	1.2	52	748
36376	184.7	185.7	1.0	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	130	99	341	0.8	43	959
36377	185.7	187.5	1.8	Vm & Vf tuff, 4 to 5% py, local sp, ga, cpy and ba	59	22	144	3	19	1170
36378	187.5	188.8	1.3	Vm & Vf tuff, 2 to 3% py, local sp, ga, cpy and ba	68	33	198	3.8	164	1040
36379	188.8	189.8	1.0	Vm & Vf tuff, 2 to 3% py, local sp, ga, cpy and ba	140	460	589	2.2	27	2680
36380	203.0	204.0	1.0	Vm tuff, 2 to 3% py	80	248	429	0.7	15	2720
36381	222.0	223.0	1.0	Vm or sed, 2 to 3% py	101	39	171	0.6	74	234
36382	247.1	248.1	1.0	Vf tuff or sed, 1% py, minor sp & ga	50	284	353	3.2	3	1270