

DIAMOND DRILLING



31E01SE0078 85 CARDIFF

010

TOWNSHIP: Cardiff

REPORT No.: 85

WORK PERFORMED BY: A.T. Griffis

<u>CLAIM No.</u>	<u>HOLE No.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
EO 522060	24	48.0 m	1981	(1) (2)
	25	60.0 m	1981	(1) (2)
EO 552061	26	51.0 m	1981	(1) (2)
	27	48.0 m	1981	(1) (2)
	28	46.0 m	1981	(1) (2)
	29	46.0 m	1981	(1) (2)

NOTES: (1) #60-81
(2) O.M.E.P. Submittal: #OM81-9-JV-79

HOLE NO 24

DEPTH	% C	ROCK UNIT	DESCRIPTION
1.00 m			
		1.70m	pink and grey striped unit, grey Bi + Hb (15%) G-fel gneiss with streaks of pink granite cm → mm wide. (Grey - granodiorite?)
2.00		1.99	
			pink fine → medium-grained granite? gneiss into granite gneiss with biotite segregations up to a few cm, pyrite, pyrrhotite, x-cutting calcite veins with pyrite, and black soapy mineral, possibly some granodiorite bands
3.00		3.01	diopside 'clot' nearly massive coarse-grained diopside + calcite matrix + sulphide matrix, diopside crystals with black reaction rims - serpentine alteration? 5-10% pyrite + 80% diopside, also garnets - diopside banding in granitic rock
		3.60	
		3.82	
4.00		4.01	medium/coarse-grained feldspathic rock - greenish feldspar, minor mafics, some interstitial feldspar, white relict crystals with pink haloes (radioactive), garnet, serpentine along fracture (amorphous?) rock
		4.41	
		4.70	breccia feldspathic rock (fragments serpentine with pyrite matrix, calcite in fractures)
5.00		5.01	grey → pink granite gneiss, black fractures + calcite, more than one granite?, sulphides along hairline fractures, areas of coarse-grained pink granite
		5.30	
		5.53	serpentine - biotite gneiss partial breccia clay? pink & grey striped granite gneiss, medium-grained pink granite with biotite, hornblende? cm banding, fractures - displacement sulphide - calcite - serpentine sulphide bands - pyrite pyrrhotite more diopside bands + granite Serpentine band, MI 70%, garnets 3-5% small into more pink granite
		5.70	
		5.80	
		5.90	
			5.70/ mostly serpentine, some calcite veinlets, 10cm into sulphide band in calcite, serpentine + fine green powder
			5.90 pink granite (gneiss?) highly fractured, cc + serpentine

HOLE NO 24

DEPTH	%C	ROCK UNIT	DESCRIPTION
6.00			more serpentine or chlorite zone? with remnants of pink granite?
		6.40	mafic band to pink weakly foliated granite, hornblende, banded sulphides - pyrite pyrrhotite, cp?
		6.60	
		GAP	
		6.70	mafic band + pink and green feldspathic band with diopside
7.00		6.90	diopside rock, MT ~ 40%, green, cc-si, all calcareous diopside gneiss, medium-grained, sulphide (Fluorite was in one of the granitic units)
		7.40	
		7.50	calcareous mafic rock biotite? hornblende gneiss, MT ~ 60%
		7.70	medium-grained pink granitoid gneiss, MT 15% biotite, hornblende mixed - pink granite bands, pink & grey granitic bands, sheared? granite & ribbon @, medium-grained cc-si bands, sulphide, pink and green striped unit
8.00			mafic calcareous zones with sulphide enrichment some serpentine bands, banded
		8.71	R2 50% mostly cc-si diopside gneiss (mafic), + pink granitic bands. serpentine + pyrite band
		8.90	fracture-fill pyrite and offset
9.00		9.17	pink and grey banded gneiss, slightly calcareous, light green diopside gneiss, medium-grained, minor biotite
		9.60	local white calcite bands with diopside up to 2cm, sulphide, calcareous bands in light green diopside gneiss, also pink and green feldspathic and granitic bands, disseminated sulphides interbanded cc-si and granitic rocks, variable grain size
10.00			local white calcite band + sulphide, mostly fine to medium-grained light green diopside gneiss, some serpentine, sulphide along cleavage, pink granite shear? bands cc-si light green
		10.60	
		10.81	
11.00		11.25	phosphate or biotite - diopside gneiss, grey green non-calc. MT ~ 10-50% variable mica content, sulphide banded streaky light green diopside gneiss into more homogeneous diopside gneiss, MT ~ 50% interbanded white calcareous bands and light green diopside gneiss, pink - sheared? granitic bands, sheared calcite

HOLE NO 24

DEPTH	ZC	ROCK UNIT	DESCRIPTION
12.00		11.93m	with phlogopite, mafic mineral altered yellow, fine graphitic shears, sheared: phlogopite-dioopside marble, graphite
		12.13	diopside cc-si, (20-30% diopside) banded cc-si rocks,
		12.30	minor 'marble' sheared granite (or foliated),
		12.53	white sheared bands.
13.00		12.90	local graphitic shear, 2cm wide - fine-grained graphite in white marble? into more diopside cc-si (mostly calcareous) green-white, calcareous bands, minor pink
		13.17	feldspar augen, graphite in cleavage planes < 1%, sulphide some serpentine seams with 5% graphite
			mixed band medium to coarse-grained white cc-si and fine-grained green diopside gneiss
			medium to coarse-grained graphitic (few %) diopside (25%) white marble?
14.00		14.17	transition diopside cc-si and white coarse-grained marble?
		14.28	interbanded graphite, into iron calcite diopside gneiss
		14.67	interbanded slightly calcareous light green diopside gneiss.
		14.80	fine-grained, graphite ~ 5%, and green diopside with cc matrix, swirly banded, minor pink feldspar bands
15.00		15.04	disseminated sulphide bands, granitic intrusive bands
		15.22	local graphitic shear, transition diopside gneiss to granite coarse-grained foliated (or sheared) granite, ribboned some diopside black mineral?
		15.73	mixed granite gneiss with large diopside crystals and light green cc-si with pink feldspar, graphite along serpentine veins, fluorite 1470m
		14.80	white cc-si and diopside cc-si medium to coarse grained, few % graphite, granitic bands interbanded graphite 10% locally, green non-cc diopside gneiss
			interbanded with calcareous, pyrrhotite, few % graphite
			fairly homogeneous pink-green medium-grained nearly massive rock, chloritized fractures, low mafics ~ 1%, feldspathic any Quartz? anorthositic? iridescent feldspar ^{light colour}
			sulphides 1%, graphite along fractures into clots of monazite - cc, redict white crystals?
			shed or well foliated calcite band, + Q, sulphide

HOLE NO 24

DEPTH	%C	ROCK UNIT	DESCRIPTION
		15.80	
16.00		16.10	graphitic (5-10%) diopside gneiss with pink feldspar, some cc matrix, cc-si
		16.40	fairly homogeneous fine/medium-grained biotite-(diopside) gneiss, some pink feldspar, MT 15%
		16.55	graphitic coarse-grained cc-diopside to medium-grained banded green-pink diopside/granitic bands
17.00			medium to coarse-grained cc-si diopside - white calcite matrix, pink feldspar patches, patchy, 6-8% graphitic
		17.15	fine/medium-grained graphitic (diopside) biotite gneiss, slightly calcareous, some diopside bands, MT ~25%, 2-3%
		17.30	graphite, sulphide along fractures
		17.62	calcareous diopside gneiss + coarse-grained granite band
18.00		18.00	medium to coarse-grained foliated (sheared?) pink to grey granite MT ~3%, trace of graphite, sulphide along fracture
		18.25	fine/medium-grained graphite-(diopside)-biotite gneiss, MT ~25% green/green banded
			banded pink feldspathic and green diopside bands - mostly calcareous also white calcite bands, graphite 5-10% in bands light green diopside gneiss, sulphides graphite overall few % some green feldspathic bands?
19.00		18.87	
		19.00	interbanded pink feldspathic (granitic) and diopside gneiss
		19.45	medium-grained graphite-biotite diopside cc-si, calcareous bands, minor granitic bands, ^{most} graphite in calcareous bands
		19.80	light green feldspathic? rock bands and pink granitic bands sulphide sparse graphite
20.00			more green diopside cc-si gneiss, serpentine bands, few % graphite, some biotite gneiss bands
		FI	medium to coarse-grained pink/grey granite gneiss, foliated, some auger, white mineral? few % mafic, hornblende clots, fluorite 20.20 (m), trace graphite
		20.84	mafic band in granite near ^{contact} grad'ation to cc-si banding of 'spotted marble' cc-si diopside + cc, 30% calcite and fine-grained green diopside cc-si sulphide, graphite ~3%, serpentine bands
21.00			spotty cc-si rock, medium to coarse-grained, clots of diopside, graphite, biotite, ~10% graphite, calcite ~50%, shears.
		21.65	

HOLE NO 24

DEPTH	3C	ROCK UNIT	DESCRIPTION
22.00m		22.10	SOS, minor fine-grained diopside-gneiss bands
23.00m		23.20	Fine-grained (diopside)-biotite gneiss, possible granodiorite?, fairly homogeneous, foliated, no graphite visible
24.00m		23.80	shear displacement, contact with coarse-grained pink granite
		24.10	foliated - ribbon Q, MI 1%, trace of graphite, fractures combining calcite, serpentine, sulphide. ~5% graphite, banded mostly diopside gneiss, some biotite, and white calcite bands, minor pink feldspathic bands, chlorite, shear-some
25.00m		24.84	abundant graphite at contact with pink granite gneiss,
		25.04	mostly medium-grained granite gneiss, minor graphite-diopside band
		25.10	some calcite
		25.24	cc-si, white spotted diopside-cc rock (marble?), 5% graphite sulphide, banding - graphite-serpentine-diopside, light green bands and pink feldspathic
26.00m		25.70	
		25.81	graphite-fel-diopside cc-si, patchy calcite, graphite 3-5%, some serpentine bands, graphite patches, medium-grained
		26.20	dark green mafic rock MI 50%, biotite-diopside-fel gneiss, few % gap light green rock - fel-diopside, 3-5% graphite, sulphide medium-grained, graphite concentration ~20% band + serpentine?
		26.52	
		26.64	medium-grained banded mafic diopside bands + calcareous bands 5-10%, fine/medium grained amphibolite?, dark green, biotite + hornblende gneiss MI ~60%, sulphide + calcite along fractures, 5-10% biotite, No graph banded calcite-diopside-graphite, graphitic shears? in calcite, cc-si, calcite matrix, graphite and diopside clots, green diopside bands
27.00m		27.44	

HOLE NO 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
		27.99	
		27.12	light green feldspathic rock with serpentine bands, chlorite clots, some calcite matrix
28.00m		27.89	pink-grey granitoid gneiss + light green bands, biotite mafics, serpentine + sulphide + calcite along fracture, disseminated sulphide
		28.02	
		28.10	few crns of amphibolite?, MT ~ 40%, graphite along cleavage into biotite-dioptase-fel gneiss, MT 20-25%, medium-grain, few % graphitic, sulphide serpentine band
			mixed bands - light green feldsp + mt dioptase, dark green, etc., graphite 25-30% in bands
29.00m			dioptase-marble bands medium-coarse grained, massive to sheared, mica 'locks', graphite, banded with light green cc-si, chlorite mafics in white crystalline calcite, dark green clots, some dark green serpentine bands up to 2cm wide near end of unit, graphite interbanded chlorite-serpentine mafic bands + graphite and white/green dioptase-fel, + biotite bands cc-si, graphite + serpentine
		29.50	
		29.87	white cc-si (marble?) with graphitic shears up to 1cm wide ~ 10% diop
30.00		30.10	graphite shear, calcite vein, dark green altered mafic rock, chlorite-serpentine, mixed with granitoid looking biotite gneiss
		30.25	
		30.30	local medium-grained pink granite, low mafics, trace of graphite weathered 'crumbly' biotite-dioptase-fel cc-si, graphite, interbands with white/green cc-si medium-grained and altered serpentine-chlorite mafic rock, ~5% graphite in serpentine bands, some pink feld
31.00m			
		31.13	granitoid looking biotite gneiss, some pink feldspar, chlorite, 'granodioritic', MT ~ 15%, or semi-pelitic? graphite along shears, serpentine, grey-green colour, some diopsidic bands, serpentine
		31.45	graphite concentration, sulphides
		31.54	
		31.69	local coarse grained granite band, sulphide concentrate
		31.80	
32.00		32.05	coarse-grained green-grey feldspathic rock, looks anorthositic Q? some serpentine banding, sulphide no visible graphite (feldspathic segreg white dioptase-cc-si (marble), ~15% dioptase, minor graphite green diopsidic bands with more graphite
		32.20	
		32.29	fine grained feldspathic gneiss, grey-green 'granitoid', few % biotite, green mafic mineral, fine trace of graphite
			feldspathic gneiss in contact with banded cc-si, biotite-dioptase-cc, coarse-grained mica, white/green bands graphite
33.00			band of coarse-grained graphite in light green dioptase gneiss with cc-si bands, green to white, increasing calcite and

HOLE NO 24

DEPTH	% C	ROCK UNIT	DESCRIPTION
33.00			grain size with depth into white marble? with mica (phlogopite) little graphite, relict brown mineral
	33.00		
	33.23		finer grained light green cc-si with coarse-grained cc-si band
	33.32		some serpentine bands with graphite minor disseminated graph.
	33.42		local coarse-grained granite injection in cc-si (white granite?) foliated, ribbon Q.
	33.70		more cc-si
34.00			50-70% graph
	34.04		salmon pink coarse-grained granite, sheared?, foliated, minor graphite, sulphides
	34.20		mixed region, cc-si and granitic material, diopside gneiss + pink feldsp. graphite band with up to 25% in cm bands; 33.95 graphite concentration 50-70% coarse grained 3cm wide int contact with granitic s cc-si
	34.62		
35.00			34.95
	35.10		banded white and green cc-si, serpentine bands, minor pink feldspate bands, some biotite-cc bands, few & graphite fine/medium grained pink-grey granite gneiss, Bi 3-5%, streaked Q, minor graphite, into more leucocratic fine-grained granite (or meta-arkose) with cc-si bands.
	35.71		graphitic cc-si, irregular light green diopside gneiss and serpentin band with graphite 25% graphite some calcite into biotite-diopside-fel gneiss, grey, MT 15-25%, disseminated graph
36.00			36.29
			light green grey biotite diopside gneiss, medium grained, fine trace of graphite, fairly homogeneous, look? gdi
	36.83		~ same composition, slightly coarser, also MT 10-15%, disseminated sulphid in bands, fine-grained gdi? gneiss x-cut by younger medium-grained gdi? sulphides along fractures
37.00			37.10
			local sheared? pink granite in gdi gneiss, more (diopside) - biotite gneiss bands with shear foliated granite
	37.26		grey-green biotite diopside fel-gneiss + serpentine bands with up to 5% graphite small low graphite
	37.71		medium-grained green diopside rock with sulphide, minor graphite into coarse-grained diopside-fel band granitic
			medium-grained graphitic (diopside) biotite-fel gneiss, 25% biotite, 3-5% disseminated graphite
			local coarse-grained granite, into cc-si banded gneiss with minor white cc bands, 3-5% graphite

HOLE NO 24

DEPTH	%C	ROCK UNIT	DESCRIPTION
		37.54	more biotite gneiss, cc-si bands, sulphide, few % graphit
39.00	38.86	37.73	light green cc-si with white bands, fel augen bands, biotite banding, few % graphite, grey/green striped gneiss, biotite gneiss + green (light) cc-si
		39.21	local calcite-mica band, few cm's, medium to coarse-grained, more green cc-si patchy to banded, few % graph, sulph
40.00		40.00	gross cc-si with ~10% biotite bands, + cc bands, few % graphite biotite-diopside gneiss grey-green, 15-20% biotite, MT 30% minor graphite biotite gneiss + light green cc-si, large crystals, sulphide into grey to green medium to coarse-grained (diopside)-biotite fel gneiss, 'gdi' MT 15-20%, banded 15-22 MT, no graphite
41.00		41.00	
		41.49	
42.00			
		42.55	minor light green diopside-fel bands ~1cm in 30s
43.00		42.72	light green diopside-fel gneiss, minor graphite, in 'gdi', into more 'gdi' gneiss (diopside)-biotite-fel gneiss, grey, medium-grained, no graphite, biotite and diopside variation
		43.01	
		43.40	finer-grained biotite ~5-10% coarse-grained lenses with sulphide more light green diopside 'gdi' medium-grained 'gdi' with biotite, green diopside, less foliation sulphides, some light green diopside bands, and local variation
44.00		44.10	local sheared granite bands in 'gdi' gneiss, mostly 'gdi', some light green bands

HOLE NO 24

DEPTH	ZC	ROCK UNIT	DESCRIPTION
		44.36 44.56	'gdi' gneiss with ~30% light green diopside gneiss bands mostly 'gdi' gneiss, medium grained, MT 15-20%, trace of graphite sulphide 'stringers' in 'gdi' gneiss
45.00		45.40	increase of light green 'diopside', graphite <1%, possible shear
46.00		45.90 45.87	ptygmatic fold green diopside, sulphide 'gdi' gneiss with diopside streaks, coarse-grained white B-fel (granitic) bands, -sheared, + green diopside cc-si inter bands, shearing?
		46.32	more homogeneous medium-grained 'gdi' gneiss, biotite, diopside, sulphide, some banding
		46.75 46.82	local light pink streaked 'sheared' foliated granit, 6cm wide more medium-grained 'gdi', biotite-diopside gneiss, 5-10% green diopside bands
47.00		47.22	local coarse-grained granite into less foliated medium-grained 'gdi' (Biotite, hornblende?), MT 10-15%, nearly massive trace of graphite, sulphide
48.00		47.87	finer-medium-grained 'gdi'
			END

K. Gohmauer

HOLE NO 25

DEPTH	% C	ROCK UNIT	DESCRIPTION
3.00m			
4.00	3.91		patchy, green diopside cc-si, medium-grained, some white cc bands, cc vein
5.00	4.63 1.80		patchy green diopside in cc matrix, medium-grained mica-cc rock graphite, cc vein more green cc-si with white/green cc bands, trace \rightarrow 1% graphite in bands
	5.60		green cc-si gneiss, < 3% graphite
6.00	5.73		medium \rightarrow coarse-grained cc-si marble? + diopside, MI. 6-30%, bands fine-grained graphitic shears in white marble, more white cc-diopside marble + cc-si with mica (phlogopite?), sulphide, No disseminated graphite.
	6.30		more diopside cc-si, medium-grained, sulphide, some biotite? banding, trace of graphite
	6.69		coarse-grained pink pegmatite dike or band.
	6.77		more medium-grained green diopside cc-si, sulphides disseminated,
7.00	6.80 7.00		white cc-si, diopside 15-20% (marble?) no visible graphite?
	7.14		more green diopside cc-si, some calcite matrix finer grained, more diopside, local granite band.
	7.22 7.50		more coarse-grained granite with calcareous material
	7.68		more green cc-si, trace of graphite sulphide along fracture
8.00			mixed white diopside cc-si (diopside marble) + green cc-si, 50-60% marble, sulphide, no graphite,
	8.32		biotite gneiss 25-30% biotite
	8.41		mica (phlog?) cc-si 50-60% mica, green calcite matrix
	8.60		medium-grained, relic crystals

HOLE NO 25

DEPTH	% C	ROCK UNIT	DESCRIPTION
9.00		8.60	(biotite schist?) to calcite-dioptase-phloa? cc-si, irregular patchy cc-matrix, mostly green diopside rock, some large diopside up to 2cm
		9.20	weathered cc-si rocks, calcite leached, albino? forsterite, diopside
10.00		9.53	serpentine/chlorite, weathered mafics, cc-si abundant, calcite, no graphite, iron-oxide weathering, weathered cc-si at 9.93m
			more cc-si, ~60% calcite-marble
		10.20	green cc-si fine/medium grained, some cc matrix, ~5%
		10.30	occasional calcareous bands, dark to light green, no graph?
11.00			
		11.47	patchy cc-si, mostly white (marble) with 30-60% calcite, also bands of green cc-si, clots, feldspar
12.00		11.92	Fine grained light green cc-si (20% of unit) with local coarse-grained granitic bands, bands of white cc-si (marble) (30% of unit), some fine-grained graphitic shears in marble at 12.65m
		graphite	disseminated graphite in marble
13.00		12.98	see with phlogopite? marble, graphite up to 1%, mostly foliated sheared white diopside marble, bands , folds of diopside cc-si in marble, graphite along foliation or shear in marble 3-5%
		13.26	increasing amount of diopside, dark green cc-si, serpentine?, calcite up to 3%, graphite ~5% coarse grained, local pink feldspathic bands, clots, clots of graphite up to 30%, black mineral + pyrite along fractures, some calcite rich patches
14.00		14.15	75% disseminated graphite

HOLE NO 25

DEPTH	% C	ROCK UNIT	DESCRIPTION
		14.48	more cc-si, graphite, cc ~ 40%
		14.55	light green diopside gneiss, few % graphite, some cc
		14.68	lighter green feldspathic gneiss, green coloured border of
15.00		14.84	pink granite?
		15.17	medium/coarse-grained pink granite, MT < 3%, trace of graphite colimited, cleaved? streaked quartz
		15.40	green feldspathic at contact with cc-si, light green diopside gneiss mixed with granite, minor graphite
		15.57	
		15.70	coarse-grained diopside crystals mica calcite, segregations, sulphide calcite vein? with sulphide enrichment
16.00			light grey-green feldspathic gneiss, disseminated sulphide 3% + graph light green mineral - feldspar? graphite, biotite possible garnet
		16.20	local coarse-grained diopside with black rims, + calcite, some coarse- grained pink feldspar, felsic bands
		16.60	
		16.70	increasing pink feldspar few % coarse-grained graphite
17.00		16.83	biotite gneiss band, its green diopside banding, few % graph
		16.93	disseminated sulphide 1%
		17.08	increase graphite 10-15% - locally, coarse-grained
		17.40	mixed granitoid gneiss and graphite-biotite gneiss, MT 25-30%, ~3% graphite
		17.40	
		17.64	biotite (hornblende?) - diopside gneiss, MT 45%, Biotite 25-30%, graphite coarse-grained in bands, average < 1% graphite toward
		17.76	
		17.87	coarse-grained pink granite
18.00			coarse-grained graphitic white 'spotted' diopside marble, ~60% cc, black mineral, few % graphite
			medium-grained graphite - diopside cc-si, 3-5% graphite feldspathic band + cc-serpentine minor graphite
			coarse-grained graphite in fractured diopside dark green rock, MT 25-30 5-8% graphite, some dark green mafic → hornblende? or serpentinized diopside pink feldspathic bands near core
19.00		18.26	15.2%
		19.33	light green diopside gneiss slightly calcareous 3-5% graphite, ~30% diopside local pink feldspar bands
		19.60	lighter green - mostly light green diopside? + minor cc + coarse-grained pink feldspar diopside? 60-70% darker green cc-si, cc ~ 15%, diopside ~ 70%, varies, 4%

HOLE NO 25

DEPTH	ZC	ROCK UNIT	DESCRIPTION
20.00		19.84	graphite 1% to 10% in calcareous bands 5-10% graphite, some fine-grained graphitic shears in dark green diopside cc, mafic cc-si
		20.30	50% with graphite concentration, average 3-5% disseminated serpentine, graphite up to 20% in cm band, dark green diopside cc-si, medium grained
		20.53	
		20.74	
21.00		20.80	graphite concentrate 20-50%
		21.03	50% lower graphite, with pink feldspathic bands medium/coarse-grained white cc-si, graphite concentrate at contact (~20%), white patchy 'marble', mixed with dark green diopside cc-si
		21.26	
		21.43	
22.00		21.90	50% with fine-grained graphite shears into more 50% patchy green diopside + white cc-si, ~5% graphite light green cc-si patchy to white, 5% graphite, mostly light green cc-si, some dark green mafic
		22.44	graphitic dark green biotite-diopside greiss, MT 25-30%, some biotite in bands, 5% graphite, sulphide bands disseminated fine-grained grey graphitic shear (100%) 2cm wide sulphide light green diopside rock and white 'marble'-sheared rock mixed, some coarse-grained diopside
		22.50	
		22.61	
		22.80	
23.00			pink-grey/green greiss, MT 10-15%, fine-grained, granit? dark green cc-si, ~20-50% calcite, diopside cc-si, some dark green serpentine streaks, few % graphite, carbonate content varies in bands, in places graphite < 1%, some sulphide
		23.60	more graphite - up to 6%, more calcareous up to 60-70% cc in bands, also coarser-grained
		23.83	
24.00		24.06	
			dark diopside cc-si, few % graphite 2-5%, sulphide along cleavage in bands, some serpentine bands
		24.60	slightly lighter diopside cc-si, some biotite, < 1% graphite
25.00			graphite up to 10% in calcareous bands
		25.10	sulphide along fracture, 50%
		25.20	serpentinized unit, graphite up to 5%, dark green serpentine-diopside rock, MT ~70%

HOLE NO 25

DEPTH	% C	ROCK UNIT	DESCRIPTION
	25.33		highly weathered cc-si, abundant sulphide
	25.40		breccia, cc-matrix 60-70%, sulphide along fractures, serpentine fragments, sulphide stringer.
	25.53		in situ breccia?, dark green serpentinized rock, 3-5% graphite
26.00			calcite along fractures, mafic rock
	26.20		graphite enriched up to 50%
	26.50		50% breccia, calcite filled fractured rock - mafic, serpentine diopside
	26.70		some pink feldspar into dark green diopside cc-si, 15-20% graphite
27.00	26.90		graphite-serpentine-diopside-cc-si gneiss, dark green, ca 50% MT 40-50% - varies, serpentine-graphite bands, 15-20% graph
	27.61		high graphite-serpentine band, cm band of calcite + sulphide
	27.43		graphite 50-60%, some fine-grained sulphide matrix, chlorite
	27.56		leached cc?, light green to dark green cc-si, MT 20-30%, some serpentine bands, 2-5% graphite, sulphide, biotite
	27.72		white calcite-breccia zone into serpentinized-diopside mafic rock
28.00			few % graphite
	28.20		graphitic (light green/dark green (serpentine) cc-si, ~15% graph some pyrite concentration
	NO CORE		up to 50% graphite in highly weathered rock into light green cc-si with serpentine banding, few % graphite, some biotite
29.00	29.07		dark green cc-si mafic-serpentinized, few % graphite, minor granitic bands, calcite + sulphide few mm's
	29.27		light grey, fairly homogeneous gneiss, fine/medium-grained biotite + diopside MT ~15%, granitoid? gneiss, calcite along fracture, serpentine along shears
30.00	29.95		serpentine band + graphite into white calcareous ('marble') sheared rock, diopside, fine-grained graphitic
	30.13		shears
	30.57		graphite-biotite band into light pink foliated/sheared granite-leucocratic with local diopside banding, fractured + cc + sulphide, augen, ribbon Q, sulphide bordered by calcite in veins, trace of graphite
	30.77		coarse-grained granite

HOLE NO 25

DEPTH	Σ C	ROCK UNIT	DESCRIPTION
31.00	30.77		banded light green diopside cc-si with serpentine bands
			fine-grained graphite - few % - banded
	31.14		crumbled-mass, weathered cc-si / serpentine
	31.30		serpentine band + graphite
32.00	31.43		biotite-diopside cc-si, few % biotite, weathered,
	31.50		minor graphite
	31.75		white calcite-breccia, folded coarse-grained graphitic lenses
	31.91		serpentine clasts, calcite matrix (marble?), diopside,
	32.00		folded biotite, 10% graphite, leached cc
	32.25		more dark green (white) cc-si, less biotite, graphite, similar
	32.42		to 31.43
	32.63		fine-grained diopside-biotite gneiss, possible granitoid?, local
	32.80		coarse-grained fel bands
	33.00		offset bands, fracture, serpentine calcite + sulphide + graphite
34.00	33.00		into medium-grained biotite-diopside (serpentine) cc-si with
	33.17		calcareous (white) bands
	33.24		graphite in serpentine band up to 50%, folded?, breccia?, + calcite
	33.41		more serpentine diopside cc-si, some folded
	33.60		3-5% graphite, less contorted biotite-diopside, medium-grained
	33.70		foliated gneiss, local augen serpentine bands with graphite
	33.87		possible granitoid?, light green diopside
	34.01		serpentine-graphite bands, 10-40% graphite, coarse-grained
35.00	34.01		into fine-grained gneiss with crystals and fragments into cc-si
	34.02		graphite-biotite diopside with pink feldspat, mixed granite
	34.10		few % granite
	34.90		dark green diopside gneiss, ~20% graphite, serpentine, sheared?
	35.00		light green diopside gneiss, serpentine bands, biotite banding,
	35.00		few % graphite - banded
35.00	35.00		33.60 light pink fine to medium-grain fold-graphitic band
	35.36		33.10 more light green banded diopside gneiss, local
			sulphide band, fine biotite lamination
			increasing amount of biotite also increase graphite 3-5%, graph-diopside
			biotite gneiss, banded biotite and diopside
35.00			rounded sulphide-pyrite aggregates, green fel-rock, few % graph
			pink-grey, medium-coarse-grained foliated granite, few augen
			sulphide band with dark rim, along fractures
			34.9% light green graphite-biotite-diopside cc-si, with granitic

HOLE NO 25

DEPTH	% C	ROCK UNIT	DESCRIPTION
			and calcareous bands
		35.36	biotite or phlogopite 'marble', breccia?, large fragments of
		35.62	diopside gneiss, large mica flakes, fine-grained graphitic shears
36.00		36.00	light green diopside cc-si gneiss, pink feldspar, local pink granitic bands, fine grained graphite - few %
		36.40	banded irregular, light green cc-si, few % graph., pink fel bands
		36.40	banded light green diopside gneiss, striped, some sulphide, graphite
37.00		37.16	more white cc-si bands, some pink feldspathic bands
		37.56	breccia? white cc-si + diopside (marble) graphitic shears, some pink coarse-grained feldspar
38.00		37.83	more fine-grained green diopside gneiss
		37.92	finely-fractured, fine-medium-grained diopside gneiss - bands of white cc-si + diopside (~30%) + pink feldspar bands,
		38.28	fine-grained graphitic shears ~3% graphite
		38.40	white diopside cc-si ('marble'), few % graphite
			light green diopside banded gneiss + pink feldspar (metasomatic), white calcareous bands (~20%+), disseminated sulphide, graphite
39.00			increasing white cc-si ('marble?') medium grained with depth
		39.18	white diopside cc-si ('marble') ~70%, with diopside gneiss
		39.45	light green cc-si (+ 'marble' bands and biotite banding, few % graph
40.00		39.88	local coarse-grained green feldspathic band
		40.00	dark to light green diopside gneiss, sulphide along fractures
		40.15	light green diopside cc-si, fractured, pink fel - bands
		40.25	light green-grey biotite-diopside-fel gneiss, Mt 20%, crosswise shears
		40.40	low graphite, sulphide, qtz?
		40.60	grey-green striped gneiss, biotite/diopside banding, some fel aug. mostly light green cc-si, minor white cc-unit
			(diopside)-biotite fel gneiss, medium grained, minor graphite

HOLE NO. 25

DEPTH	% C	ROCK UNIT	DESCRIPTION
41.00	40.96 41.17		light green banded diopside gn, some pink feldspar increase in cc-si (calcareous), white/light green, minor biotite very light green cc-si, <1% graphite
42.00	42.32 42.46 42.57 42.67 42.80		mica - cc-si, mica ~35%, trace of hornblende?, feldspar fragments? white cc-si, cc matrix with feldspar pebbles?, feldspar ~20%, calcareous meta-sed?
43.00	42.67 42.80 43.28 43.53 43.68 43.80		light green fel/diopside gneiss with biotite bands, few z-graph interbanded white fel-cc-si, rounded fel in calcite matrix ~15% fel, conglomerate? + diopside, few z-graphite light green diopside gneiss with biotite bands and marble bands, mostly calcareous - light green, sps, with <1% graphite
44.00	43.80 44.36 44.46		mica 'clots' in cc-matrix, 15-20% mica (philosopie marble?) graphitic shears light green diopside-fel gneiss, minor graphite sps with ~15% biotite into (43.80m) biotite gneiss - shear contact? with light green diopside gneiss, trace of graphite
45.00	44.46 45.34		interbanded light green diopside-fel gneiss, sulphide, graphite green-grey biotite fel gneiss, 10-15% biotite, cm bands of diopside-fel gneiss, trace graphite (semi-pelitic or granitoid)
46.00	45.34 46.36 46.51		grey medium-grained biotite gneiss, Bi ~25%, feldspathic streaks, 'gd' gneiss, some diopside, some coarse-grained bands, fairly homogeneous, some banding light green fel/diopside band, sulphide, trace of graphite grey biotite gneiss, medium-grained, few fel augen, sulphide 'gd' gneiss, some streaked diopside lenses, possible

HOLE NO. 25

DEPTH	%C	ROCK UNIT	DESCRIPTION
47.00			deposited fragments?
48.00	47.33		mostly grey biotite gneiss with green streaks of diopside gneiss, hornblende? some fine grained biotite gneiss with ~5% biotite green bands constituted ~10% up to 7cm wide green 'spots' in grey gneiss disseminated sulphide
49.00	48.52		banded biotite gneiss and green gneiss, mostly biotite gneiss with green diopside streaks, some coarse-grained feldspar bands
	49.20		coarse-grained green feldspathic band with coarse-grained biotite gneiss inclusions
	49.71		coarse-grained foliated biotite gneiss, Mt. 52, streaked feldspar bands, garnet?, 1mm and less - flattened? (adi?) gneiss
50.00	49.90		medium-grained 'adi'
	50.19		more massive sos homogeneous biotite gneiss, some HB
	50.36		interbanded 'adi' gneiss and green diopside-gneiss
	50.45		coarse-grained foliated granite + diopside + biotite + garnet?
	50.58		fine-grained biotite gneiss, 'adi', 'MT' ~10% nearly massive, sulphide
60.00	50.89		more biotite, coarser grained, sulphide
	60.00		END

K. Lochmayer

HOLE NO 26

DEPTH	% C	ROCK UNIT	DESCRIPTION
1.00m		1.01m	grey hornblende? - biotite (quartziorite?) gneiss MI 10% Fe-oxide stain along cleavage, disseminated pyrite along fracture
		1.20	
2.00			grey-pink gneiss, some pink feldspar, medium-coarse-grained granitoid gneiss (granite?), 5-10% MI, disseminated sulphides, some less mafic bands, hornblende or diopside, altered mafic, quartz lenses, no graphite
2.00m		2.78	fairly sharp contact, dike?, mafic dark green diopside
		2.94	hornblende, coarse-grained gabbro?, relic white crystals
		3.06	light pink granitoid gneiss, disseminated sulphides, white crystal.
		3.13	gradational contact with mafic rocks, garnet or pyroxene crystals (opx), brown
		3.24	
4.00		3.40	gradational to light green feldspathic? rock, with sulphides
		3.67	garnet or orthopyroxene, light green mineral - feldspar? or pyrite some dark green bands
		3.80	
		3.95	pink feldspathic band with diopside and hornblende crystals
		4.05	more light green feldspathic gneiss with garnet? (or pyroxene) dark green fracture-filling (serpentine?) few garnets 1mm ± les.
5.00		4.51	same rock only coarse-grained, with fine garnets (amphibolitic?) mafic bands diopside + some feldspar veins with diopside
		4.86	more mafic, 15-20% diopside + hornblende, also sulphide concentration, possible light green translucent mineral
		5.14	medium-coarse-grained light green crystalline rock with coarse grained diopside (40-50%) large diopside crystals, interstitial sulphides, pyrrhotite, pyrite, chalcopyrite?, also few % garnet, in general dark green rock, relic white crystals, some calcite matrix, gabbro?, "hourglass" disseminated sulphides
			more white calcite in matrix, interstitial to patchy, mostly diopside dark green gneiss, fine disseminated banded calcinides, garnet?, feldspathic to calcareous bands fluorite in calcite band, fine to medium garnet, mixed irregular banding, white diopside (25%), light green gneiss, dark green serpentine, disseminated sulphides, mottled

HOLE NO 26

DEPTH	ZC	ROCK UNIT	DESCRIPTION
5.00m	5.14		pink feldspathic band in the cc-diopside rock
	5.24		spotty white cc-diopside rock, breccia?, white cc matrix
	5.42		spot s. → diopside rock, crystals, large fragments?
	5.51		diopside rock with calcite matrix, and pink feldspar banding
	5.66		to light green-pink rock
	5.90		pink coarse-grained granite + diopside, fine disseminated
	6.00	graphite	sulphides, into light green diopside gneiss, some feldspar
	6.20		streaks
	6.25		streaky granite-diopside gneiss, feldspar ~5%, possible fluorite/shear
	6.42		light green diopside gneiss, medium-grained, garnet?, sulphide
	6.73		medium green diopside cc-si, <1% graphite, light green diopside?
	6.95		disseminated sulphides
7.00			local granite band fine-grained graphite
			light green diopside rock, fine-grained graphite 1%, gradational
			into mica-diopside cc-si, white rock, MI ~35%
	7.51		medium green to light green diopside cc-si, serpentine?,
			mostly light green diopside gneiss, <1% graphite, some
			coarse-grained diopside lenses, garnet? → flattened
8.00m			biotite-diopside cc gneiss minor biotite, MI 65-70, ~1% sulphide
	8.20		6.95m light green diopside gneiss, some calcite, garnet?, sulphide, no graph
	8.34		7.15m local band mica-diopside-cc-si, into more light green
	8.45		diopside gneiss <1% graphite
	8.65		interbanded light green diopside gneiss and mica-diopside cc-si
	7.51		light green diopside gneiss, with 20% bands of diopside
9.00	9.00		- calcite, no graphite, some mica
			shear contact?, fine-grained graphitic streaks, calcite vein with crystals,
	9.34		possibly fragmented light green diopside rock
	9.40		white calcite contact to light green diopside gneiss, 15% diopside
			mica in calcareous band, to light green diopside-fel
			gneiss, ~10% diopside, some biotite banding, few %,
			alveolar in green diopside rock
			- mixed rock - white diopside-calcite bands, medium green diopside,
			serpentine bands to light green diopside rock, garnet,
			possible trace of graphite
9.00m			medium to coarse-grained cc-diopside rock, 3-5% diopside/mar
			no graphite, mica?
	9.34		local coarse-grained granite intrusion, diopside crystals

HOLE NO 26

DEPTH	%C	ROCK UNIT	DESCRIPTION
		9.40	in cc-si white rocks (marble?) granitoid looking rock, medium to coarse grained, MI 53, hornblende diopside?, redish, massive, trace of graphite, some pink banding sulphide into pink leucocratic granite, coarse-grained at contacts.
10.00		9.90 10.00 10.13	medium to coarse-grained cc-si, ~50% diopside, graphite? pink foliated granite, medium to coarse-grained graphite along contact to light green diopside cc-si, banded, light to dark (serpentine) green, and white (calcite), folding; few % graphite some feldspathic streaks, 60-70% calcareous.
11.00		10.96	less calcite, some graphite in serpentine bands
		11.26	more calcareous, 3% graphite, dark green diopside, minor biotite.
		11.56	
12.00		11.70	pink to grey biotite gneiss, + diopside granite?, trace of graphite mixed green diopside gneiss and biotite gneiss, dark green diopside, 3-5% graphite, sulphide, diopside gneiss MI 35-40%
		12.45	dark green diopside bands with granitic material, coarse-grained graphite, fine disseminated sulphides, streaked pink and steel gneiss
13.00		12.95 13.00	coarse-grained feldspathic rock, grey, biotite, graphite, sulphide up to 50% biotite in band, sulphides along fracture, into more coarse-grained greenish feldspathic rock 3-5% graphite.
		13.25	
		13.39	medium-grained grey biotite (diopside)-fel gneiss, graphite, biotite banding, MI ~15%
		13.54	
		13.69	sharp contact with lighter grey medium-grained gneiss, MI ~ same but white feldspar?
14.00		14.04	gradational to less mafic ~5% coarse-grained granite? 1% graphite, into banded gneiss banded biotite-hornblende gneiss (granodiorite/diorite), MI < 30 some coarse-grained feldspathic bands, graphite 1-3%, avg < 1% coarse-grained light pink granite?, MI 2-32, trace graphite fine pink garnets, some sulphide, some biotite banding coarse graphite flakes gradational into grey medium-grained biotite gneiss, MI ~32 Q-tel
		14.60	

HOLE NO 260

DEPTH	%C	ROCK UNIT	DESCRIPTION
		14.70	
15.00	14.70		biotite ^{gr-fel} gneiss, MT 6-8%, 1-2% graphite, sulphide, hornblende?
	15.00		graphite-biotite gneiss, 2-5% Biotite, 5-10% graphite
	15.07		~15-20% graphite, coarse-grained in biotite gneiss, sulphides
	15.29		coarse-grained granitic band with coarse-grained dark diopside + hornblende?
	15.40		
16.00	15.50		increased mafics, sulphide, graphite
	15.82		15.32 15-25% graphite bands
	15.95		biotite (hornblende/or diopside) - 30-40% biotite, medium-grained, few % graphite
	16.20		15.50/ coarse-grained graphite bands, 70% graphite, few cm's wide into Biotite (40-50%), diopside (20-30%) + feldspar band
			15.82/ more graphite, ~15%-25% in diopside-biotite-fel gneiss sulphide,
	16.90		15.95/ high grade graphite in diopside-fel rock, MT 40-50%, graphite 40-60%, up to 70%, with interstitial sulphide, coarse-grained graphite.
	17.00		17.00
18.00	17.40		biotite-diopside-fel gneiss, ~5% graphite, coarse-grained
	17.75		coarse-grained light pink granite, coarse graphite minor partially foliated
	18.00 m		more graphite (5%) - biotite (10%) - diopside (10%) gneiss, medium-grained.
			more coarse-grained pink foliated granite,
			graphite concentrate + calcite + sulphide, coarse-grained graphite band - 35% graphite inter-banded with biotite + garnet? bands into more graphitic bands
19.00	18.67		18.67 graphite sulphide calcite
	19.02		decrease in graphite ~1-5% also disseminated sulphide
			biotite-hornblende/diopside? gneiss MT 20-25% few % graph
	19.29		some coarse-grained feldspathic bands at 18.46
	19.46		18.47 graphite up to 5%
			graphite concentrated near granite (~10%), coarse-grained granite bands inter-banded with biotite-hornblende/diopside gneiss ~50-60% coarse-grained granite, sulphide, graphite
		biotite-hornblende/diopside gneiss, MT 60%, 35-40% Bi, graphite granitoid or pelitic gneiss sulphide	
		more ^{19.29} granite gneiss medium-coarse grained, trace graphite inter-banded with biotite-hornblende? gneiss, up to 3% gra	

HOLE NO 26

DEPTH	SC	ROCK UNIT	DESCRIPTION
		19.46	medium to coarse grained biotite gneiss (granitoid?) possibly sedimentary origin? 1-2% graphite, MI 15-20%, nearly massive, pink to grey
20.00		19.94	coarse-grained pink foliated granite interbanded with foliated biotite gneiss, MI 20-25% - varies, sulphide graphite ~20% coarse-grained pink granite
		20.25	medium to coarse-grained feldspathic rock with biotite/hornblende or diopside banding, 1% graphite, sulphide
		20.60	mostly coarse grained feldspathic rock, pink to green feldspar granitic matrix local granite band
21.00		20.94	leucocratic, 3-5% mafics, 'light green feldspar?', sulphide graphite <1% disseminated
		21.03	more graphite up to 5%, more mafics ~5%
		21.33	pink to grey medium to coarse grained feldspathic rock (granite?) graphite in mafic bands few %, possibly anorthositic rock if little quartz, sulphides along fractures
		21.41	medium to coarse grained biotite gneiss, 20-30% biotite, 3-5% hornblende?
22.00		21.71	21.41 coarse-grained green to pink feldspathic rock, green feldspar? white crystals, 1% graphite <5% MI
		21.95	finer grained to medium grained feldspathic gneiss, 5% mafics, green, 5% graphite, well foliated, shaly, calcareous material, black band chlorite?
		22.05	dark green mafic rock, MI 60-70%, medium to coarse grained altered serpentinite, mica-phlogopite?, diopside, hornblende calcite matrix, graphitic bands sulphides
		22.30	light green diopside banded gneiss, ~3% graphite pyrite into coarse grained, sulphides, graphite fractured
		22.41	coarse grained graphitic 15%, abundant sulphide, medium green rock
		22.70	22.41 calcareous band yellow mineral? brown mineral solution fracture, into more light green diopside gneiss, 5-10% granite, some calcite
		22.88	22.70 fractured white yellow and red mineral, sulphide chalcoprite?, graphite, mafics 5-10%, into light grey-green feldspathic rock, medium grained, 3-5% graphite, sulphide

HOLE NO 26

DEPTH	LOG	ROCK UNIT	DESCRIPTION
23.00	22.95		slightly darker, 5-30% graphite, sulphide with calcite
	23.07		increased grain size, coarse-grained graphitic up to 10% in bands
	23.91		coarse-grained sulphide-band, + calcite, grey-green-pink feldspar 1-10% MT, light green diopside
24.00	23.65		grey/green diopside - feldspathic rock, ~5% graphite
	23.83		23.46-7 vein? calcite matrix, yellow mineral, hematized?, breccia
	24.00		skarn?, sulphides in carbonate, graphite ~5%, diopside
	24.00		50% calcite
25.00	24.40		coarse-grained graphitic carbonate seam, ~60% graphite, calcite + sulphide matrix
	24.50		dark green altered mafic? rock, serpentine, disseminated sulphides, ~15% coarse-grained graphite
	24.90 (S.P.)		irregular patchy light to dark green rock, diopside/serpentine
	25.17		graphitic, sulphide abundant, sulphide interstitial to graphite, ~10% graphite, few % sulphide
	25.38		graphite banding, 25-60% interstitial sulphide, x-cut of dark green diopside rock (low graphite)
	25.57		dark to medium green diopside gneiss, MT 40-50%, 5-8% graphitic seams, sulphide bands, calcareous and serpentine bands, ~5% graphitic bands with up to 70% graphite few cm wide.
26.00	26.00		graphite (15-25%) + sulphide (15%) + diopside & serpentine (50%) + calcite (5%), orange and brown (siderite?) carbonate. graphite up to 40% in places
			fine/medium-grained graphitic + sulphide band (60-70% graphite, 5-10% sulphide)
			25.22 / coarse-grained graphitic rock, 40-50% graphite with inclusion of diopside/hornblende mafic rock, 10% sulphide
			MT ~40%, biotite ~20%, + diopside/hornblende, dark coloured green, graphite 5-10% disseminated sulphide banded gneiss, coarse-grained feldspathic green bands, with up to 25% graphite, mafic dark green hornblende/diopside band 40-50% (~5% graphite), some white feldspathic bands, sulphides.
			calcareous mafic rocks, serpentine diopside, calcite > 5%, MT 40-50%, 10% graphite, coarse-grained, int. banded mafic-cc rocks - cc-si or amphibolite?, some biotite, sulph

HOLE NO 26

DEPTH	%C	ROCK UNIT	DESCRIPTION
		26.39	mafic rock, ~50% diopside, 15-20% graphite, 10-15% sulphur sulphide matrix, dark green mafic rock, 'serpentine'? CC vein + graphite 26.48, cm serpentine bands some feldspar, local variation.
		26.70	
		26.82	
27.00		27.07	
		27.17	coarser grained, less mafics, abundant sulphide, feldspar, sulphide 6%, graphite ~4% more of graphite - sulphide mafic rock, blotchy, ~15% graphite ~10% sulphide, 40% mafics + calcite
		27.62	contact, mafic dike rock?, dark green - serpentine - diopside containing lenses of host rock - with sulphides
		27.77	
28.00		27.85	
		28.06	patchy 'cc-si', coarse to medium-grained, light to dark green, ~5% sulphide, 10% graphite, 10-25-30% into banded rock (25-30% MT), green feldspar, sulphide and graphite bands, 1-2% sulphide, ~5% graphite few cm's graphite rich band ~20%, 5% sulphide serpentine, calcite vein
		28.25	
29.00		28.69	28.69 ml calcareous rock breccia? few cm's wide, biotite flak green diopside gneiss, medium green
		29.25	27.86 - 'cc-si', graphite, diopside 27.88 white cc-rock, 60-70% calcite, medium to coarse-grain diopside, graphite, nearly massive, 15-20% diopside, 2-8%
		29.35	
		29.72	28.06 banded cc-si + mafic rocks, sulphides along calcite bands, serpentine bands mostly diopside marble, graphite
		29.88	
		28.29	28.29/ dark green serpentine rock + calcite with patches of 'cc'-diopside rock and interstitial sulphide + interbanded light green, rock mostly dark to medium green mafic bands, graphite
		28.70	28.70 graphite enriched up to 30% near serpentine band more white-green cc-si to light green diopside gneiss with graphite bands calcite stripes in bands micaceous calcite, 'muddy?', few % graphite, sulphide more of the same, mostly light green diopside gneiss with medium green banding, serpentine - calcareous bands, few % graph.
		29.72	29.72/ breccia - diopside gneiss fragments mm to few cm's, sulphide + calcite matrix, sheared?, sulphide (pyrite) up to 50% in 3 cm band, some sulphide fragments
		29.88	29.88/ local graphite enrichment, serpentine, clay?, altered rock, fractured, brecciated

HOLE NO 26

DEPTH	% C	ROCK UNIT	DESCRIPTION
30.00m		30.00	mostly light green diopside gneiss, MI ~40%, fine serpentine streaks, few % graphite, trace sulphide
		30.40	local serpentine bands + calcite + sulfide vein
		30.71	some grey biotite bands, minor graphite
		30.92	folded rocks, light green diopside + calcite, few % sulphide
31.00			pink feldspathic streaks, 20-25% graphite.
			swirly, folding cc-si
			more banded light green to light grey gneiss, medium grains
		31.60	MI ~25-35%, some serpentine streaks, also pink and dark grey bands, graphite ~3%, disseminated sulphid
			striped green / grey / pink gneiss
32.00			up to 15-25% graphite, abundant serpentine veining, into
		32.29	mostly light green diopside gneiss with pink feldspar and
		32.31	dark green banding, 3-5% graphite, - variable
		32.60	dark green serpentine / diopside band with 15% graphite
		32.85	light green diopside rock, MI 40%, 1-2% graphite, sulphide
		32.92	with interbands serpentine + graphite, some pink feldspathic
33.00			bands
		33.15	light grey/green gneiss with pink streaks, MI ~25%, 10-15% diopside
			~1% sulphide 'granodiorite' looking
		33.40	partially assimilated border, sulphide at contact 1%, medium/coarse-
			grained pink granite gneiss, trace graphite
		33.81	fairly sharp contact with light green (10-15%) diopside gneiss
			sulphide, biotite? interbanded with pink granite gneiss (~20%
34.00		34.00	sheared pink granite in contact with light green graphitic
			diopside (20-30%) gneiss, dark green serpentine bands with
			10 to 20% graphite, overall few %
		34.60	calcite vein, serpentine extension 'fracture' with graphite
			+ to walls, some banded diopside gneiss
		34.79	green/pink / grey banded gneiss, coarse grained, few % graphite, calcite
35.00		34.90	340/coarse grained feldspar, with sulphide in green diopside +
			cc gneiss, patchy, banded light → dark green, + cc
		35.30	bands, up to 15% graphite in serpentine bands
			graphite up to 60-70%, coarse-grained, + cc matrix, minor sulphid
			green diopside gneiss, ~5% graphite
		34.86	another graphitic zone 50-60% graphite
			medium/coarse grained diopside cc-si, minor calcite, with

HOLE NO. 26

DEPTH	ZC	ROCK UNIT	DESCRIPTION
35.00			graphite seams, rock - not banded, nearly massive
		35.30	graphite 15-20%, patch of white/diopsidic rock, with calcite 15-20%
		35.60	dark green serpentinite rock + calcite, ~10% graphite, soap
		35.82	less dark green, more calcite matrix, swirly, 15-25% graphite
36.00		36.00	also dark fol-banding, and dark green serpentinite bands
		36.11	banded crystalline calcareous bands, green serpentinite bands,
		36.22	sulphides, ~5% graphite
			brecciated coarse, calcite vein? - sulphide enriched,
		36.60	serpentinite-calcite calc
		36.78	graphite ~25% in band with cc matrix, some sulphide, cc veining
37.00		37.02	dark green diopsidic rock with graphite bands, overall few % graphite
			minor cc - sulphide band, biotite
		37.43	(diopsidic) - biotite grey gneiss with coarse grained granite bands,
		37.52	sulphide garnet, trace of graphite
		37.70	medium to coarse grained granite gneiss, augen, sulphides, graphite
		37.91	dark green serpentinite/diopsidic folded gneiss, + cc, MF ~30% -
38.00			graphite ~1%, some pink fold spar, calcite banding,
			serpentinite bands - extension fractures, alternating with
			green fold-spar bands
		38.50	carbonate and serpentinite alternating bands, + diopsidic,
			sheared fine grained graphite
		38.72	light green coloured banded, diopsidic ~10% with grey
		38.85	and pink bands, up to 25% graphite in bands,
		39.02	disseminated graphite ~1%, 37.90m - with serpentinite
			bands - cm
			missing core
			light green diopsidic gneiss with green serpentinite veins,
			fine to medium grained, ~25% diopsidic, 1-2% graphite,
			minor grey bands
			grey to pink granite gneiss, augen sheared, grey
			at contacts, pink in middle, some pink at edge,
			fracture displacement pyrite
			more light green diopsidic banded gneiss (MF 25-35%)
			serpentinite, graphite bands (minor graphite)

DEPTH	% C	ROCK UNIT	DESCRIPTION
39.00m	39.03		band of dark green matrix (amphibolite?) MI-60% with fine white crystals, into mixed bands of dark grey biotite - diopside gneiss, and light green diopside gneiss, some light green spots in dark grey gneiss. Amphibole 1% up to 5%, sulphide, cc-bands
40.00	39.57		mostly light green diopside gneiss with serpentine-graphite bands, serpentine col bands, feldspathic bands, cc-diopside bands. Amphibole < 1% - 5% light to dark green streak
	40.17		gradational interbedded gneiss with diopside gneiss, amphibole, sulphide
	40.41		coarse-grained pink biotite gneiss to medium-grained sulphide
41.00	40.91		granite reaction bands, interbedded with biotite (1) - diopside gneiss and green diopside gneiss, layered granite gneiss, minor granoblastic mixed zone
	41.18		mostly light green diopside gneiss with biotite-feldspar banding, < 1% graphite, sulphide
	41.62		mostly grey biotite-feld gneiss (granodioritic?), medium-grained, < 1% graphite, diopside, sulphide, some diopside bands increasing granite leucogranite - 3-5%, also cc-bands towards bottom of unit
42.00	41.95		folded diopside + biotite banded gneiss, biotite bands (50-60%) sulphide, increasing diopside gneiss
	42.82		fractured green diopside gneiss, biotite clots, sulphides in field, few graphite, local bands of coarse-grained pink granite
43.00	43.22		mostly green diopside gneiss, medium-grained, some cc, biotite, 3-4% graphite
			gradational into pink-feldspar-biotite gneiss, MI 15-25% green gneiss, minor sulphide
			gradational into streaky green diopside gneiss, pink feldspar streaks, sulphide bands, 1-2% graphite, local biotite bands, local cc granoblastic zone, into more light green diamond gneiss with biotite banding
			local white mica - diopside cc-si on green diopside gneiss more light green diopside gneiss, 25-30% diopside, 50-60% feldspar 1-2% graphite, increasing calcite
			medium/coarse-grained white mica biotite or phlogopite

HOLE NO 26

DEPTH	%C	ROCK UNIT	DESCRIPTION
		43.40	diopside cc-si fine grey graphitic shears minor graphite
		43.61	light green diopside gneiss with calcareous bands with
		43.80	more white cc-si (diopside marble?) but more diopside
44.00			coarse-grained pink foliated granite, <1% mafic sulphide, graph.
			medium-grained green diopside rock, 1-2% graphite, ~20% calcareous banding, trace sulphide
		44.26	
		44.40	banded light green diopside gneiss with white cc-bands, 1-2% graphite, sulphide, some biotite-diopside banding
		44.65	white cc-si + diopside, few Quartz grains, graphite shears
		44.74	
46.00			banded gneiss, i) 15% biotite diopside gneiss, ii) 75% diopside-fe gneiss, iii) 5-10% diopside-cc bands; interbounded sharp to gradational contacts, graphite <1%, 1% sulphide
		46.18	
		46.35	mostly green diopside bands/green/grey/white striped gneiss
47.00		47.00	green diopside cc-si, more calcareous, bands medium/coars. grained white granite, minor biotite bands, 1% graph ~20% white granite
		47.38	
		47.56	banded diopside cc-si, (white), graphitic shears, and diopside (green) gneiss, calcareous unit ~70%, <1% graphite, sulphide
		47.73	
48.00		47.98	fragmental unit, white cc-si, calcite matrix, + diopside Q pebbles?, Feldspar fragments, ~10% Qtz + Fel rounded fragments of diopside gneiss, patchy breccia? conglom.
		48.47	interbanded cc-si and biotite (diopside) bands into mostly (diopside) - biotite Q-fel gneiss, MI 15-20 medium-grained looks granitoid fine garnets?, trace graph
		48.90	irregular swirly, mostly cc-si, unsorted, coarse bands of orthoquartzite? <1% graphite, some calcite pebble conglom. mostly green calcareous
49.00		B9R1	light green diopside gneiss non-calcareous, interbanded with biotite (20-30%) gneiss, 1% graphite, sulphide biotite bands ~10% of unit.
		49.00	mildly calcareous green diopside gneiss, 1% graphite, white cc-si band 49.00m in green diop gneiss biotite-diopside gneiss with diopside bands, some green

HOLE NO 26

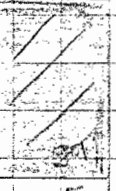
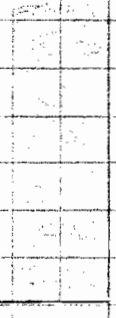
DEPTH	% C	ROCK UNIT	DESCRIPTION
		49.33	diopside bands x-cut biotite banding
50.00			more cc diopside cc-si and diopside - non cc and bands biotite - diopside gneiss x-cut by green diopside gneiss, $\leq 1\%$ graphite, sulphide + cc interbanded green diopside gneiss + cc and biotite bands, minor granitic band, medium-fine-grained biotite diopside gneiss (some granodiorite looking)
		50.40	diopside gneiss, non-cc, sulphide band, pyrite + pyrrhotite
		50.60	disseminated sulphide, No graphite?
		50.76	mafic band 5-10% biotite, 50-60%+ diopside/or orthoclase?
51.00			more light green diopside gneiss, trace of graphite, sulphide interbanded with biotite-diopside gneiss, up to 12cm
		51.20	grey green/or grey striped gneiss ~4% biotite gneiss
		51.40	green diopside cc-si $\leq 1\%$ graphite, fractures grey biotite-diopside gneiss, serpentine + calcite along fractures, disseminated sulphide, MT 15-20%, trace graphi.
		51.88	shearing? towards bottom
			end of hole

K Gochmayer

Project No. 2502

CLIENT: GRIFFIS

HOLE NO: 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
0			px = pyroxene gdi = granodiorite Q = quartz bi = biotite hb = hornblende cc-si = calc-silicate cc = calcite MI = mafic index fel = feldspar
1.0m			weathered gneiss, granitoid, gdi gneiss bi, hb? medium grained
2.0m			fracture Q
.16 .27 .31	1		
.91	2		Banded Q-fel ampb/px gneiss, possible cc-si gneiss with gdi gneiss disseminated sulphides parallel to gneissosity, garnet calcite & fluorite vein
3.0m .08			
.40	5		coarse grained granitic band containing coarse grained diopside? (or amphibole) garnets, banded with medium grained diopside(?) gneiss, sulphides abn and small desseminated, coarse-grained diopside conds ~ 3.69 - 3.70 m
.12			
5.0	?		coarse-grained Q-fel rock with bands of coarse grained sulphide bearing mafic/ultramafic diopside(?) rock containing garnets(?)

DEPTH	% C	ROCK UNIT	DESCRIPTION
5.0m			
5.86			
6.0m	3	BorC	Q-fel (diop) gneiss, medium-grained, pink feldsp
6.11			segregation. Diorite gneiss - Hornblende?
	5		gar. sulphides
6.41			medium-grained pink granitic gneiss, disseminate
7.0m	3	C	disseminated sulphides
7.10			(gar. HB gneiss amphibolite (meta-diorite?)
7.32			with minor feldspar banding/or diopside gneiss
			→ sulphide band (Mafic)
7.32			
	3		white fel / HB or diop banded gneiss
			inhomogeneous inequigranular
			garnet, sulphide
8.0m			
	3b		8.00
8.30			
8.42	g	GRAPH	8.42
8.63	3b		8.63
		A	8.84m
9.0m			
9.05			OA3% ↑ 9.05
		BorC	9.17m ↓
9.90			9.90
10.00m			
		C	
			10.47m ↑ 10.40
			1.09%
11.00			

Q-fel (diop) gneiss, medium-grained, pink feldsp
 segregation. Diorite gneiss - Hornblende?
 garnet, sulphides
 medium-grained pink granitic gneiss, disseminate
 sulphides banded
 disseminated sulphides
 (gar. HB gneiss amphibolite (meta-diorite?)
 with minor feldspar banding/or diopside gneiss
 → sulphide band (Mafic)
 white fel / HB or diop banded gneiss
 inhomogeneous inequigranular
 garnet, sulphide
 fine to medium-grained inhomogeneous green diop cc-si
 banded with calcite segregations
 graphitic zone - slightly finer-grained
 more leucocratic medium-grained bands, mafic bands
 sulphides
 graphitic 8.84-8.94 - fine grained banding
 disseminated to bands in
 Banded mafic (diopsidic) and dark
 bands (micaceous?)
 fine to coarse-grained graphite
 some nearly massive bands, foliated to
 disseminated
 - some feldspar segregation
 cc-si rocks - mafic rocks
 - also sulphides' (9.77m more sulphides)
 - more homogeneous medium-grained mafic 'gneiss'
 MI ~ 50% gabbro? composition, more biotite?
 - brown mineral gar? or opx
 - disseminated graphite

HOLE NO. 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
		10.48	
11.00m		3a1	banded light green diopside-gneiss - also with Biotite bands - graphite, disseminated sulphides
12.00m	2.20%		
		12.51	increase in amount of graphite ↓ also coarser-grained in bands some pink feldspar segregation 12.51m - graphite band.
13.00m			- coarser-grain diop-gneiss with graphite and pink K-feldspar? Feldspar bands; augen.
		13.38	
		A	similar to above unit but brecciated looking less mafics, relict garnet?, more sulphides
		13.74	graphite concentration 13.60 → 13.70 m
14.00m		3a1	- similar to unit 12.51 → 13.38m.
		13.96	also foliated graphitic bands
		B	graphitic Biotite-diopside light to dark green medium-grained gneiss MT ~ 25-30% - more Biotite - good foliation - mafic & felsic banding, also sulphides
15.00m			- 50% with interbands of light green felsic & pink felsic, medium → fine-grained - graphite - some coarse grained, sulphides - some feldspar 'augen'
	1.91%		
		15.58	50% Pi - diopside medium-grained gneiss
		15.70	~50% B? Felitic?, sulphides, graphite
16.00m			'Augen' gneiss band inter-layered with diopside gneiss - banded.
		F	- fluorite?, sulphides, large graphite flakes

HOLE NO. 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
16.00m			pink felsic bands minor (5-15%) medium to coarse-grained - often coarse-grained graphite associated with pink feldspar bands.
17.00m			
17.50m			
17.50m ↓		17.45	
17.50m ↑		17.70	coarse-grained felsic band with 'augen' - graphite, sulphides, relict rounded crystals?
18.00m	1.58%		foliated, Bi-diopside? gneiss (fel, + Q?) MI ~ 30%
18.43m ↓		18.57	minor pink to white feldspar banding
18.43m ↑		18.69	some graphitic bands
18.80m			homogeneous in places
19.00m	2.48%		local band medium to coarse-grained felsic (granitic) band with graphite flakes
19.40m		19.46	same graphitic Bi-diop (foliated gneiss)
19.40m ↓		19.70	medium to coarse-grained felsic band with graphite and sulphide
19.40m ↑		20.04	same graphitic Bi-diop gneiss with feldspar segregations, some feldspar 'augen'
20.00m		20.13	
20.00m ↓		20.24	graphitic gneiss, ~ 25% graphite, Diopside
20.00m ↑	3.72%	20.48	nearly massive rock with large feldspar porphyroblast/phenocryst
20.13m		UM	nearly massive diopside gneiss MI 30-4
20.24m			graphite + sulphide, minor Bi
20.48m			more felsic diop (HB?) gneiss
			MI 25%, some Bi, graphitic, some pink Fel
			20.48 more mafic, abundant crenulated? graphite
			15%+, chloritized, serpentinized?, dark green altered mafics, scopy, MI 70%+

HOLE NO. 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
		20.64	
21.00m		21.00	fine-to medium-grained, nearly massive granitoid? rock, MT ~ 10-15% grey (or semi-pelite?) minor pink feldspathic bands (Bi) - diopside? - feld gneiss - minor graphite, sulphide.
	9.72%	22.00	Nearly massive → gneissic green to black diop-feld rock graphitic (15-20%) some concentration up to 30-40% graphite in bands.
22.00m		22.35	- local mafic bands - breccia fragmented diopside gneiss, feldspar fragments, some coarse-grained graphitic fragments, Bi-diopside gneiss fragments (mm's to cm's) with a fine grained black graphitic matrix
23.00m		22.80	
		23.08 ↓	
		23.30	medium-grained graphitic diopside foliated rock similar to fragments in breccia circulated? high grade graphitic some non-foliated with fine-grained graphite, feldspar (microcrysts) and rock fragments
	3.55%	23.85	
24.00m		24.02	diopside-feldspar rock (+ Biotite + graphite) MT ~ 40-45%, foliated
		24.10	
		24.27	chlorite? along fractures, altered-chloritized black material (serpentine? along fractures, also sulphides along fractures)
		24.50	medium → fine-grained, nearly massive to foliated banded diopside (or 'horblende?') gneiss
25.00m		24.92 ↓	SOS with minor fel augen, foliated, chloritized
		25.11	SOS with local variation - fel augen 1-4cm, high graphite
	2.84%	25.27	pink feldspar segregation, abundant graphite at contact, chloritized, altered, crumbly diopside gneiss, nearly massive banded diopside gneiss + graphite
		26.00 ↓	more banded green diopside gneiss & felsic bands AVG MT ~ 25-30% Biotite foliation, feldspar augen graphitic bands.
			SOS banded green diopside gneiss, mafic banding pink feldspar to green, graphite - fairly abundant - biotitic

HOLE NO 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
26.00m	↑	26.07	well banded diopside gneiss, light and dark bands
	1.63%	26.30	graphitic bands, medium to coarse grained, discontinuous
		26.34	bands, mm mafic bands, MF ~ 25%
		26.50	white feldspar bands with fine grained graphitic shears?
		26.64	streaks
27.00m		27.05	26.34 same band? light green (chloritized?), striped diopside-gneiss
	27.18 ↓		more mafics, darker
	↑	27.42	pink felsic, coarse-grained band (injection) in contact with
		27.53 W	(26.69) fine to medium-grained, ~15% mafics, granitic? rock
	4.01%		26.83 large diopside altered, coarse grained feldspar injection
			Augen, sulphides minor graphite
28.00		27.97	green mafics (diopside?) banded diopside gneiss, graphitic bands
		28.10	pink feldspar bands, green feldspar, medium grained
		28.24	crumbly weathered graphitic-chloritized diopside-gneiss
			graphitic seams in green banded diopside-gneiss (calc-sil),
			(phlogopite or biotite), sulphides, some garnets, some calcitic
			serpentinized?
	28.85 ↓	28.79	nearly massive graphite seam ^{+HB} green feldspar diopside
29.00m	↑	29.02	biotite phlogopite - diopside-feldspar gneiss
	1.33%		green serpentine? banded rock with graphitic seams up to 3cm wide
			with local medium-grained pink feldspathic bands
	29.46 ↓	29.46	graphite-serpentine slickensides? 28.60m
	↑	W	medium-grained granitoid? gneiss, augen, biotite, graphite, diopside
			sulphide trace
30.00m	3.22%	29.96	29.02m more green, graphite-biotite-diopside gneiss with
		30.22	minor feldspar augen, serpentinized? sulphides
		30.45	crumbly weathered chloritized graphite-biotite r.k
		30.50	white feldspathic rock, carbonate-enriched coarse-grained breccia
			serpentinized graphite-biotite-diopside gneiss, fel augen
			breccia, gouge?, fine-grained black graphitic matrix +
		30.90	serpentine with rounded fragments of feldspar-diopside
31.00m		C	rock + graphite / or mat.
		31.20	calcareous diopside rock with graphitic seams dissemination
			slickensides, serpentine, calcite veinlets, altered rock,
			sulphides along fractures, brecciated?
			sandy, serpentinized black bands, fairly mafic in bands
			interbedded with serp-diop-green-gneiss, graphite + sulphide

HOLE NO 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
		31.20	
		▲ ▲	breccia diopside-feldspar gneiss, feldspar augen?, graphite, serpentinized rock, calcareous (secondary?)
		▲	▲
		▲	▲
		▲	▲
		▲	framboidal pyritic, sulphides concentrated with calcite
32.00 (Box 6)	32.10 ↓ ↑	32.00	
		▲ ▲	serpentinized, graphitic (up to 25-30%) bands, + sulphides
		32.40m	diopside gneiss, calcite vein → breccia, graphitic fragments calcite enriched
	3.09%		
			well foliated, banded, graphite-biotite-diopside (hornblende?) - fel gneiss
			serpentinized some nearly massive diopside-serpentine bands up to 2m
			layered rock?, some sulphides in serpentine bands, fine to medium grained
33.00m	33.01 ↓	33.02	medium-grained felsic rock with disseminated sulphides, granitic / granodioritic?, Biotite, graphite, homogeneous, MT = 5%
		33.37	
R2 33.48		33.48	more diopside banded gneiss
			mostly pink medium to coarse-grained granitoid gneiss with feldspar augen (a few), grey to pink feldspathic gneiss, sulphides, inter bands of diopside rock (green) in feldspathic gneiss, pyrrhotite bands
34.00m		33.90	diopside bands 3-5% up to 50cm wide possibly sheared granite (porphyritic), minor graphite
			interbanded green and dark rock, well foliated, banded, graphitic green, graphite-serpentine/diopside-feldspar gneiss, some fine-grained black bands, graphite, sulphide
35.00m	35.09 ↓ ↑		
	0.91%		
		35.90	
36.00m			interbanded 'green' and 'black' bands, well foliated, graphitic
			'green', graphite-serpentine-diopside-fel gneiss
			some fine-grained black bands, graphite, sulphide, some feldspar augen, biotite
37.00m			'black' bands similar with feldspar augen, bands in mm → 20cm, green bands more felsic less biotite

HOLE NO 27

DEPTH	Z, C	ROCK UNIT	DESCRIPTION
37.00m			sulphides enriched along x-cutting fractures and along serpentine bands green bands - light green mafic, green feldspar graphite in both bands
38.00m	38.01 ↓	37.96 Box 7 38.10	band of nearly massive green diopside-fel gneiss felsic fine → medium grained sheared granite to coarse-grained 'augen' gneiss, with bands of diopside. sulphide - pyrite, pyrrotite, graphite - trace sulphide band ~ 38.73, ribbon quartz
39.00m	39.01 ↑ 0.75%	38.90 39.40 more graphite 39.70	banded green diopside - fel rock with discontinuous bands of fine → medium-grained 'black' - Biotite bands (gneiss). sulphides disseminated, < 1mm size graded bands as well, less graphite (trace?) flattened feldspar → 'augen' minor more graphite
40.00m		39.45	more graphite, more biotite, better foliation fine → medium-grained graphite - biotite - diopside gneiss fel augen mostly light green (low biotite) diopside rock, patchy rather than banded in places
41.00m	40.81 ↑ 0.48%		bands of i) green nearly massive diopside rock ii) coarse-grained sheared or foliated feldspathic bands iii) black foliated diopside - biotite - fel gneiss, iv) medium grained white + black biotite - fel rock graphite in all bands - varies %, mostly green with ii, sulphides pyrite, pyrrotite?, concentrate ~ 39.83.
R3 42.00m	42.23 ↓ ↑	41.70	coarse-grained biotite - fel rock black? and green (diopside) bands. biotite ~ 25% + in bands at intervals of 2cm → 10cm, some feldspar porphyroblasts? less medium grained biotite - diopside gneiss - patchy green to white with graphite, sulphides in coarse-grained feldspar lenses

HOLE NO. 27

DEPTH	% C	ROCK UNIT	DESCRIPTION
43.00	0.812		SOS
43.47 ↓ ↑			
Box B 44.00m	0.72%	43.94 Box B	mostly green nearly massive unit, low biotite, banded gneiss, bands of coarse-grained biotite rock, disseminate graphi.
44.55 ↓ ↑		44.53	
45.00m	0.09%	44.83 NIC TO TRACE GRAPHITE	'black' (diopside) biotite - fel gneiss, graphite - fine < 1% banded with minor green - diopside gneiss, some feldspar augen, rocks similar to granodiorite gneiss, disseminate sulphides, up to 3%.
R2		45.43 R2	44.83 - medium-grained Biotite-fel gneiss, Feldspar augen possible granodiorite gneiss, some coarse-grained feldspar segregations with sulphides, less banding - minor green unit, fairly homogeneous, sulphides ~ 3%
46.00m			
46.63 ↓ ↑		46.70	
R3 47.00	0.04%	R3 46.94	more 'striped' biotite mm banding, medium to coarse-grain feldspar segregations, lenses, flattened. less sulphides (granodiorite? gneiss) Bi-fel gneiss with augen, some green bands, nearly massive to banded
48.00m ↓		48.00	END.

K. Gahnauer

HOLE NO 28

DEPTH	% C	ROCK UNIT	DESCRIPTION
0.00m			
BOX 1 R1		0.52 R1	Iron stained, ochre-yellow feldspar?, coarse diopside crystals with black rims (cm), ~5% diopside.
1.00m		1.05	- minor fluorite, calcite, purple-grey quartz diopside in bands, possible garnet
	quartz	1.83	nearly massive granodiorite? biotite-hornblende, chlorite MI ~10-15%, weak foliation iron stain along fractures - sulphides disseminated, garnets 1.60m bands 'diacitic' composition - amphibolite
2.00m		2.06m	feldspathic rock - greenish, MI ~5%, medium-grained sulphide bands medium to coarse grained biotite-granodiorite?, magnetite 2.46m, iron stain local mafic bands - hornblende 3.15m
3.00m		3.26	
		3.52 R3	coarse-grained feldspar rock with sulphides, diopside crystals garnets? cm, pyrrhotite, pyrite. local mafic bands Bi-HB ~30%, abundant sulphides 5-8%, garnets? in mafic bands fractured inhomogeneous 'granodiorite' gneiss streaked medium to coarse-grained, local Fe-stain relict white crystals? amphibolite?
4.00m			
5.00m		5.10 R4	diacite to 'granodioritic' bands, Biotite, hornblende, 5.43 medium to coarse grained non-foliated patchy mafic rock with rounded diopside crystals, cm's, ~25% diopside, + feldspar, garnet, sulphi
	B		

HOLE NO. 28

DEPTH	% C	ROCK UNIT	DESCRIPTION
6.00m			SOS
Box 2		6.60 B2R1	
7.00m	6.89 7.09		garnet-hornblende? serpentinite-diopside-feld rock with medium to coarse-grained diopside, pink feldspar (metasom. sulphides) into granitic looking rock, light pink, sulphides along fractures into coarse-grained granite with large diopside crystals some displacement along x-cutting fractures, calcite veins, abundant fractures, with sulphides
8.00m	8.00m		areas of abundant diopside + garnet, diopside crystals serpentized borders, calcite matrix, calc-silicate
	8.50 8.62 8.77		phlogopite or biotite - calcite rock (marble?) 'spotted' w/ sulphides 8.62m silicate inclusions, diopside calc-silicate, nasal phlogopite? 'marble' calcite rock, with diopside patches
9.00m	9.40		granitic injection into 'marble', calc-silicate
	9.62	R3	no calcite, garnet - diopside hornblende feldspar rock non foliated serpentized sulphides, 9.78m pyrrhotite conc
	9.95 10.05		diopside calc-silicate, calcite vein coarse-grained - feldspar - diopside rock, (dike?)
	10.35		garnets, 'serpentine' veins
	10.60		fine to coarse grained diopside-feldspar rock with disseminated sulphides, serpentized diopside, fibroblastic pyrite along fracture
11.00m	10.90 11.05 11.20		coarse grained feldspar, light green mineral apatite?, fluor calcite, coarse-grained serpentized diopside, red to green feldspar + white feldspar, calcite vein 10.90m sulphides coarse grained with black reaction rims more coarse-grained hematized feldspar, white-diopside rock with minor sulphides calcite vein, stylolitic boundary, + fluorite

HOLE NO 28

DEPTH	% C	ROCK UNIT	DESCRIPTION
		11.20	
11.36			foliated or sheared granitic material, pink feldspar auger, sheared quartz, minor sulphides, injected into a diopside cc-si green/white, feldspar + sulphide graphite - disseminated bands in banded diopside cc-silicate, sulphite surrounding pyrite
↑	0.58%	11.67	
12.00m		11.95	
		12.00	more graphite, also pyrite, sulphides and fine-grained graphite along fractures, graphite fairly abundant in calc-silicate
		12.55 ↓	
13.00m		12.65	dominantly fine to medium-grained banded green → black rock with fine foliated graphite, flattened crystals, calcite along fractures, diopside rock patchy → cc-silicate some medium → coarse-grained diopside + calcite, some pink granitic bands, phlogopite? in calc-si, serpentine
		13.70	phlogopite? - diopside cc-si (marble?) sulphides, graphite, some pink feldspathic bands
14.00m		14.37	phlogopite? - 'marble'?
		14.40	diopside - phlogopite? - cc-si, + graphite - fairly abundant at 14.56 m, some pink and green feldspar, phlogopite bands
		14.84	
15.00			coarse-grained biotite? band into fine-grained (diopside) - phlogopite/or biotite - grey gneiss with minor diopside bands, pink feldspar, calcite veins, No graphite?
		15.50	phlogopite/biotite - diopside cc-si, calcite vein,
		15.60	fine → medium grained, graphite, sulphide
		15.70	granitic intrusion
16.00			interbanded cc-si rocks with granitoid
		16.17	graphite along fracture - displacement, serpentine nearly massive graphitic seam (2-3 cm) in phlogopite - diopside cc-si, with pink granitoid bands
17.00m		16.76 RA	more graphite in fine-grained grey-green biotite - diopside - fcl rock, no calcite, some pink feldspar
		17.02	



HOLE NO 28

DEPTH	% C	ROCK UNIT	DESCRIPTION
17.00m		17.02	
		17.17	some calcareous bands
		17.22	pink granitic gneiss + diopside rock interbanded graphitic seam in cc-si
		17.40	
18.00m		17.73	contact between serpentized HB? - diopside rock and granitic rock; pink granite with MI < 5%, flattened & lenses, medium to coarse-grained, feldspar augen, some serpentized diopside enclosed
		18.32	interbanded fine-grained diopside gneiss + pink granite - fine graphite
		18.48	
	2.13%	18.73	medium-grained phlogopite? - diopside cc-si green graphitic (abundant) diopside cc-si, slightly calcareous some pink feldspar, sulphide
		18.90	
19.00m		19.22	Fine-grained graphitic (shear) bands and coarse-grained graphitic seams in cc-si
		19.30	
		19.67	less green, graphite-mica-diopside-fel gneiss, pink band black zone, abundant graphite abundant biotite, graphite, some diopside + feldspar, semi-pelitic?
		19.93	
20.00m	1.12%	20.55	Biotite-fel rock with graphite concentrated along fractures and disseminated bands, chlorite, some feldspar augen, sulphide disseminated bands, some diopside in bands
		20.73	
21.00m		21.43	(pelitic to Bi-rich semi-pelitic?) medium-grained bands grey to pink striped rock, fine to medium grained, coarse-grained graphite, sulphide granitoid gneiss? graphitic + granodiorite? Bi-graphite pink medium to coarse-grained biotite granite + fluorite, sulphide, massive? some graphite
	1.52%	21.73	
		21.97	graphitic-biotite-diopside cc-si slightly calcareous mixed with granitic gneiss, sulphide, serpentine? slightly calcareous biotite-diopside granitoid? gneiss 21.55m to fluorite
22.00m		22.14	
		22.36	medium to coarse-grained granite, sulphides, graphite trace graphitic concentration
		22.73	
23.00m			mixed rock medium to coarse-grained striped rock - granite gneiss? biotite-diopside cc-si, mostly cc-si, graphitic, sulphides

HOLE NO 29

DEPTH	%C	ROCK UNIT	DESCRIPTION
		22.75	
		22.81	white calcareous rock with green diopside crystals, diopside mark
23.00		23.06	graphitic grey biotite (4 diopside) - fel gneiss
		23.22	pink granitic banded gneiss with interbands of
		23.35	grey graphitic biotite gneiss
		23.42	less pink feldspar, biotite bands
			graphite concentration, also sulphide 23.35
24.00	2.55%	23.38	abundant graphite + sulphides in biotite-diopside
			cc-si?, well foliated, medium-grained, green-grey
			not very calcareous if any, biotite banding in bands
			up to 1cm, possible granitoid?
		24.35	50% graphitic Bi-diopside gneiss with minor pink feldspar
			bands, ~5% graphite, sulphide, grey gneiss
		24.61	medium-grained granitoid (granodiorite) looking gneiss,
25.00			black streaks, graphite (minor, bands fine-grained), sulphides (13
			locally coarse-grained, some feldspar banding -> white to pink,
	0.44%		nearly massive granodiorite gneiss to banded, foliated
			MI 10-15%
		25.77	50% - slightly pinker granitoid gneiss
26.00		26.20	some graphitic bands + sulphides, sulphides along
		26.27	fractures
		26.32	
		26.52	pink granitic material with diopside bands, sulphides,
			graphitic streaks
27.00m	3.00%	27.00	Mixed diopsidic and granitic gneisses, fractured, abundant
			graphite 5-25% banding, coarse-grained granite bands,
			sulphide veins, disseminations
		27.21	
		27.29	medium to coarse-grained diopside-fel rocks, more
		27.45	massive black fracture filling, large diopside up to cm,
			salmon coloured feldspar, garnet?, graphite 6-8%, some
			large feldspar up to 2cm
		27.70	(diopside) biotite & fel gneiss, ~15% biotite, medium-
			grained, trace of graphite
			medium to coarse-grained, possibly granitoid grey diopside-fel gneiss,
			8% graphite
			more green in colour, serpentine-diopside gneiss, graphite

DEPTH	% C	ROCK UNIT	DESCRIPTION
		27.70m	
28.00		27.97	8-10% sulphides, fractured, graphite enriched up to 25%, banded black (serpentine?) to green
	2.75%	28.50	pink granite injection in diopside gneiss, sulphide band, diopside cc-si, disseminated graphite, graphitic seams, local shears, graphite 2-10%
		28.70	mixed pink streaked rock, graphite 5-10%
29.00		ROW 9	diopside (white-green) cc-si, abundant graphite, seams, calcite, 10-25% graphite (in bands)
		29.37	brecciated rock, pink granite + diopside interbanded, shear? x-cutting calcite vein with sulphides, graphitic ve
	2.60%		increased brecciation, black gouge, fine-grained graphite, 5cm wide, into crumbly serpentine rock, calcite veins, graphitic, highly altered, green serpentine - light -> dark green
		30.00	graphitic serpentine-diopside (etc) gneiss, highly serpentinized, sulphides, non calcareous
31.00	2.69%	Box 6-1	green, graphite 2-10%, graphitic seams, slickensides, some calcite, green feldspar, gradational to grey -> green striped gneiss, grey biotite, green - diopside
		30.85	
	1.25%	31.00	some granitic bands, ~2% graphite, some graphite seam
		31.22	green serpentine-diopside rock, 3-5% graphite
	31.46	31.45	grey -> green striped, sulphide along fractures
		31.60	breccia region, granitoid? gneiss
32.00m	0.76%	31.94	abundant serpentine (etc), serpentine-diopside rock, sulphides along fractures
		32.16	highly serpentinized rock, crumbly, breccia, graphite up to 16%, Biotite in bands, calcite, fault zone,
		32.30	31.94 m local sheared granite 30m wide
		32.43	fine-grained graphite - gouge, sulphide along fractures
		32.68	local Biotite-diopside gneiss into more crumbly rock
33.00		32.89	
		33.05	biotite-diopside granodiorite? gneiss, colour banded, sulphide, trace of graphite
		33.09	more crumbly serpentine-diopside gneiss, graphite, sulphide, banded soapstone gran white diopside gneiss, 6-10% graphite, graphite 30-40%

DEPTH	% C	ROCK UNIT	DESCRIPTION
33.00		33.09	green and white striped rock, serpentine-dioptase gneiss, medium-grained, graphite seam 25-30% graphite Folds  displacement folds x-cut 'serpentine drag'  veins with sulphides, abundant graphite especially in serpentine veins
	5.70%	33.76	
34.00	34.61	33.99	abundant. Nearly massive to massive serpentine-graphitic 25% graphite + calcite veins, dark green
		34.49	serpentine dioptase gneiss, graphite, local pink and grey (biotite) bands.
	2.96%	34.62	
		34.80	striped serpentine-dioptase gneiss
35.00			local granitic band, 4cm wide, 5-10% graphite
			dioptase rock with pink streaks and white, dark streaks with biotite, interbanded dioptase, biotite and feldspar gneisses, graphite
		35.31	
	1.30%		
36.00	36.06	36.00 BTR1	graphitic-dioptase gneiss, green/white, graphite < 5% sulphide along fractures, few feldspar 'augen'
		36.50	well banded gneiss, green and grey, dioptase and biotite rich bands cm → mm banding, fine → medium-grained very fine graphite < 1%
	1.83%	36.70	
37.00	37.03		interbanded fine and medium-grained gneiss, i fine → medium grained graphite-dioptase gneiss, ii white-green medium grained dioptase gneiss and grey biotite bands some cm pink feldspar augen
		37.50	dioptase gneiss + granitoid gneiss, graphite, sulphide
		37.74	fine-grained black graphitic matrix with crystals of dioptase embedded shear zone, into white breccia, patchy some shears, rounded fragments in white + graphitic matrix, ~35% graphite, calcite, also fine grained graphitic matrix.
38.00		38.03	medium-grained green rock with sulphides, fine-grained graphite, local granitic bands
		38.38	
			biotite-dioptase-fel gneiss, feldspathic lenses, medium-

DEPTH	Z C	ROCK UNIT	DESCRIPTION
39.00	38.82		
	39.03		grained, 10-15% biotite, possibly granitoid gneiss
	39.46		fine disseminated sulphides, graphite, foliated feldspar, feldspathic bands
	39.61		more diopside, less biotite
40.00m	39.70		graphite-diopside gneiss, fairly homogeneous, few % graphite, slightly calcareous, fine-grained, with
	39.98		coarse-grained feldspathic bands
	40.11		inequigranular, more graphite, medium to coarse-grained patches of diopside + pink and green feldspar
	40.49		Biotite-fel gneiss, granitoid?, graphite
	40.85		more green diopside gneiss with local feldspar bands, graphite
41.00	41.07		more grey gneiss, graphite, sulphide
	41.20		coarse-grained pink feldspar band, minor graphite
	41.40		40.4 green feldspar fine grained, sulphide enriched
	41.40		40.21 sulphide band
	41.40		40.23 Biotite-feldspar, granodiorite? gneiss, 15-20% Bi, some diopside, medium grained, graphite, sulphide
42.00	42.00 B8R1		50s (diop) - biotite grey medium-grained granodioritic gneiss, with green streaks, 1% graphite, sulphides
	42.43		banded grey biotite (granodiorite?) gneiss and green diopside gneiss
	42.75		green diop. gneiss, (+ feldspar),
	42.93		41.12 sulphide band, graphite
43.00	43.53 R2		more Biotite-feldspar gneiss
	44.04		interbanded grey and green gneisses, local coarse-grained feldspathic bands, graphite, coarsening
44.00			biotite-diopside gneiss, fine to medium-grained, local coarse-grained feldspar bands, some looks granodioritic, graphite, sulphide
			50s, grey medium-grained (diopside)-biotite gneiss (granodiorite?), sulphide, graphite
			diopside border to medium grained granitoid, rugen (2cm) sheared quartz lenses
			green diopside rock, few % graphite, sulphide
			mostly green diopside gneiss, banded some coarse-grained feldspar, grey bands - biotite banding, graphite, sulphide, medium-grained

HOLE NO. 28

DEPTH	% C	ROCK UNIT	DESCRIPTION
44.00		44.01	(diopside) - biotite - fcl gneiss with feldspathic patches, augen, possibly granodioritic/dioritic
		44.42	Fine to medium grained, MI ~ 25%, sparse graphite, sulphides
		44.62	local coarse grained streaked Feldspar bands, 5 cm wide
45.00m		44.54	white medium grained granite, Biotite
		45.00	granodiorite? medium-grained, MI ~ 25% Biotite, sparse graphite
		45.08	
		45.35	Green rock - local more medium-grained gdi gneiss
		45.61	interbanded green and grey gneiss, disseminated graphite
		45.77	green - diopside cc-si, sulphides pyrite, feldspathic bands, augen
46.00		45.85	biotite ± diopside gneiss with a few feldspar augen more biotite - variable, green and grey bands, MI ~ 25% local white granitic bands, white-green cc-si diopside gneiss, very calcareous, graphite, sulphide, possible diopside marble
47.00m			mostly cc-si, minor biotite - diopside gneiss bands fine graphite throughout
			505 mostly calcareous
48.00m		48.00	END.

R. Gachmayer

HOLE NO 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
		2.20m	
		2.54m	biotite gneiss, medium-grained MT ~25%, weathered, Fe-stain, +diopside, (possible granodiorite),
		2.62m	No visible graphite
3.00m		2.90	local coarse-grained granite, ribbon-sheared quartz, sulphide green diopside and grey biotite gneiss into more coarse granite few cm of coarse-grained granite to more grey 'gd' gneiss
		3.30m	MT 15-20%, with streaks - green, and spots, No graphite
		3.60	more local coarse-grained granite into more biotite gneiss, 25% granodiorite? or semi-plutonic, trace of fine graphite
4.00m			more coarse-grained granite, sulphide, mostly pink medium → coarse-grained granite gneiss with broken quartz, remnants of biotite, diopside bands, minor graphite, sulphid pyrrhotite, pyrite, sheared granite
		4.12	po concentration, graphite
		4.71	
5.00m	0.48%	4.93	mixed pink granite + green diopside
		5.22	mostly diopside cc-si 50-60% diopside, calcareous, medium-grained green rock with calcite matrix, graphite along cleavage disseminated sulphides
		5.43	coarse-grained sheared granite, feldspar auger, sulphides, trace of graphite
		5.70	
6.00m	0.42%	5.85	green diopside cc-si fairly massive (gabbroic?), not very calcareous, sulphides along fractures, disseminated graphite
		6.40	more coarse-grained granitoid gneiss interbanded with green diopside gneiss, graphite along fractures
		6.58	biotite-diopside gneiss into green diopside gneiss some serpentine, interbanded diopside cc-si and bi-diopside gneiss amphibole
7.00m		7.00	
		7.30	more biotite - 'gd' looking, +diopside + graphite
		7.47	more green diopside cc-si, sulphide, graphite few %, lots with green/white bands cc-si, calcite varies, local pink 'pegmatite' few cms into more cc-si graphite - rare, Biotite bands into biotite-diopside gneiss MT 25-35%, local pink
			local large pink feldspar, large diopside crystals (3cm)

HOLE NO 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
		7.47	
	0.83%	7.50 C	into finer grained (biotite) - diopside rock, ~60% diopside matrix? white relict crystals? abundant sulphide
8.00m	↓ 8.03m	B.03 B2R1	similar looking to diopside rock but lighter green, chloritized?, MI 40-50%
	↑	8.10	
		8.33 B	sheared, some black fine-grained graphite? in light green diopside rock, fairly well fractured, graphite
		8.53	
	1.00%	8.60	some pink feldspar metassomatism?
		9.36	
9.00m		9.06	fairly abundant graphite 5-7%, good foliation in diopside - fel rock, some pink feldspar, fractures - graphite, calcite
		B	light green diopside gneiss + graphite interbanded with pink feldspathic gneiss
		9.50	dark and light green minerals, MI 30-40%, mixed rocks
			green diopside cc-si, calcareous matrix to light green cc-si, feldspar augen up to 1/2 cm, graphite
10.00m	↓ 10.20m		non-calcareous diopside gneiss, with some pink feldspar granitoid?
	↑		calcareous unit white with green diopside, patchy, sulphides little or no graphite, black fractures, some coarse grained diopside crystals
		10.58	isomorphized feldspar + diopside rock, MI 35-40%
	1.05%		disseminated graphite, some granitoid material?
11.00m	↓ 11.31m	11.35	green diopside rock to white/green cc-si with diopside, sulphide, graphite, more light green diopside gneiss with some pink feldspar, pyrrhotite
	↑		some pink feldspar streaks interbanded white/green graphitic cc-si and diopside-pink feldspar gneiss
			salmon pink medium to coarse-grained granite medium grained granitoid gneiss, (granodiorite?) flattened quartz, sulphide, trace of graphite
12.00m	↓ 12.32		medium-fine grained pink granite, MI 15%, possible granodiorite or granite? (2 ages)
	↑		gradational into felsic rock with light green diopside - felsic rock, some pink feldspar, biotite, graphitic
	1.23%		major rock type - light green diopside, non-calcareous? with green feldspar, graphitic, disseminated sulphides, - local interbands of coarse-grained pink granite, cm → 10cm sulphides, also white cc-si diopside rock, biotite
	↓ 12.50m		
	↑		
	1.12%		
13.00m			

HOLE NO 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
13.00m			SOS, sulphides along fractures
↓	13.30m		
↑		13.50	
		13.70	more grey biotite gneiss with minor green diopside gneiss
14.00m	1.35%		
↓	14.45m	14.37	biotite band - 80-90% biotite, 6cm wide, + diopside into more green and grey gneiss, graphite banded grey/green - biotite/diopside bands, also pink granitic bands, graphite upto 20% in some bands, some sulphides
↑		14.48	
		14.62	
		14.73	35% arsenite
15.00m	0.31%		light pink coarse grained granite
↓	15.19m		diopside gneiss, graphite
↑		15.20	interjected medium to coarse grained granite in diopside gneiss, mostly granite gneiss
15.79%		B/C	light green diopside gneiss ~ 40% diopside, graphitic, some calcareous bands, local pink feldspar bands some fractures, fine biotite bands
16.00			
↓	16.28m	16.27	more pink feldspathic bands, more biotite, some granitic gneiss
↑		16.60	medium-grained, coarser-grained than previous diopside gneiss, (diopside)-biotite-fel gneiss, some light pink feldspar, MI 20-25%, 'granodiorite' composition abundant graphite, sulphide
17.00m	1.03%	17.13	
		17.27	more diopside
		17.50	pink finer-grained feldspathic gneiss, graphite streaks, sheared?
↓	17.96m		biotite-diopside gneiss, green to grey mixed bands graphitic, some pink feldspar streaks
↑			same interlocking of granitic, diopside and biotite gneisses
18.00m	1.78%	18.30	grey granulitic gneiss gradational into green diopside gneiss, graphite throughout
		18.41	
↓	18.80m	18.80	more (diopside)-biotite-fel gneiss (possible granodiorite) grey green in colour, seams of graphite, disseminated

HOLE NO 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
18.80m		18.78	less diopside, less mafics ~15%, somewhat pink, (granitoid)
19.00m	↑		
	1.21%	R.15	more of rock at 18.41m, higher mafic content, biotite + diopside ~25-30%, coarser grained, well banded, graphite, some feldspar augen, sulphides along fractures
	↓		
	19.59m		
	↑		
20.00	2.77%	19.72	graphitic biotite-diopside-fel gneiss, MT ~20%+ graphite, some pink feldspar, biotite banding with graphite
	↓		
	20.25m		
	↑	20.25	banded gneiss, grey to green, local pink feldspathic bands - coarse-grained (20.70m), graphitic,
	0.92%		
21.00m	↓	21.10	pink granite injection? gneiss, with green diopside banding, some graphite sulphide
	↑		
	21.70m		
	↑	21.43	white/green cc-si, banded, also bands of biotite-diopside-fel gneiss
	0.98%	21.53	
	↑		
	21.80		medium-grained graphitic-biotite gneiss mixed with pink granite and diopside gneiss
22.00m	↓		graphitic fairly abundant at contact with pink medium grained granite with biotite-graphitic bands.
	↑		
	22.09m		
	↑	22.31	medium grained calcareous unit, biotite-graphite-diopside cc-si & feldspathic patches, patchy silicate inclusions in calcareous matrix, graphite 10-15%, non foliated, possible breccia
	4.78%		
	↓		
	22.67m	22.70	
	↑		
23.00	2.43%	23.10	biotite-diopside-fel gneiss, minor calcareous bands, graphite, sulphide, banded, MT 20%, some pink feldspar (possible granitoid origin)
	↓		
	23.37m	23.37	
	↑		
	23.98m	23.53	graphite seam 1-2cm, graphite-biotite-diopside gneiss with local calcareous bands, mixed granitoid + cc-si?
	4.19%		
24.00m			more calcareous white rock (mudde) with diopside, graphite biotite-calcic granite, medium grained, more graphite-biotite-diopside gneiss, non cc, slightly pink, sulphides into interbanded granite gneiss and feldspar gneiss, graphitic bands

HOLE NO 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
24.00		24.10	fairly abundant graphite non-oriented ~15% in green diopside gneiss
↓ 24.37m		24.40	Fault: breccia with fine-grained black gneiss, graphite?, with crystals of feldspar, diopside (fine-grained) enclosed, also rock fragments and quartz + feldspar, large flattened diopside and feldspar crystals
↑		24.70	
3.58%		25.00	
25.00		25.63	graphite slickensides, fractured graphite - (biotite) - diopside calc-sil. granitic - 10%. light green mafics, sulphid. non-calcareous, light green diopside?, fine-graphitic seams, abundant graphite ~20% diopside, pink feldspar metasom. albism., diopside - feld gneiss
↓ 25.58m		25.60	fine grained graphite 'hear?' in contact with banded pink granitoid and light green diopside gneiss, ~6% graphite - in bands disseminated, sulphides
↑		26.60	
26.00m	7.81%	26.60	medium-grained graphite - chlorite? - biotite - feld gneiss (1 diopside), granitoid looking, pink feldspar, MT ~15% foliated, banded, ~5% graphite, sulphide, green and grey banding
↓ 26.55m		27.00	green diopside gneiss with some calcareous banding, also sericite - black → bands, some granitic material. calc-silicate rocks
↑ 1.26%		27.25	
27.00m		27.40	
↓ 27.16m		27.63	gradational into medium-grained granite gneiss few % graphite / serpentine/diopside - calc-sil gneiss, abundant graphite 10-15%, serpentine bands, also phlogopite or biotite - graphite bands, 5-8% graphite
28.00		28.00	diopside - biotite - quartz - feldspathic gneiss, MT ~15 somewhat porphyritic, possible granodioritic gneiss, medium-grained, 2% graphite, well foliated, some pink feldspar crystals
↓ 28.19m			
↑ 1.03%			more serpentine - graphite bands in granitoid? biotite gneiss
29.00		29.20	well foliated (diopside-biotite granodiorite) gneiss, few % graphite, MT 15-20%, fractured
↓ 29.29m		29.40	
↑			505 (28.75m) MT 10%, local serpentine bands few cm wide, some green alteration / graphitic seam, highly altered rock, calcite,

DEPTH	% C	ROCK UNIT	DESCRIPTION
		29.40	
	2.78%	29.70	very crumbly, 'soapy' rock, green, serpentized, graphite chlorite?, fault related or alteration?, medium-grained
		29.90	biotite gneiss with green bands, graphitic bands
30.00			5% some serpentine bands
		30.22	green rock with less biotite, banded - serpentine bands
30.20m			coarse-grained granitoid with sulphides, black mineral
		30.52	abundant serpentine streaks - shear? with graphite,
	0.99%	30.67	post rock possible granitoid
		31.00	highly altered rock, serpentine, chlorite, clay?
31.00m			graphite, diopside gneiss with local coarse-grained granitoid
		31.15	interbanded with grey biotite gneiss
31.20m			light pink granite gneiss MT 3-5%, medium to coarse-grained
	1.97%	31.45	streaked, minor graphite, foliated
		31.67	biotite gneiss, well foliated (granodiorite?), minor graphite
		31.70	minor green bands
		31.93	31.00 -> 31.15m serpentine fractures, light green diopside gneiss
32.00m		32.03	and coarse-grained granite
	0.69%		more biotite (granodiorite?) gneiss, graphite, some
		32.45m	pink granitic bands
		32.63	patchy, possibly brecciated, green diopside rock, chlorite, serpentine fractures
			coarse-grained graphite, biotite, chlorite
33.00	1.22%		biotite (granodiorite?) gneiss interbanded with green diopside rock (green feldspar?), also serpentine bands, few zirconite
		33.60	pink granite interbanded with 'granodiorite' gneiss, medium to coarse-grained grey granite, 5% biotite
		33.82	grey biotite (granodiorite) gneiss, MT 15% variable
34.00		34.07	into a fine-grained 'granodiorite' gneiss
			gradual into (32.55m) medium-grained biotite (granodiorite) gneiss MT 20%, with dark green streaks
			chlorite-biotite gneiss MT 30-35%, graphite, some diopside, sulphide lenses
		33.20m	MT 15% biotite 'granodioritic' or semi-pelitic
			biotite concentration, contact to dark green rock
			MT 40-50% biotite, chlorite, hornblende?, feldspar
			more green in colour, graphite streaks, chlorite, serpentine

HOLE NO 29

DEPTH	%C	ROCK UNIT	DESCRIPTION
34.00	↑	34.02	mixed zone, chlorite-graphite-serpentine bands and biotite gneiss bands + light green diopside-fel rock
		34.80	
	1.73%	34.60	mostly light green rock, light green mineral 50-60%, cc-si, cc in bands, 1-3% graphitic
		34.97	some non-calcareous fine serpentized fractures, pink feldspathic bands and local biotite-gneiss bands
35.00		35.27	in green cc-si, some graphite enrichment in serpentine veins
	↓	35.17m	light green non calcareous gneiss gradational to pink felds; coarse-grained white/green cc-si with local non calc green rock, dark green bands
	↑	35.76	more local serpentine bands, pink feldspathic bands
36.00	1.55%	36.07	graphite seam few cm's, graphitic light green gneiss with pink feldspar streaks, chlorite
		36.51	
		36.61	biotite gneiss MI 35% sulphide, serpentine veins
			fine medium to coarse-grained granite + cc-si with pink fel streaks augen, sulphide, graphite along fractures
37.00	↓	37.13	37.10 local calcite vein 1/2 cm
	↑	37.22	
	1.29%	37.38	local coarse-grained granite band
		37.58 BTR	cc-si diopside bands fine-medium-grained green to white, non calcareous to calcareous, graphite
			biotite-chlorite diopside gneiss interbanded with cc-si green gneiss, graphite
38.00	↓	37.93m	interbanded grey and green gneiss, mostly fine-grained green non calcareous green bands, some pink feldspar, diopside gneiss, graphite in bands, medium grained, serpentine and/or chlorite (possibly chlorite-fel diopside), sulphide, graphitic parts
	↑	38.00	
	1.08%	38.90	
		38.93	mainly homogeneous green-grey (biotite)-diopside rock, few % graphite
39.00	↓	39.00	
	↑		into more calcareous bands, medium grained green gneiss with bands of biotite gneiss and granite
	0.79%		ca. 5% disseminated graphite, parallel fractures to org
		39.70	more parallel fractures

HOLE 180 29

DEPTH	% C	ROCK UNIT	DESCRIPTION
		40.00	
40.00	↓	40.09	biotite-chlorite-gneiss, MT 15-20% medium grained sulphide along fractures
	↑	40.50	green diopside gneiss into white cc-si or diopside marble (50-60%), < 1% graphite, mostly calcareous, some fine oriented graphite shears, light green cc-si bands start
	↓	40.90	Fine-grained black graphite seen, cm wide, with embedded crystals
41.00	↑	41.44	more green cc-si + a light green diopside gneiss with cc-si white and some pink feldspathic bands, graphite fine-grained, sheared? material into more light green diopside gneiss (more calcareous) local serpentine bands, 5% graphite
		41.62	
		41.78	coarse-grained granite bands in light green diopside gneiss
42.00			mixture of diopside gneiss and biotite gneiss, 5% graphite medium-grained chlorite-biotite-gneiss (granodiorite?), MT 15-20% some streaked with diopside gneiss, coarse-grained graphite, 3-5% few calciferous
	↓	42.48	
		42.72	medium to coarse-grained white calcareous breccia?, coarse-grained graphite 5%, patchy, green diopside fragments
		43.06	more light green diopside gneiss, fine to medium grained low calcite, with bands of grey biotite gneiss, disseminated graphite
43.00		43.15	local coarse-grained foliated granite, ribbon quartz
			mixed green diopside gneiss with grey biotite bands into light green cc-si, graphite, interbanded grey and green gneiss 40% biotite gneiss, some sulphides along fractures, slightly calcareous to calcareous bands, 3% graphite
44.00			
		44.46	
			missing core
		44.93	
45.00		45.15	fine to medium-grained green diopside cc-si
		45.21	coarse-grained granite, black mineral? ilmenite?, sulphide
		45.76	green diopside cc-si interbanded with biotite gneiss, graphite, foliated granite bands, ribbon Q, or sheared

HOLE NO 29

LAKEFIELD RESEARCH OF CANADA LIMITED

DEPTH	LOG	ROCK UNIT	DESCRIPTION
		4576	
46.00		46.10	more biotite diorite gneiss mixture, graphite green diopside cr. ss. series
		46.20	more coarse grained granite into ^t diopside gneiss, graphite
		46.45	end

K Gochmayer

CARDIFF TWP.

#60-81

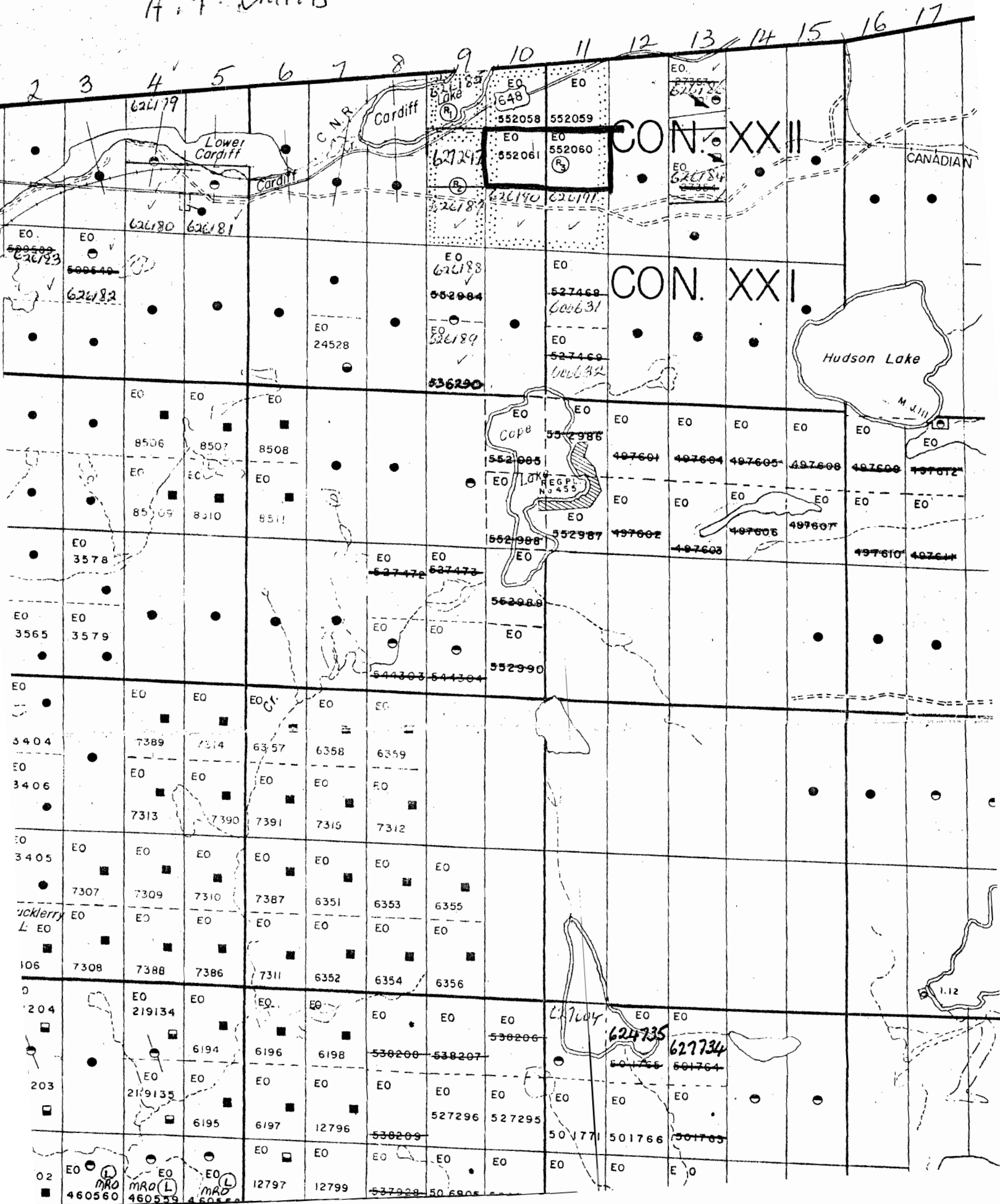
A. T. GRIFFIS



31E01SE0078 85 CARDIFF

300

T





SKETCH OF PART OF LOTS 9, 10 AND 11, CONCESSION 22,
 TOWNSHIP OF CARDIFF,
 PROVISIONAL COUNTY OF HALBURTON,
 SCALE: 1" = 40'
 K. R. AMES LTD.
 ONTARIO LAND SURVEYOR
 1981

Modifications by A.T. Griffin, Oct 1991

- Surveyed line with challenge
- Elevation of station
- Station of pit
- Station of lower grade graphic bench above with higher grade below
- Location of 1981 data base
- Approximate location of 1981 data base





SKETCH OF PART OF LOTS 9, 10 AND 11, CONCESSION 22,
 TOWNSHIP OF CARDIFF,
 PROVISIONAL COUNTY OF HALIBURTON,
 ONTARIO
 SCALE: 1" = 100'
 K. R. AMER LTD.
 ONTARIO LAND SURVEYOR
 1981

Modifications by A.T. Griffin, Oct 1981

- Surveyed line with change
- Elevation of station
- Outline of pit
- Outline of lower grade graphic beds above and higher grade below
- Location of 1981 600 hole
- Approximate location of 1981 600 hole