

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

LATITUDE <u>L173E</u>	Tests	Dip	Magnetic	Corrected	Project No. _____	Hole No. <u>BE-96-10</u>
DEPARTURE <u>91 + 50N</u>	Depth		Bearing	Bearing	Property <u>Buchans East</u>	
ELEVATION _____	<u>218.7</u>	<u>-66°</u>	_____	_____	NTS <u>12A/15</u>	Grid Name _____
DIP AT COLLAR <u>- 60 (Not checked)</u>	_____	_____	_____	_____	Date started <u>Jan 24/96</u>	Completed <u>Jan 30/96</u>
BEARING <u>180°</u>	_____	_____	_____	_____	Contractor <u>IDEAL DRILLING (NFLD.) LTD</u>	
TOTAL DEPTH <u>218.7</u> CORE SIZE <u>BQ</u>	_____	_____	_____	_____		
REMARKS _____	_____	_____	_____	_____	Logged by <u>J.L. Harris</u>	

Depth & Lithology	Description	Alteration	Mineralization
0 - 6.7	OVERBURDEN		
6.7 - 68.8	FELSIC VOLCANICS - light buff to creamy & locally grey to green 6.7-43.1 Core is ver. broken & rubbly w/ common fault gouge & breccia zones & poor core recovery - fault gouge & breccia zones, metreages often approximate due to core loss: 9.2-11.0, 11.5-14.1, 18.5-19.8, 20. -20.7, ~28.9-29.2, 41.7-43.1 - felsic volcanic has tiny qtz crystals, hints of fragments locally - it is likely tuffaceous - some healed brecciated sections - may be due to faulting or volcanic breccias - ~21.7-~26.1 - coarse volcanic breccia. Clasts are generally dark green chloritic, mafic to intermediate vol. in a fine pink to buff groundmass. Locally has felsic fragments as well - matrix supported - lower 0.05m (26.05-26.1) shows wispy foliation at about 20° TCA 32.0-~35.2 - dark grey felsic breccia. May be a hydrothermal breccia. Groundmass is fine grained silica for the most part, clasts appear to be silicified as well 35.2-41.7 - pinkish to buff felsic, rubbly core, cut by hairline fractures where whole core is present. Often is brecciated by silicification? 41.7-~45.0 - generally light grey massive felsic volcanic, silicified, rare primary features ~ tiny qtz crystals & lighter fragments. Local layering or foliation at about 75° TCA	- weak sericite & silicic alt'n, some bleaching - local black chlorite 32.0-35.2 silicified 35.2-41.7 silicification 41.7-45.0 silicification, minor sericite	6.7-22.0 - occasional zones of 1-2% disseminated pyrite 21.3-21.5 - 10-15% pyrite w/ black chlorite 22.0-35.2 - 1-2% py finely disseminated & fracture controlled 41.7-45.0 ~2-3% pyrite stringers & disseminated. Clots of pyrite in the fault gouge & breccia @41.7-43.0

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Depth & Lithology	Description	Alteration	Mineralization
6.7 - 68.8 (Cont'd)	45.0-60.2 - very similar to above. Buff to tan w/ tiny qtz crystals or shards cut by a network of grey fine grained felsic to silicified rock containing to 20% fine disseminated py and/or py bands. Very likely is a primary fragmental w/ lighter coloured lithic fragments in a pyritic groundmass. Weakly defined layering or foliation at about 80° TCA 59.0-59.6 - fault zone. Patches of gouge to 0.1m. Below 56.5, unit is more like 41.7-45.0, may be more silicified 59.6-59.8 - small agglomerate or volcanic breccia. Pink & white clasts in a silicic groundmass 60.2-62.7 - interbanded dark grey to green & softer, mafic to intermediate volcanic 62.9-63.2 - band of immature volcanoclastic rounded 2-4mm clasts very little groundmass or cement - siliceous. Lower contact faulted 63.2-68.8 - felsic vol. as above but softer & more sericitic. Still apparently fragmental but boundaries are more indistinct. Foliation or banding @80-85° TCA. Gradationally more sericitic & altered downward. Arbitrary contact @68.8	- possible silicification, minor sericite 63.2-68.8 sericitic	45.0-57.5k - py to 10% locally, average ~5%. Below 57.5, py content decreases slowly to about 63.2 - dark blebs and/or fragments of very fine pyrite, also disseminated pyrite. Pyrite to 5%
68.8 - 117.9	FELSIC VOLCANIC - light grey to pinkish & buff altered felsic volcanics. Occasional dark grey-green more chloritic sections intermediate. Faint indication of banding or foliation at 80-85° TCA 70-70.9 - 2 or 3 small gouges on fractures at 10-20° TCA 75.8-80.5 - patchy pink potassic alt'n to about 50% of interval 80.2-80.3 - small fault breccia 80.6-80.7 - " " " 82.1-83.9 - breccia. Pale buff to pinkish fragments in a darker more pyritic cement. Hydrothermal breccia 85.4-92.3 - darker colour more chloritic, maybe mafic to intermediate interbands originally. Common brecciated appearance. Dark chloritic fragments in a sericitic & silicified groundmass. Pyrite content is slightly lower over this interval, black chlorite common 91.0-91.1 - carbonate vein breccia along core 92.3-117.9 - pale creamy to buff colour. Fairly massive, no primary features, occasionally mottled w/ darker chloritic? blotches 98.6-99.6 hydrothermal breccia? Some minor pink to white carbonate infill. Also brecciated locally down to 117.9	68.8-117.4 sericitic & weakly silicified. Locally pink "potassic" alt'n, local black chlorite - sericitic & locally weakly silicified. Rock appears to be composed of qtz & sericite	68.8-117.4 pyrite 2-8% as disseminated blebs & bands or stringers. Locally as fracture infill, average around 5% 82.1-83.9 minor sphalerite - py disseminations, stringers & bands, average 3-5% 98.6-99.6 some minor sphalerite in breccia 103.0 minor cpy 113.0-117.9 occasional disseminated black sphalerite

Depth & Lithology	Description	Alteration	Mineralization
117.9 - 158.6	MAFIC TO INTERMEDIATE VOLCANIC - dark green to black chloritic locally lighter colour & more sericitic, locally rounded qtz filled amygdules 118.7-118.9 fault gouge & breccia, also @120.5-120.6 123.3-123.6 felsic unit, some pink potassic alt'n 123.6-123.7 fault gouge & breccia; 125.4-125.5 fault gouge & breccia 127.6-127.8 pale grey qtz sericite altered zone, may be altered felsic vol. 127.8-127.9 small conglomerate or volcanic breccia unit. Mostly felsic fragments 127.9-128.5 silicified or more felsic to 1% cpy, 5% py 132.4-134.0 felsic unit? or silicified mafic, contacts are somewhat gradational. Black chlorite alt'n more common downhole, generally associated w/ pyrite. Occasional white qtz veining 146.7 small gouge zone, rubbly sections of core common, likely due to faulting 146.8-146.9 small band of massive py 150.6-151.0 fault gouge & breccia 151.1-152.4 felsic unit, somewhat silicified, local pink potassic alt'n. Some sphalerite. Massive py band 152.0-152.07 ~80° TCA 157.2-158.6 pink to buff felsic volcanic, some cpy throughout	chloritic & sericitic alt'n. Possible silicification locally chloritic & sericitic throughout	117.9-127.9 pyrite disseminated & in bands, generally 2-4% 127.9-128.5 to 1% cpy to 5% py py - 5-10% disseminated & in bands. Occasional cpy. Sphalerite light grey to reddish & black. % questionable - very difficult to pick out. Present throughout (ie. 134.4-139.7 & elsewhere)
158.6 - 192.6	- dark grey to black mafic & felsic vol. interbanded (dacitic?) more amygdaloidal than above, lots of black chlorite, hint of fragmental texture locally - not a sharp change from above unit but is generally somewhat harder - overall appears to be more mafic to intermediate composition w/ fine grained black porphyritic felsic units, plag + qtz phenos 170.4-170.7 breccia healed w/ carbonate & some silica solution breccia 171.4-171.5 band of black chlorite & pyrite, pyrite to 80% 172.8 small gouge 176.45-178.44 180.1-180.4 ~50% py in bands & stringers 183.8-184.0 fault zone 186.2-186.3 massive pyrite band 187.8-188.0 ~30% py in stringers, lower ~8m are finer grained & softer (chloritic)	possible weak silicification, black chlorite associated w/ sulphides	disseminations, stringers & bands of py to 5-8% of rock. Occasional cpy w/ the py 175.4 2-3 flecks cpy
192.6 - 195.0	SEDIMENTS mostly very fine grained cherty, light grey colour banding at about 80° TCA. Wisps & bands of py, maybe some cpy. Disseminated sphalerite 192.9-193.2 & 194.6-194.9 mainly ripped up pieces of cherty seds. in a sericitic groundmass. Lower unit may have some altered prophyry clasts. Contacts slightly irregular (erosional) 194.43-194.6 siltstone? Sericitic & pyritic, contacts are sharp @75-80° TCA & sericitic	may be silicified. Some sericitic alt'n in coarser sections	192.6-195.0 py bands & wisps. Possible cpy. Sphalerite reddish & brown to black disseminated especially over top 0.5m

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

SHEET NO. 1

PROJECT NO. _____

HOLE NO. BE-96-10PROPERTY Buchans East

Sample No.	From (metres)	To (metres)	Length (metres)	DESCRIPTION	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)			
✓	≈21.0	≈23.3	2.3	Feisic volcanic, black chl. To 3% py	10	7	64	0.3	5			
✓	≈32.1	≈34.0	1.9	Silicified feisic vol. 2-3% py	2	6	44	0.2	5			
✓	41.8	42.9	1.1	Fault gouge & breccia. 2-4% py	4	20	51	0.3	5			
✓	50.6	53.2	2.6	Felsic tuff w/ 5-8% py	1	13	15	0.2	5			
✓	80.1	82.1	2.0	Sericitic & silicic alt'n. 2-5% py	14	13	39	0.2	5			
✓	82.1	83.9	1.8	Hydrothermal breccia. To 5% py	118	14	55	0.2	27			
✓	83.9	84.9	1.0	Sericitic & silicic alt'n. 2-5% py	17	8	33	0.2	5			
✓	96.6	98.6	2.0	" " "	172	6	33	0.2	5			
✓	98.6	99.6	1.0	Hydrothermal breccia. To 5% py	1009	19	125	0.6	5			
✓	99.6	102.0	2.4	Sericitic alt'n. To 5% py	354	11	22	0.2	5			
✓	102.0	105.0	3.0	Sericitic & silicic alt'n. 3-5% py, minor cpy & sphalerite	320	13	32	0.2	5			
✓	105.0	108.0	3.0	Sericitic & silicic alt'n	40	9	15	0.2	5			
✓	108.0	111.0	3.0	" "	49	13	36	0.2	5			
✓	111.0	114.0	3.0	" "	4	17	20	0.2	5			
✓	114.0	115.5	1.5	" "	31	24	51	0.2	5			
✓	115.5	117.9	2.4	" " 3-5% py	396	17	62	0.4	5			
✓	117.9	119.9	2.0	Chloritic mafic. 5-7% py	280	4	298	0.2	5			
✓	125.8	127.8	2.0	" " to 5% py	400	9	125	0.2	5			

Sample No.	From (metres)	To (metres)	Length (metres)	DESCRIPTION	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)			
✓	127.8	128.6	0.8	Silicified mafic to 1% cpy, to 5% py	5684	18	50	3.6	205			
✓	128.6	130.6	2.0	Chloritic mafic, py 5-7%	610	2	78	0.2	5			
✓	130.6	134.0	3.4	Chloritic mafic & felsic vol. Minor sph, py to 5%	595	8	96	0.4	5			
✓	134.0	137.0	3.0	" " " "	420	22	0.26%	0.3	5			
✓	137.0	140.0	3.0	" " " "	446	11	0.27%	0.3	5			
✓	140.0	143.0	3.0	" " " "	445	5	0.57%	0.2	5			
✓	143.0	146.0	3.0	" " " "	466	3	296	0.2	5			
✓	146.0	146.9	0.9	" " " "	1391	24	311	0.3	17	0.1m py band w/ mafic		
✓	146.9	149.0	2.1	" " " "	535	8	2109	0.2	5			
✓	149.0	151.1	2.1	Chloritic mafic. Py 5-8%	413	9	377	0.4	5			
✓	151.1	152.4	1.3	Felsic vol. Py 3-8%, minor sph	461	62	370	0.6	5			
✓	152.4	155.4	3.0	Chloritic mafic, occasional cpy. Py 5-8%	248	30	225	0.4	5			
✓	155.4	157.2	1.8	" " " "	448	11	113	0.6	5			
✓	157.2	158.6	1.4	Felsic vol. Cpy to 1%. Py 5-8%	1140	16	54	0.9	26			
✓	158.6	160.6	2.0	Dacite? Py 5-81%	134	21	231	0.3	5			
✓	165.8	168.8	3.0	" Py to 5%, minor cpy & sph	342	11	866	0.5	5			
✓	170.4	171.5	1.1	Mafic to intermediate vol. Py to 8%	207	6	241	0.6	5			
✓	173.9	175.9	2.0	" " Py to 5%, minor cpy	1030	7	118	0.6	5			
✓	175.9	178.8	2.9		477	3	108	0.4	5			
✓	178.8	180.8	2.0	Mafic to intermediate vol. Py to 5%, minor cpy	1239	16	123	1.3	5			
✓	180.8	184.0	3.2		511	5	139	0.4	5			

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