

LOCATION: CH-0 187E				Diamond Drill Record				HOLE NO. 84 - 04		Page 1 of 14	
AZIMUTH: 110		DIPS - collar -50 °		CONTRACTOR: Phil's Diamond Drilling				PROPERTY: Canadian Ferrites (Dawson)			
ELEVATION:		- m °		LOGGED BY: S. Lau/P. Grunenberg				CLAIM NO.			
LENGTH: 352 feet		- m °		DATE: 28 November 1984				SECTION NO.			
CORE SIZE: NQ		- m °						STARTED: 22 November 1984			
PURPOSE: Drilling conductor from ground geophysical results								COMPLETED: December 11, 1984			
Section		ROCK		Interval		ALTERATION, MINERALIZATION etc.		VEINLETS			
from	to	DESCRIPTION		from	to			Thickness mm	Angle to core	minerals in decreasing abundance	
0'	74'	Overburden									
74'	75'	Qtz chlorite schist				< 2% dssm Py Blebs					
		85% Qtz				Blebs < 0.3 mm ³					
		10% Chlorite									
		5% 2nd Brn Biotice									
		5 Chistocity $\approx 5^{\circ}$ to core axis									
75'	75'4"									10 cm wide bull Qtz vn at	
										$\approx 80^{\circ}$ to core axis.	
										< 0.5% dssm Py in VN and	
										along contact. At least	
										2 stages of deformation as	
										lower contact is offset by	
										movement along direction	
										parallel to core axis.	

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
75'4"	81'	Recovery: 80%			up to 15% dssm Py blebs			
		Qtz chlt scht. Lightly Frt			mostly within the chlt-rich			
		Limonite along frt. Frt 70° to			bands. Py is "stretched-out"			
		core axis.			along schistosity. Possibly Primary			
		75% Qtz			However, some blebs contain			
		20% Chlt			Chlt flakes therefore suggesting a			
		5% talc (?)			secondary origin.			
		Abundant Qtz vn (<0.5 cm wide)			No other sus.			
		Highly convoluted, folded						
		schistosity $\approx 75^\circ$ to core axis						
81'	81'10"							25cm wide highly frt Qtz
								vn. Cavities present with
								submedral Qtz. Insignificant
								sus present. Frt lightly stand
								with Fe.
81'10"	87'	Qtz chlt scht			up to 15% dssm Py. no			
		highly convoluted and folded.			Preverance for either Qtz-rich or			
		general fold axis approximately			Chlt-rich bands. 2 Types of Py size/			
		70° to core axis very lightly			colour occurrence. Larger, first type,			
		Frt.			is bright yellow in colour. Is the larger			
		Recovery = 100%			in size. is 2nd in nature because of			

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
		Mafic intergrowths with their						
		generally, cubic outline. They						
		are larger in size than the second type of Py but are $< 2 \text{ mm}^3$.						
					The 2nd type of Py is much			
					smaller in size. $< 1 \text{ mm}$ in longest			
					Dimension Red Bronze in colour			
					(sus Niccolite) Possibly primary			
					in origin. Almost all are elongated			
					sus // to schistosity; wherever they			
					occur, either in the Qtz-rich			
					bands on the Chlt-Rich Bands			
					% of Py types:			
					1st type - 10%			
					2nd type - 90%			
87'	89'6"	Graphite rich section up to			Intimate spatual relation	87'3"		10cm wide bull Qtz - vn.
		50% graphite in places. Lightly			between graphite and Py.			Moderately frt with slight
		frt.			up to 20% Py. Mostly ($< 80\%$)			Fe-Staining on Frt. insignificant
		Recovery: 100%			occurring as stringers. Py			Py. ($< 0.5\%$)
					2nd occurring as anhedral			
					stringers with occasional cube.			

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
89'6"	115'6"	Qtz- chlt Scht			up to 20% Py. but Aug 15%			
		Qtz up to 75% in places but			occur mostly as discontinuous			
		averaging 60%. Highly convoluted			bands of Py blebs following			
		and folded. General fold axis			schistosity within chlt-rich			
		approx 80° to core axis. very			bands. blebs < 1 mm in longest			
		lightly frt.			dimension. Occasional larger			
		Recovery = 100%			Blebs (< 2mm in longest dimension)			
					but not common			
			99'6"		10cm wide section of graphite -			
					rich bands. Again, an intimate			
					relation between graphite & Py			
					as Py occurrence here reaches			
					20%. Py as stringers and			
					blebs of up to 4mm in longest			
					dimension			
115'6"	141'2"	Graphite-rich section up to 30%			Py % increases around & within	124'8"		15cm wide qtz vn. ~ 60° to
		in places highly convoluted & folded			graphite-rich sections up to 25%			core axis. bullish competent
		Recovery = 100%			but Aug 15% up to 1 cm in			but moderately frt. no sus.
		very lightly frt except within			longest dimension for dssm Py.			
		Graphite-richer section where			mostly < 1mm dssm blebs			
		core is moderately broken-up						
		120'-123'6" graphite poor sectn 5'	120'	123'6"	Py are dssm blebs < 1mm in longest	dimension copper		bronze (niccolite) in colour.

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
141'2"	144'	Highly broken-up core			up to 50% qtz, 20% banded			
		Qtz-chlt scht 1% diss Py			Graphite & 10% dssm			
		Recovery: 35%			Py blebs			
		(sericite)						
144'	150'	Qtz-chlt scht			up to 8% py as discontinuous			
		moderately folded. Schistosity			bands of dssm blebs & occasionally,			
		Approx 70° to core axis			cubes along chlt-rich bands			
		up to 75% qtz						
		Recovery: 100%						
150'	151'1"	Qtz-chlt scht			up to 18% dssm Py blebs			
		Moderately folded			Longest dimension < 0.5 cm			
		graphitic up to 20%			small euhedral cubes (< 0.3cm ³)			
		lower contact with a			also present making up to 20%			
		graphite-rich fault. Wall Rx			of total Py.			
		Brxx seen within 1st 2 cm						
		of fault						
		Recovery: 100%						
151'1"	158'6"	7'5" wide fault/shear zone			≈ 5% py. cubes (?!?)			
		hanging wall 40° to core axis						
		footwall attitude unknown						
		mostly graphite-coated Qtz Grains						
		with minor chlt. Recovery: 40%						

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
158'6"	170'6"	Moderate to highly folded Qtz			up to 25% Py. Aug 18% - 20%			A few minor Qtz vn.
		chlt scht			Py consists of dssm blebs up to			Aug 1cm wide. Bullish.
		small scale recumbent and			0.5cm in longest dimension &			<1% Py within Largest
		overturned folds in places			discontinuous stringers			vn at 172'6" (4cm wide).
		small scale fold axis -10° - 35°			stringers follow schistosity			
		to core axis schistosity: 5°-20° to core axis			but may also x-cut it			
		up to: 65% Qtz			60% of Py occur as stringers			
		25% graphite (up to 50% in places)			Py has a tarnished, bronzy			
		10% chlt			Appearance			
		core lightly to highly			Again, Sections of high			
		broken-up			graphite contain also contain			
		Recovery: 158'6" - 170': 80%			High Py occurrence. Most of			
		170' - 190'1: 100%			the stringers are found within			
					graphite bands.			
170'6"	172'	Aphanitic to fine-						
		grained mafic intrusive. Contact	45°					
		to core axis. Distinct 0.4cm wide						
		chill margin on hanging wall.						
		Frt 40° to core axis to contact						
		attitude. Frt surface lined with						
		Py coating (up to 30% of surface area)						
172'	190'1"	same as 158						
190'1"	194'1"	Qtz-chlt-sericite scht. Little			< 0.5% dssm Py blebs	≤ 50%	Qtz	
		to no folding for first 3'						
		No graphite contact abrupt. Schistosity	15°	frt 40° sub// to schistosity		≈ 250%	chlt pg	

cont next page

25% seric

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
Cont 190'1"	197'8"	light grey green, chloritic	total		< 0.5% sulfides			
		qtz-seric schist. schistosity						
		layers of qtz to ~ 50% of total rock,						
		crenulated slightly within upper						
		portion, to highly contorted plastic						
		folding within lower few feet.						
		To Core Axis: schistosity-Ave 65°						
		fracture - 68°						
		-few, < 1mm, wide, dark mineral infilled	194'1"	195'8"	3 thin graphitic bands ~ 1/4 inch			
		fractures(chl?)			wide each leading to next			
					contact (gradational)			
		Recovery 195' - 212' = 84%						
		212' - 232' = 100%						
197'8"	199'4"	Dark grey - black & white inter-						
		mixed qtz and graphite 60% graph			sulfides < 1% - small pockets	196'3"	196'4"	1" qtz, folded, nor orientation but
		schist 40% qtz			of fine material, linear parallel			approximates ⊥ to core axis
		Very splotchy texture, schistosity			to schistosity			Bull, white
		approx 65-80° to core axis						no sus.
		Qtz sections are somewhat clayey in						
		places, grey colored						
		Abrupt contact to core axis=85°						
199'4"	199'7"	3" inches of qtz-seric-ohl schist			coppery colored sulfide po kets			
		Qtz bands to 40%, crenulated folded			and diss, f.g. sus to ~ 2%			
		To core axis: histosity ~ 50°						

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
199'7"	200'3"	Qtz graphite schist, minor chlorite banding to core axis schistosity 70°			< 0.5% Sus. pockets.			
		Total Rock 75% graph, 20% qtz						
		5% chl						
		Contact: 65° to core axis						
200'3"	202'4"	Qtz - chl - seric schist			No distinguishable sus.			
		1mm to 1" plastically deformed						
		qtz bands to 60% of rock						
		Schistosity 75° to core axis.						
		This segment of rock grades to						
		next by decreasing abundance of						
		quartz						
		Gradational contact						
202'4"	230'8"	Qtz - chl - seric schist	212'	213'		1mm	20°	fairly uniform fracture filling
		Qtz as warpy folded bands, as						veinlets of qtz
		well as porphyroblasts oversome	213'			3"	55°	bull white qtz vein
		segments, to Ave 35% total Rk						
		Structure 214' to 215'	222'			1½"	65°	qtz - carbonate white vein
		schistosity/core axis = 5°			diss sus to < 1%			80% qtz 20% carbonate
		crenulated, abrupt change						
		M schistosity direction over 1 ft						
		224' - very thin (1/8") graphitic bands						
		over 3" of core, to 20% of rock						
		226' - dark green mineral (chl)						
		makes spotty texture over /ft of core						

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
230'8"	232'1"	Contact 47° to core axis			sulfide pockets, preferred			
		Graphite - Qtz schist			orientation parallel to qtz lenses			
		60% Graph - 40% Qtz			& on boundary between qtz and			
		4 Qtz lenses to ½" thick, 1" long			graphite, with diss Py, tot. to 3%			
		parallel Qtz lense orient to C.A. = 67°						
		most Qtz disoriented in schistosity,						
		highly discontinuous, fractured						
		Recovery 232' to 252' = 93%						
232'1"	233'8"	Contact (orientation) undiscernable						
		Qtz - 35%						
		chl - 45% schist						
		Seric - 20%						
		medium green-grey			sulphide blobs throughout to			
		Acute angled folding with axial plane			< 1%			
		near ⊥ to core axis, qtz bands to						
		½" thick						
		Average schistosity 60° to core axis	233'7"	233'8"	Graphite along contact with next			
		but mostly highly variable			rock type, thin bands (1/32")			
		contact? - to C.A. = 70°						
233'8"	235'2"	more equally grained texture, medium				1/32"	50° and	thin qtz filled stringers and
		grey-green Chl 50% seric 30%			< 0.5% finely disseminated	to 3/32"	25° &	tension gashes all along
		qtz 20% schist			sulfides		70°	
		schistosity C.A. = 70°						
		only 1 highly folded discontinuous						
		quartz band to ½" thickness						

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
235'2"	241'6"	medium to dark grey-green qtz						
		chlorite, minor graphite schist,			<0.5% sulfides as small			
		qtz to 50%, few graphite laminae			pockets of fine grains.			
		to 1% of total rock						
		schistosity folded, axial plane	1 to CA					
		Average schistosity angle to CA = 55°						
241'6"	248'6"	higher % (to 40%) of graphite			very little sulfides noted			
		in graph - qtz - chl-(little seric)			Few grains diss			
		schist.						
		Qtz is highly crenulated to completely						
		disoriented through rock, and						
		contains small amounts of calcite						
248'6"	251'4"	More evenly textured variety of						
		qtz-chl-seric schist			few (<0.5%) sulfide pockets			
		Fairly even schistosity 70° to CA			to 1mm diameter			
		medium grey-green						
		Brown tinted (layering) in some						
		areas (muscovite?) somewhat pervasive						
		along section, to ~ 5% total Rk						
		Recovery 252 - 262 = 92%						
		262 - 272 = 89%						
251'4"	273'	Medium to dark green						
		chlorite 50%,qtz 40%,sericite 5-10%						

schist (cont)

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
251'4"	273'	Schistosity not consistent through section;						
		to core axis footage			<0.5% sus, pockets and cubes to ~ 5mm diameter	1 to 2	45° & 90°	qtz filled fracturing, displaced or offset in places, somewhat
		65° 253'			little or no finer disseminated			discontinuous, 5 or 6 through
		50° 257'						whole section
		15° (local folding) 258'	to 259'			to 10	60°	parallel to schistosity qtz-cakite
		60° 272'						lenses, folded, discontinuous
		few small zones are richer in chlorite (to 75%), others are higher in qtz (to 60%)						
		Recovery 272' - 282' = 85%						
		282' - 292' = 77%						
273'	274'2"	chlorite - qtz schist, minor sericite, with lathic translucent secondary mineralization (Feldspar) over some sections, Fspar to 1cm in length, and up to 15% of particular specimens, pooled and not oriented in any particular direction Qtz - blobs with no orientation, to 2 cm diameter, & to 20% of total rock no schistosity orientation			little sulfides, some stringer type py adjacent or feldspar Laths, along margins < 0.5% sus.			
274'2"	290'6"	medium to dark green chlorite - qtz - sericite schist						

cont.

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from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
274'2"	290'6"	(cont) most noticeable						
		differences along section are in			Py, fresh cubes with recognizable			
		structure changes. Relatively			striations, as well as pockets of			
		even schistosity abruptly changes			sulfide, either eroded, or agglomerated			
		to high highly disorganized, dorray			fine grains	to 15	55°	Qtz - cc lenses eyeshaped
		of broken laminae, brittle de			to 25% of rock locally, but			plastically deformed
		formation, oataclasite			<1% oversection			some (few) tension gashes infilled
		schistosity to core axis = 55°						
		where it exists						
		apparent contact schist to cataclarite						
		to core axis = 35°						
		Cataclasite zones to w/ft length,						
		mostly gradational from schist,						
		2 zones - 1 at 281'						
		1 at 283'						
290'6"	290'11"	3 white (bull) quartz veins,			No distinguishable sus.			
		2", 1" and ½" in width,						
		separated by chlorite - qtz schist						
290'11"	292'	dark grey green chlorite-						
		quartz (little sericite) schist						
		Qtz to 15%, mostly chlorite						
		schistosity to C.A. = 70°						
292'	293'7"	Bull white Qtz vein containing a few			No distinguishable sus.			
		fragments of chlorite schist						

contact to C.A. = 85°

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from m	to m		from m	to m		Thickness mm	Angle to core	minerals in decreasing abundance
293'7"	297'8"	medium grey green chlorite			various shapes of sulfide			
		quartz (minor sericite) schist			pockets up to 2mm in			
		60% chl, 35% qtz, $\leq 5\%$ sericite			diameter, no preferred orien-			
		schistosity to CA = Ave. 55°	295'	297'	tation in core	2 to 3	50° to 60°	5 or 6 qtz-cc stringers, 1
		in most cases schistosity very						set fracture filling \perp to other set
		poorly defined, highly crenulated,						which is along schistosity and is
		or plastically broken up to a great						more folded/lenticular
		degree.	298'	299'		30	0°	core has caught an edge of
		Recovery 292' = 312' = 100%						a qtz rich zone, not a
297'8"	298'4"	medium green grey with patches						coherent vein, fragments of
		of dark green, chlorite 50%						chl schist within. no sus.
		qtz 40%, sericite $\leq 10\%$, with						
		massive chlorite patches up			- massive chlorite	>35 (?)	0°	
		to 50% of core, may be an alter-			- little or no sus.			
		ation vein with contact parallel						
		to core axis						
298'4"	300'	Qtz - cc rich zone containing						
		fragments of chlorite schist, or			few cubic sulfide blebs up			
		massive chlorite, appear to be			to 5% over given area of core,			
		portion of vein - contact to CA			but < 0.5% overall			
		= 40°						
300'	303'4"	much the same as 297'8" 298'4"						
		chlorite zones are patchy within						
		chl-qtz schist, up to 50%	301'	302'2"		≥ 30	0 to 5°	broken qtz cc chunks, portion of
		of core = massive chlorite						vein containing chl schist.

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