

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,238

part 2
of 2

APPENDIX C

Diamond Drill Core and Analytical Results

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
5

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		shearing decreases and sphalerite replaced by increased pyrite												
32		-31.3-31.7m. - similar to 29.3-29.9m.; patchy K'ic envelopes around chlorite-pyrite zones of alteration (5%)	31.9	32.9			5644	158	128	2220	1.0	200		
33		-31.75-35.0m. - similar to 25.5-30.0m.; variable sericitic, chloritic & potassic alteration, 1-3% pyrite.	32.9	34.0			5645	130	290	750	0.8	1950		
34		33.4 - 35.0m.; minor medium-grained sphalerite galena, & chalcopyrite along late fractures @ 20° to core axis - accessory carbonate (1% sphalerite, trace galena, trace epidote) @34.4m. - possible fluorite along fracture; buff to pink.	34.0	35.0			5646	134	360	790	1.0	55		
35														
Undifferentiated Intermediate Volc./Subvolc		BOX 5 35.0 - 39.8m.	35.0	36.0			5647	117	235	1060	0.8	5		
36		-Same as 25.5-30.0m. -exfoliation-type fracture approx. perpendicular to core axis with pyrite coatings												
37		-35.0-35.2m.; same as 33.4-35.0m.; slips are pyrite-coated below 35.2m. -35.7-39.8m.; similar to 31.3-31.7m.; intensity of K'ic, pyritic & chloritic alteration variable; 5-10% pyrite (average), locally up to 15%.	36.0	37.0			5648	95	74	359	1.0	10		
38														
39			37.0	38.0			5649	205	63	1010	1.2	15		
			38.0	39.0			5650	75	21	422	0.19	10		
			39.0	39.8			5651	162	38	360	1.6	45		

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
			47.6	48.6			5660	188	34	210	1.4	110
48												
49												
Undifferentiated Intermediate Subvolcanic		BOX 8 48.8 - 53.25m.	48.6	49.6			5661	204	62	259	1.5	115
50		Similar to Box 7 Moderate chloritization to intense K'ic + pyritic alteration; mostly fine-to-medium- grained	49.6	50.6			5662	311	67	185	1.4	150
51		49.1-52.2m.; predominantly moderate-to-intense K-feldspar alteration + 5-15% pyrite (fine, disseminated to medium-grained aggregates or fillings); pink to grey; occasional slicken- sides @ 15° to core axis; local vugs along fractures, some calcite druse & veinlets; calcite common with pyrite in vug infillings; core badly broken	50.6	51.6			5663	107	46	115	0.9	40
52			51.6	52.6			5664	267	39	198	1.1	155
53		52.2-52.95m.; chloritic, weakly sheared andesite inclusions in granodiorite intrusive phase (S) minor slickensided slips; quartz is absent to obscure	52.6	53.6			5665	172	29	165	1.0	60
54												
55		52.95-53.25m.; similar to 49.1-52.2m. -K'ic alteration-(K-spar + 5-7% spotty biotite) plus pyrite (10%)	53.6	54.6			5666	55	25	206	0.7	15

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1

PAGE No.
6

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
		BOX 6 39.8 - 44.6m.	39.8	40.8			5652	94	50	252	1.0	5
		Same as 25.5-30.0m., etc.										
41		39.8-40.3m.; 40.7-40.9m.; 41.3-41.6m; 42.1-44.3										
		-zones of moderate to intense K'ic alteration										
		with 5-15% pyrite	40.8	41.8			5653	91	38	288	1.1	25
42		43.9-44.1m.; intense pyrite + minor carbonate										
		as veinlets										
		-@42.9m., slickensided shear in zone of K'ic										
		alteration; increase pyrite in schistose,										
		sericite										
43		-@43.2m., slickensided, pyritic shear @ 35° to	41.8	42.8			5654	108	88	315	1.3	15
		core axis										
			42.8	43.8			5655	136	330	560	2.6	5
44												
		Undifferentiated										
		Intermediate	43.8	44.6			5656	165	40	540	1.1	5
45		Volc./Subvolc.										
			44.6	45.6			5657	73	90	530	1.4	5
46		BOX 7 44.6 - 48.8m.										
		Same as 39.8 - 44.6m.										
		44.9-45.7m.; 46.6-47.5m.; stronger K'ic										
47		alteration + patchy chlorite & pyrite(5-20%)										
		in poorly defined zones										
		47.9-48.2m.; patchy K'ic alteration of K-spar										
		+ ?biotite-pyrite.	45.6	46.6	~70%		5658	268	22	216	1.5	50
		Below approx. 46.6m.; later slickensided										
		fractures @ 20° to core axis with carbonate										
		+quartz+pyrite, medium-to-coarse-grained										
		open-space-filling where not sheared later.	46.6	47.6			5659	183	148	445	2.6	95

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1

PAGE No.
8

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		BOX 9 53.25 - 57.6m.	54.6	55.6			5667	46	20	145	0.7	25	
56		-slightly coarse-grained equivalent of box 7 & 8											
		-buff-grey colour with about 15% medium-grained chloritic clots (after hornblende), 5% quartz											
57		54.0?-54.1m; @54.5m; 54.6-54.8m; 51.9-52.2m; 57.0-57.1m.	55.6	56.6			5668	109	24	142	1.0	5	
Granodiorite		-local moderate to strong patchy to vein-like K'ic alteration zones; pink with dark chloritic spots and 5-15% disseminated to stringer pyrite.											
58		-abundant irregular, carbonate-healed fractures (+ quartz) plus localized slips @ approx. 5°-15° to core axis commonly with semi-massive pyrite, sheared	56.6	57.6			5669	146	20	175	0.9	20	
		-core ground from 54.0-54.2m. - ? cave-in											
		-rare barite+carbonate veinlet @ 56.5m.											
60			57.6	58.2			5670	283	26	172	0.9	55	
		BOX 10 57.6 - 62.4m.											
		57.6-59.85m.; - same as Box 9	58.2	59.2			5671	239	70	390	1.1	190	
61		57.6-58.2m.; fractured, finer-grained intrusive phase as above; in sharp, planar fault contact (with sheared pyrite) with moderate											
62		K'ically & pyritically altered equivalent (15% pyrite maximum); contact @ 5° to core axis, local shear & narrow brecciation	59.2	60.3			5672	205	21	362	0.7	100	
		58.2-59.3m.; intense K'ic + pyritic alteration of same host											
		59.3-59.85m.; moderate, leucocratic sericite alteration with 10-15% fine-grained pyrite	60.3	61.2			5673	390	54	2320	3.6	320	

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOL F No.
M82-1

PAGE No.
9

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Granodiorite		59.85-62.4m.; phase (?granodiorite-quartz monz) with 10-15% quartz, possibly 1:3 K-spar/plagioclase ratio (feldspars sericitized) roughly 7% pyrite (replacing mafics); commonly fractured as above adjacent to core axis with powdery carbonate along fractures.	61.2	62.2			5674	152	42	1160	1.8	70
63												
64		-60.3-60.7m. - intense K-spar alteration zone with pyrite as above; strong pyrite along breccia shear fracture @ 5° to core axis	62.2	63.2			5675	250	64	191	1.8	155
65		-60.7-61.2m. - moderate K'ic alteration as above										
		-@61.4m. - small carbonate cemented breccia zone	63.2	64.2			5676	276	52	212	1.6	195
66		<u>BOX 11</u> 62.4 - 67.0m										
		-Same as 59.85 - 62.4m. -sericitized & pyritized throughout; pyrite replaces mafics & follows fractures (20%max)	64.2	65.2			5677	248	60	278	1.2	325
67		Granodiorite -63.5-63.9m; 65.4-65.5m; 66.5-66.7m; - intense fracturing & brecciation with pyrite locally along fractures.	65.2	66.2			5678	247	106	266	2.1	330
68												
69			66.2	67.2			5679	346	185	401	3.3	450
		<u>BOX 12</u> 67.0 - 71.70m										
		-Same as Box 11 67.15-68.0m; 70.8-71.1m; intense fracturing & brecciation with pyritic fractures	67.2	68.2			5680	216	126	457	1.3	145

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1

PAGE No.
10

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
		-related to main fracture @ 5° to core axis	68.2	69.2			5681	233	87	780	1.3	110
70												
			69.2	70.2			5682	135	55	336	0.9	10
71												
			70.2	71.2			5683	133	117	466	1.5	35
72												
Granodiorite			71.2	72.2			5684	263	62	217	1.7	20
73		BOX 13 71.70 - 77.0m.										
74		Same as above; patches of pyrite locally (up to 20%) 71.9-72.2m; 72.4-72.5m; 73.6m; 74.4-74.6m. 76.5-76.7m; -intense fracturing with pyrite as above.	72.2	73.2			5685	205	370	770	1.6	35
75												
			73.2	74.2			5686	182	108	1050	1.8	25
76												
			74.2	75.2			5687	90	285	1910	1.8	20

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
12

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		same as above;											
85		-84.5-85.65m. - brecciated sericitized & K'ically altered with pyritic fractures and fragments.	83.2	84.5			5696	172	57	167	1.0	20	
86		-85.65-85.8m. - similar with 35% fragments of white-to-grey quartz vein material with 5-30% total sulphides (10-15% average) - pyrite-chalcopyrite-sphalerite-galena in sub-equal proportions; sulphides occur as disseminations & along later fractures in the quartz;	84.5	85.65	48%		5697	94	86	202	1.0	60	
87		-85.8-87.5m. - moderate to intense shear of K'ically altered rock; 10% sericite + 3-5% later chlorite along shears (+ minor carbonate); fragments of K'ic + chloritic	85.65	85.8			5698	3890	5900	6710	43.5	960	
88		altered rock with 5-10% fine pyrite in lower 0.6m.	85.8	87.5	70%		5699	810	1160	2430	9.7	225	
		Granodiorite											
89													
90		87.5-88.6m.; chloritized intrusive phase (uncertain) with 5% disseminated pyrite	87.5	88.6	90%		5700	650	70	660	2.9	1800	
91		BOX 16 88.6 - 93.15m.											
		Similar to 87.5-88.6m.											
		-propylitized intrusive (as above) cut by low angle fractures & shears; moderately magnetic	88.6	89.6			5701	940	49	630	3.5	900	
		88.6-89.2m; 89.5-91.15m; 91.4-91.8m; 93.0-93.15											
		-sericite &/or epidote-chlorite alteration along irregular shears; filled with sheared pyrite (2-3mm. wide max) and minor	89.6	90.7			5702	1740	112	1320	8.2	1050	

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Granodiorite		101.9-102.9m.; minor stringers subparallel to core axis with magnetite pyrite, ?sphalerite, chalcopyrite - 2% total sulphides also present in adjacent fractures	102.0	102.9			5714	605	450	2590	2.2	505
103		-moderate K'ic alteration; sericite along main fractures; subequal pyrite & magnetite										
104		BOX 19 102.9 - 107.15m	102.9	103.5			5715	267	79	1430	1.1	310
		Same as boxes 16-18; magnetic										
105		102.9-103.5m.; moderate to intense K'ic alteration related to latest stage fractures + quartz-carbonate multi-phase stringers subparallel to core axis; earlier sphalerite-pyrite-chalcopyrite stringer @ 30° to core axis - 0.5-1.0% total chalcopyrite - cut by later stringers; lower fault contact @ 70° to core axis marked by narrow gouge	103.5	104.5			5716	475	205	1290	1.6	440
106		103.5-107.15m.; moderate K'ic &/or chloritic alteration grades into predominantly chloritic alteration below approx. 106m.; cut by stringers above:	104.5	105.5			5717	375	118	820	1.9	345
107		-quartz-sphalerite-pyrite(-chalcopyrite) stringers subparallel to core axis cut by similarly oriented, cross-cutting quartz-carbonate-sulphide (plus minor barite) veinlets with dark magnetite-rich margins & cores & white quartz in between.										
		-104.7-106.1m.; complex dyking of finer-grained intrusive as in 98.9-99.1m.; contacts distinct to fracture-controlled; cut by similar quartz-carbonate-sulphide-magnetite stringers as above; magnetite throughout both phases & in stringers; moderate K'ic alteration throughout locally intense along fractures @ 40° to core axis.	105.5	106.5			5718	252	35	1010	1.7	215

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
		below (2% sphalerite & 0.5% chalcopyrite below 111.7m); vein along fracture @ 111.9m @ 20° ^ to core axis marks change to pervasively chloritized intru- sive - vein has sericitic envelopes	111.0	111.5			5724	105	154	124	5.3	290
112	Granodiorite		111.5	112.0			5725	315	245	3050	4.0	280
		BOX 21 112.0 - 117.0m	112.0	112.5			5726	294	250	1140	4.1	290
113		112.0 - 112.7m - similar to 111.9 - 112.0m - strongly chloritized as above with 10% veins and stringers of quartz; irregular veins of quartz up to 2 cm wide with 10% - 20% coarse sphalerite,	112.5	113.0			5727	930	340	950	7.4	650
		≤ 10% pyrite, trace chalcopyrite. 0.5% late, coarse barite - veins run subparallel to core axis and are fractured and displaced; later quartz stringers with minor pyrite follow fractures across	113.0	113.5			5728	3560	516	1450	11.2	580
114		1° veins, latest stage brown, Iron-stained sericite (?) along hairline fractures; lower contact follows fracture (carbonaceous) with quartz-sericite (pyrite) veinlets adjacent and parallel @ 15° to core axis	113.5	114.0			5729	5950	3000	8100	7.8	1490
115		- 20% disseminated and stringer pyrite in chloritized host.	114.0	114.4			5730	3380	4100	1830	690.0	17,000
		112.7 - 114.8m; similar to 110.8 - 112.0m - variable but intense quartz-sericitic-chlorite- pyrite-chalcopyrite alteration; 10-15% fine, disse- minated stringer pyrite with trace - 5% intergrown chalcopyrite (1-2% overall) along a profusion of fractures; irregular quartz veins similar to early veins in section 112.0 - 112.9m host up to 20% sphalerite (1-2% overall), 10% pyrite (2% overall), 1% chalcopyrite (0.2%) overall and minor galena and barite.	114.4	114.8			5731	1770	310	1390	5.5	700
116		- black to honey sphalerite is generally coarse with fine-to-medium-grained pyrite, chalcopyrite, and galena - below about 113.6m sphalerite and galena most abundant (galena up to 3%)	114.8	115.4			5732	630	300	5100	3.7	490
117			115.4	115.9			5733	316	77	680	2.0	150
			115.9	116.9			5734	153	75	540	1.6	60
118			116.9	117.9			5735	193	100	680	1.2	100

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
19

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
		one veinlet of 1cm @ 118.05m of quartz and traces of sphalerite and chalcopyrite.	118.9	119.4			5737	215	74	660	1.0	140
		- increase carbonate along latest fractures										
119		119.4 - 121.3m; similar to 117.0 - 119.4m	119.4	120.4			5738	300	113	580	3.4	310
		- predominantly chloritized with potassic envelopes around fractures and stringers and minor sericitic alteration patches	120.4	121.4			5739	284	54	473	1.4	250
120		- chloritic host is magnetic; later stringers are hematitic										
		- 1° quartz-hematite-pyrite stringers are irregular and generally <1mm	121.4	122.4			5740	373	115	464	1.9	230
121		- 2° stringers of quartz-hematite-pyrite 1 - 2mm and related										
Granodiorite		- 3° veinlets of quartz-pyrite-hematite or quartz- hematite-magnetite cut @ 30° to core axis;										
122		magnetite only at 120.3 and 121.2m										
		- chalcopyrite absent throughout (?)	122.4	123.4			5741	630	86	278	2.6	500
		<u>BOX 23</u> 121.3 - 125.4m										
123		- similar to Box 22; K-spar alteration predominates below about 123.8m	123.4	124.4			5742	323	69	750	1.6	265
		- stringers of magnetite ± hematite accompany stronger potassic alteration; some with quartz										
124		- cut by irregular 2° quartz-pyrite-magnetite-hematite stringers with trace chalcopyrite; locally very drusy; Iron-oxides commonly concentrated along	124.4	125.4			5743	391	60	960	1.2	340
		vein margins; quartz-pyrite-chalcopyrite-magnetite- hematite together in apparent equilib in lower	125.4	126.4			5744	316	56	760	1.2	230
125		potassic zone										
		- 3.5cm 2° vein @ 122.3m										
126		- strong magnetite throughout in host intrusive										
		- rare, late carbonate along fractures										
		- overall, 10% magnetite/hematite, 3% pyrite, trace chalcopyrite										
			126.4	127.4			5745	352	174	1310	1.5	330

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
20

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		BOX 24 125.4 - 129.8m											
128		- similar to 123.8 - 125.4m (Box 23)											
		- intrusive breccia @ 125.6 - 126.0 & 129.0 - 129.9, fragments of 3 - 25mm ϕ of similar intrusive and of earlier quartz-magnetite vein material.	127.4	128.4			5746	331	235	4130	1.2	175	
129		- 1° & 2° stringers as above											
		- internal fractures @ 30° - 50° & subparallel to core axis responsible for breccia texture; cut even 2° quartz-pyrite-magnetite veins, with slightly later 2° veins of the same	128.4	129.4			5747	400	800	1650	1.9	750	
130		- trace chalcopyrite, galena, sphalerite with 2° quartz; 3-5% overall pyrite; 5-10% overall magnetite and hematite (70:30)	129.4	130.3			5748	765	75	940	2.6	720	
131		- considerable banding in veins.											
		BOX 25 129.9 - 134.45m											
132		- same as Box 24	130.3	131.3			5749	413	67	1300	3.4	225	
		- 129.9 - 130.2m; 15% - 30% quartz-magnetite-pyrite veinlets - 2 generations as above in stockwork; minor pyrite stringers - trace late carbonate;											
133		moderate potassic feldspar alteration and magnetite throughout; trace chalcopyrite	131.3	132.3			5750	445	56	1240	2.3	465	
		130.2 - 134.45m; intrusive breccia as from 125.6 - 126.0 and 129.0 - 129.9m; change marked by	132.3	133.3			5751B	405	50	1230	1.8	190	
134		strong K -spar alteration, quartz-pyrite-magnetite veining similar to above - bizarre changes from 1cm veinlets to strong stringering and irregular											
		patches; fragments with stronger K-spar	133.3	134.0			5752B	277	136	1120	4.0	215	
135		alteration and more chlorite-magnetite rich frag- ments and faint, partially annealed fractures between; variable content of earlier, angular quartz vein fragments (\pm magnetite)	134.0	135.0			5753B	428	110	1140	2.0	200	

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		@ 131.1, 131.3, 132.6m - probable xenoliths of intermediate volcanics (chlorite-feldspars-quartz-magnetite)											
		- quartz-pyrite-magnetite veinlets cut early vein fragments and intermediate xenoliths but locally are cut by hairline fractures related to intrusive forces.											
		133.4 - 133.6m; feldspar-quartz-hornblende porphyritic granod. dyke; fine grained felsic groundmass; 80% fine-to-medium-grained phenos, subhedral to euhedral ; minor pyrite-magnetite along fractures @ 20° to core axis cut by late carbonate stringers @ 134.0m - strongly potassically altered fracture @ 60° to core axis; clay and sericitic along fracture with intense potassic-spar-pyrite alteration adjacent; patchy, fragmented K-spar -pyrite zones below											
		- 15 - 20% fine to coarse pyrite, fracture controlled, with trace chalcopyrite.											
135		Granodiorite BOX 26 134.45 - 139.4m	135.0	136.0			5754B	373	114	1340	2.2	255	
136		- same as 134.0 - 134.45m; more pervasive moderate to patchy intense K-spar alteration plus quartz-pyrite-magnetite fracture stringers and veinlets	136.0	137.0			5755B	660	52	1380	1.9	740	
137		- earlier quartz vein fragments with magnetite - pyrite up to 2cm diameter.											
		- moderately magnetic (fine-grained, disseminated)											
138		- late fractures with pyritic coatings and later carbonate ± coarse barite.	137.0	137.6			5756B	730	37	1310	1.8	970	
		137.0 - 137.5m - similar; chloritically altered with decrease breccia textures; hematitic; fragments of intrusive breccia as above included; mainly fine-grained with few phenocrysts of feldspar; medium	137.6	138.3			5757B	172	76	580	1.0	165	

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
22

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
		pinkish grey	138.3	139.2			5758B	775	86	1160	1.7	635
139		137.6 - 138.3m - abundant evidence of ground core; possible cave, recovery uncertain										
Granodiorite		138.3 - 138.45m - intrusive breccia as above										
		138.45 - 139.4m - similar to 137.0 to 137.5m - 10 - 20% quartz and feldspar phenos.	139.2	140.2			5759B	445	44	730	1.5	660
140		- 138.95 - 139.2m - moderate potassic-spar alteration with 5% pyrite and/or magnetite ± quartz stringers; 10% pyrite; late carbonate-filled fractures ± specularite; weakly magnetic										
141		- 139.2 - 139.4m - sharp fracture with pyrite @ 35° ^ to core axis marks change to very weakly magnetic, pyritic (15% - 20%) and chloritically altered intrusive.										
142		<u>BOX 27</u> 139.4 - 144.5m										
		- similar to above intrusive breccia; moderate K -spar alteration	140.2	141.7			5760B	310	152	1630	2.2	110
143		- minor quartz-carbonate-pyrite and/or magnetite stringers and trace chalcopyrite										
144		139.4 - 140.4 - same as 139.2 - 139.4m with patchy subequal amounts of chloritic and K -spar alteration; good intrusive breccia textures.										
		140.4 - 141.7; 142.0 - 142.3; 144.2 - 144.6m - variably altered, fine-grained, felsic dykes; 80%	141.7	142.3			5761B	422	81	1660	1.8	360
145		coarser feldspars and 1-5% coarser quartz in very fine, felsic groundmass.	142.3	143.3			5762B	620	32	780	1.5	520
		- all exhibit moderate to strong K -spar and pyrite (5-10%) with weak magnetite in darker, less potassic and pyritic sections										
		- cut by very rare fracture veinlets of quartz- carbonate and minor pyrite and trace chalcopyrite	143.3	144.2			5763B	545	84	3870	1.8	440
		- contacts @ varying angles to core axis	144.2	145.0	~60%		5764B	824	65	1430	1.8	830

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
23

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
Granodiorite Intrusive		BOX 28 144.5 - 148.8m												
Breccia + Dykes 146		(144.5 - 145.0m - mostly ground core) - same as Box 27; intr. breccia cut by ground dykes; variable potassic and pyritic alteration	145.0	146.0			5765B	440	69	1360	1.6	370		
		144.6 - 146.0; 147.0 - 147.6; intr. breccia - cut by massive veins, veinlets and stringers of quartz-magnetite-pyrite-chalcopyrite (30% vein over- all) below 146m.	146.0	147.0			5766B	1300	74	472	4.3	1500		
		146.3 - 147.0m - same intr. breccia with quartz veins (50%) cut by granod. dykes (50%) with irregular contacts	147.0	147.6			5767B	1340	40	800	3.6	1240		
Granodiorite Dykes + Intrusive Breccia 149		146.0 - 146.3; 147.6 - 148.8 - same granod. dykes as above with variable potassic and pyritic alteration - quartz-carbonate-sulphide veinlets are present only locally	147.6	148.6			5768B	550	74	1360	4.8	620		
		- very strange, patchy chloritic/potassic alteration contacts @ 148.6m												
		BOX 29 148.8 - 153.5m	148.6	149.6			5769B	260	67	151	3.1	300		
		- granod. dykes cutting intrus. breccia as above. 148.8 - 149.6; 152.3 - 152.7; granod. dyke with strong potassic alteration												
		149.6 - 152.3m; intrusive breccia as in Box 24 and Box 25	149.6	150.6			5770B	610	380	1130	3.0	480		
		- moderate K-spar and pyrite alteration with chloritized upper contact zone	150.6	151.6			5771B	545	240	825	2.1	610		
		- cut by 10% quartz-pyrite ± magnetite veinlets and minor, late quartz-carbonate-pyrite veinlets; earlier veins brken and interrupted by internal fractures - also-cut variable alteration (espec. chlorite and K-spar).	151.6	152.3			5772B	950	110	340	2.9	1900		
		- trace chalcopyrite and 1% coarse sphalerite in quartz-pyrite veinlets around 151m	152.3	152.7			5773B	580	76	520	1.6	925		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
24

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Granodiorite Intrusive Breccia		- strong K - spar alteration @ 151.1m	152.7	153.5			5774B	460	156	2320	1.8	225
154		- 151.7 - 151.9, strong quartz-sericitic-chlorite- pyrite alteration with minor relict textures; probable very fine sphalerite and trace chalcopyrite in quartz-pyrite veinlets.										
155		- 157.9 - 152.1; above grades into patchy chloritic and potassic alteration with disseminated pyrite and veinlets as above.										
156		152.7 - 153.5m - intrusive breccia similar to that above; moderate K - spar alteration, modera- tely magnetic with <1% disseminated pyrite; minor quartz-magnetite ± pyrite veinlets - increase to- wards 153.5 with localized chalcopyrite (≤0.5%) and sphalerite (≤1%).										
157		- @ 153.5; sudden appearance of up to 2cm. fragments of vuggy quartz and sphalerite (2%) and trace chalcopyrite associated with increase K-spar alteration										
158		BOX 30 153.5 - 158.1m	153.5	154.5			5775B	440	22	680	1.4	300
159		- same intrusive breccia as in Box 29 - strong K - spar alteration 153.5 - 154.1; minor pyrite with chlorite along fractures; a few quartz-pyrite-magnetite stringers	154.5	155.5			5776	330	45	180	1.4	170
		- 1 - 2cm veins of commonly banded quartz-pyrite- magnetite (80:10:10) with minor sericite - carbonate along fractures @ 154.15; 154.7 - 154.9; 156.7m.	155.5	156.5			5777	132	30	41	3.4	145
		- wider veins of the same material @ 155.7 (>4cm), 156.0 - 156.3 (approximately 20cm); 156.9 - 157.1m - 10 - 20 cm veins with same banding; approx. 30% of magnetite is altered to hematite; original banding cut locally by quartz-chlorite vein patches with	156.5	157.5			5778	860	37	148	4.1	2200
			157.5	158.5			5779	560	60	262	2.2	780

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		182.8 - 184.7m - same as 180.1 - 182.0m												
184		- intense alteration along fault breccia from 184.6 - 184.7m	183.8	184.7			5808	320	80	1360	1.7	460		
		184.7 - 187.0m - moderate potassic and chloritic alteration mixed; cut by same quartz-magnetite-pyrite veinlets broken by intrusive brecciation												
185		(1% pyrite aver. 5% magnetite) - 0.1% later carbonate (calcite/ankerite) in irregular open space fractures with traces chalcopryrite; latest stage anhydrite along fractures @ 50° to core axis.	184.7	185.7			5809			no sample				
186		187.0 - 187.3m - intense quartz-sericitic-pyrite with earlier quartz-magnetite-pyrite veinlets	185.7	186.9			5810			no sample				
		BOX 37 187.3 - 193.14m	186.9	187.7			5811	320	1600	5500	4.2	1750		
187		- granodiorite; same as above intrusive with evidence of brecciation absent to very minor 10% medium grained quartz; feldspars sericitized and carbonatized - indistinguishable; mafics chloritized	187.7	188.7			5812	410	310	1080	3.2	630		
188	Granodiorite	- cut by 5 - 20% quartz-pyrite ± magnetite veinlets; very minor displacement along microfractures.												
189		187.3 - 187.6m - strong sericitic alteration with shear fracture @ 15 - 20° to core axis; 15% coarse anhydrite + 0.2% chalcopryrite and sphalerite along late fracture spaces @ 188.3 - 2% pyrite associated with late sulphate; trace sphalerite @ 190.3m -	188.7	189.7			5813	280	320	3390	1.8	200		
190		0.1m of early quartz-pyrite vein + late sulphate and pyrite, sphalerite, chalcopryrite (20% of sulphate; 90:9.1)	189.7	190.7			5814	230	270	1010	2.1	320		
191		190.7 - 190.7m - strong sericitic alteration as in 187.3 - 187.6m; also K-spar alteration marginal to sericitic												
		- minor late sulphate and trace galena and sphalerite	190.7	190.9			5815	220	920	2650	2.6	510		
		191.3 - 191.6 - carbonate stringer and assoc. chalcopryrite.	190.9	191.9			5816	220	420	1150	1.6	275		

KIDD CREEK MINES LTD

DRILL HOLE LOG

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		5 - 10% very fine pyrite in generally pale green quartz-sericitic host												
175		- same alteration hosts late, generally fine to medium - grained chalcopyrite, chalcocite, tetrahedrite ? cuprite and pyrite in varying amounts along fractures with carbonate (overall sulphides - 1% over)	174.1	175.1			5798	280	280	1525	2.5	285		
176			175.1	176.1			5799	420	118	4310	2.6	280		
		BOX 35 177.3 - 182.45m	176.1	177.3			5800	280	120	1180	2.2	200		
177		- similar intrusive breccia + granod dykes, altered 177.3 - 178.0m; fine-grained granod. dyke, intensely quartz-sericitic-pyrite altered (15 - 20% pyrite); minor chlorite clots; scattered late fractures with pyrite-chalcopyrite	177.3	178.0			5801	380	34	10	1.5	360		
Granodiorite Intrusive Breccia + Dykes	178	178.0 - 182.45m; intrusive breccia similar to above with fewer, large quartz vein fragments	178.0	179.0			5802	350	25	11	3.2	670		
179		178.0 - 180.1m; intense quartz-sericitic-pyrite alteration as in 177.3 - 178.0m (5 - 15% pyrite); early magnetite with quartz altered to hematite especially 177.4 - 178.0m (+ trace chalcopyrite along late fractures)	179.0	180.0			5803	260	40	9	1.4	365		
180		180.1 - 182.0m; quartz-chlorite-pyrite alteration with minor sericite ; large, quartz-magnetite-pyrite veinlets, 1-3cm with trace - 60% magnetite locally; 15% pyrite overall average	180.0	181.0			5804	390	55	590	1.5	295		
181		181.0 - 181.45m; sharp fracture contact marking change to K -spar-sericitic-chlorite-pyrite alteration	181.0	182.0			5805	320	40	267	1.6	420		
182		BOX 36 - 182.45 - 147.3m	182.0	182.8			5806	270	20	205	1.4	250		
Granodiorite Intrusive Breccia + Dykes	183	- same as Box 35 182.45 - 182.8m - same as 181.0 - 181.45m	182.8	183.8			5807	340	65	1250	3.3	345		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-1PAGE No.
29

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		192.0 - 192.5m; fracture @ 10° to core axis with 1° sphalerite, trace chalcopryite along margins; filled by coarse anhydrite following later dilatancy.											
193 Granodiorite		BOX 38 193.14 - 198.95	191.9	192.9			5817	220	560	5600	2.8	2900	
			192.9	193.9			5818	230	34	248	1.4	180	
194		- same as Box 37; less early quartz-magnetite-pyrite veining - weak foliation of chloritic mafics @ approximately 50° to core axis.											
195		195.7 - 195.8m - 2cm vein of broken sulphides and carbonate and quartz-sericite in anhydrite matrix.	193.9	194.9			5819	185	42	420	1.4	95	
		(10% sphalerite, 2% pyrite, trace chalcopryite and galena) - @ 10° to core axis											
196		196.5 - 196.9m - 2 fractures @ 10° to core axis with early, intense quartz-sericitic-pyrite alteration + K-spar envelopes - refractured and mineralized with 1% pyrite, trace galena.	194.9	196.0			5820	260	174	2150	2.0	515	
			196.0	197.0			5821	330	128	900	2.2	260	
			197.0	198.0			5822	300	44	416	1.9	265	
		BOX 39 198.95 - 205.6m	198.0	199.0			5823	352	34	580	1.6	310	
198		- similar to Box 38 - pervasive K-spar-chlorite-magnetite altera- tion (1°)	199.0	200.0			5824	287	39	778	1.6	200	
199		rare chlorite foliation, quartz-magnetite-pyrite (chalcopryite) veinlets present throughout but < 10% of rock - only minor early microfractures cut veins	200.0	201.0			5825	235	70	775	1.4	150	
200		- later (2°) pyrite and/or carbonate stringers (< 0.5%) - these are all cut by high angle fractures with anhydrite (2%); traces pyrite ± chalcopryite ± sphalerite along the margins											
201			201.0	202.0			5826	196	74	700	2.2	265	

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Granodiorite + Intrusive Breccia		quartz-sericitic-pyrite which grades into potassic host; core is pyrite + chalcopyrite (50:50) + trace hematite - 2% chalcopyrite over section; vein broken along late sulphatic fractures	212.4	213.4			5837	273	30	124	1.3	145
211		212.2 - 212.4m; 4cm intrusive breccia dyke; various altered fragments (≤ 7 mm) in chlorite-pyrite altered matrix; 5 - 8% pyrite overall	213.4	214.4			5838	115	48	142	1.6	140
212		213.5 - 214.2; potassic envelopes to 40° - 50° fractures with pyrite + anhydrite veinlets (4 per section)										
213		215.6 - 215.9 - local hematization of host between 2 quartz-pyrite veinlets.	214.4	215.4			5839	158	24	480	1.1	70
		BOX 42 216.0 - 221.5m	215.4	216.4			5840	116	26	98	1.9	100
214		216.0 - 219.4m - chloritically, altered equivalent of Box 41 (similar to Box 39) with K-spar overprint alteration; late sulphates	216.4	217.4			5841	210	54	170	2.2	270
215		- 5% overall, quartz-pyrite-magnetite veinlets and irregular, broken stringers and local stock works. 218.0 - 218.4m - zone of hematite-chlorite altera- tion next to early quartz-pyrite-magnetite vein @ 30° to core axis; hematite after magnetite, minor pyrite - latest fractures @ 30° to core axis with white salts. (218.2 - 218.4m removed - not split)	217.4	218.2			5842	600	28	265	1.6	80
216		218.6 - 219.5m; narrow quartz-carbonate stringers with trace chalcopyrite along margins; becomes sulphate - carbonate veinlet towards lower end of section	218.2	218.				not sampled !				
217		219.5 - 221.8m - intrusive breccia, similar to but of different time than that above, more quartz vein fragments chlorite - K-spar alteration similar to 216.0 - 219.4m; intrusive + early vein- ing cut by latest sulphate stringers (+ trace chalcopyrite).	218.4	219.5			5843	420	22	166	2.4	210
218			219.5	219.8			5844	395	16	160	1.8	200
219			219.8	220.3			5845	9500	505	220	22.8	1750

KIDD CREEK MINES LTD

DRILL HOLE LOG

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
		- contact with overlying rocks marked by 5cm quartz-sericitic-pyrite alteration 'vein' - locally hematized	220.3	220.8			5846	11500	200	116	16.9	960
220		219.8 - 220.8m; sharp, faulted + original contacts between intr. breccia and quartz-sericitic-sulphide alteration vein; highly fractured internally; stringers & disseminated clots of fine pyrite +	220.8	221.8			5847	1260	255	392	3.8	1200
221		chalcopyrite (approximately 50:50 overall) with 4-6% chalcopyrite over; sulphides not evenly distributed throughout quartz; late sulphate in breccia open space; locally banded sulphides in vein fragments; lower contact marked by 1cm sulphate vein with 5% fine pyrite, 1% chalcopyrite and minor carbonate - @ 45° ^ to core axis.	221.8	222.8			5848	208	164	965	1.9	265
Granodiorite Intrusive Breccia		221.4m - 6cm alteration zone with 1.5cm quartz-pyrite-chalcopyrite core and sericitic-pyrite envelopes @ 30° ^ to core axis (4-6% chalcopyrite over zone).										
222												
223												
224		BOX 43 221.8 - 227.5m										
		- same intrusive breccia as 219.5 - 221.8m										
225		- less chlorite & more potassium-spar alteration; non-magnetic; no veins of quartz-pyrite-magnetite - only vein fragments of the same; very minor, scattered patches of sulphate + minor quartz-carbonate ± sulphate stringers with trace - 0.5% chalcopyrite associated throughout	222.8	223.8			5849	230	97	1275	1.6	580
226		223.8 - 223.9m - 5 quartz-hematite-chalcopyrite-pyrite stringers with potassic envelopes @ 35° ^ to core axis										
227		@ 227.5m - 2cm diameter fragments of quartz-magnetite pyrite-chalcopyrite vein (40:30:10:10)	223.8	224.8			5850	334	68	1340	2.0	350
228			224.8	225.8			5851	350	74	780	1.6	215

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2

PAGE No.
1

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Ch	Pb	Zn	Ag	Au		
Overburden		0-12.5m OVERBURDEN												
		BOX 1 12.5 - 17.7m												
12		Intermediate volcanic/subvolcanic												
Undifferentiated Intermediate Volc./Subvolc.		- core is highly broken ($\approx 90^\circ$ to core axis) throughout and primary textures have been partially to completely overprinted by moderate chloritization.	12.5	13.5			1489	126	65	189	1.6	95		
13		The rock is dirty greyish green and textures vary from very fine grained to weakly porphyritic.	13.5	14.5			1490	178	40	167	1.7	140		
14		Plagioclase ($\leq 20\%$) - subhedral white crystals (1mm avg) are altered to a fine grained mixture of sericite and carbonate (calcite). Hornblende ($\leq 5\%$) - subhedral chloritized crystals (1.5mm Aug)	14.5	15.5			1491	68	30	218	1.3	60		
15		are often weathered out; leaving voids. The matrix/groundmass is highly altered to fine grained greyish green to pale pinkish green chlorite with 1-5% pyrite as fine disseminations and granular clusters (1 \rightarrow 4mm).	15.5	16.5			1492	183	44	219	1.3	30		
16		Weak carbonitization and abundant hairline fractures are present throughout, the pinkish tinge is probably due to a weak 'potassic' (K-spar) overprint which locally occurs as intense deep pink alteration patches (ie 15.5m).	16.5	17.5			1493	58	36	210	1.2	225		
17		These patches often have associated pyrite-dark chlorite concentrations.	17.5	18.0			1494	32	57	196	1.0	20		
18		BOX 2 17.7 - 22.5m	18.0	19.0			1495	155	230	510	1.0	60		
Undifferentiated Intermediate Volc./Subvolc.		Intermediate volcanic/subvolcanic												
19		- Same general description as Box 1. Core is highly fractured and broken. Moderate chlorite alteration is dominant alteration with associated disseminated pyrite to 1%. Pyrite also occurs concentrated ($\leq 10\%$) with chlorite locally along fracture.	19.0	20.0			1496	115	66	253	1.2	65		
20			20.0	21.0			1497	193	40	191	1.1	50		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
4

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Undifferentiated Intermediate Volc./Subvolc.		chlorite and associated pyrite. Disseminated and granular clusters of pyrite occur throughout this interval in amounts of 1 - 5%.	35.0	36.0			1513	95	34	970	1.3	20
35		33.1 - 33.7m - highly broken core with weak potassic alteration, 1 - 3% pyrite and trace sphalerite. Calcite coats fractures throughout.										
36		BOX 5 33.9 - 39.1	36.0	37.0			1514	157	94	487	1.0	35
37		Intermediate volcanic/subvolcanic General description is same as previous.	37.0	38.0			1515	128	28	326	0.9	20
38		33.9 - 36.0m - moderately chloritized, highly fractured (80° - 90° to core axis) andesite is dark greenish grey and fine grained. Local traces of potassic alteration. Pyrite is minor throughout except along shears (@ 34.9m) minor pink calcite along fractures.	38.0	39.0			1516	105	18	640	0.9	50
39		36.0 - 38.7m - moderate chloritized, highly fractured (80° - 90°) andesite with weak, patchy to locally intense potassic alteration overprinting.	39.0	40.0			1517	85	93	1450	1.0	30
40		37.0m - 3mm pink potassic veinlet (90° to core axis) 38.7 - 38.9 - intense pink potassic (K-spar) alteration with disseminated pyrite to 5%.	40.0	41.0			1518	37	24	390	0.8	15
41		BOX 6 39.1 - 43.8m	41.0	42.0			1519	28	32	605	1.0	70
42		Same description as previous. Moderate chloritized and intensely fractured intermediate volcanic (sub-volcanic) with disseminated pyrite to 1%. Local narrow zones of variable potassic alteration occurs throughout. Powdery, white calcite occurs as coatings on fractures throughout.	42.0	43.0			1520	29	158	1420	1.0	35
43			43.0	44.0			1521	8	38	582	0.8	40

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.

M82-2

PAGE No.

5

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Undifferentiated Intermediate Volc./Subvolc.		39.9m - coarsely crystalline pyrite veinlet (2mm wide) with late stage drusy pink calcite and intense deep pink alteration halos (1cm)	44.0	45.0			1522	39	34	720	2.0	10
44		<u>BOX 7</u> 43.8 - 48.6m										
45		Intermediate volcanic/subvolcanic Same general description as previous - moderately chloritized, intensely fractured andesite with narrow zones (\approx 25cm) of moderate deep pink potassic alteration.	45.0	46.0			1523	264	38	1060	2.5	25
46		33.8 - 44.5m - moderate chloritized, intensely fractured with 1 - 3% pyrite. 44.5 - 45.9m - intense, deep pink potassic altera- tion with 5% fine disseminated pyrite.	46.0	47.0			1524	124	30	440	1.0	60
47		47.9 - 48.3m - moderate deep pink potassic altera- tion with 1 - 2% disseminated pyrite. 48.4 - 48.5m - fault gouge with 40% grey clays and 60% rock fragments.	47.0	48.0			1525	188	210	1360	1.1	55
48		48.5 - 48.6m intense light greyish green quartz- sericite-pyrite alteration (1% pyrite).	48.0	49.0			1526	890	340	1290	6.2	850
Undifferentiated Intermediate Volc./Subvolc.		<u>BOX 8</u> 48.6 - 53.3m	49.0	49.7			1527	133	650	3710	1.7	145
49		Intermediate volcanic/subvolcanic Same general description as previous with about 50% of the core altered to pink K-spar.	49.7	50.8			1528	142	860	2960	1.4	65
50		48.6 - 49.0m - intense sericite-quartz-pyrite alteration - light greyish green, bleached. 49.0 - 49.7m - intense deep pink potassic altera- tion with 2% disseminated pyrite and local thin <1cm clay zones (20° to core axis).	50.8	51.8			1529	244	270	990	1.2	80
51												
52			51.8	52.8			1530	115	450	1550	8.5	75

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2

PAGE No.
7

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
61		BOX 10 57.8 - 62.9m											
62		Felsic intrusive Same description as Box 9. The intrusive shows overall weak pervasive K-spar alteration with local narrow zones (≤30cm) of moderate alteration	62.0	63.0			1540	130	96	710	1.4	90	
63		Granodiorite (@ 60.7 - 61.0m) 1 - 3% pyrite occurs dominately as fine grained clusters sporatically distributed throughout. At about 62.0m the pyrite decreases to 1% and the rock is grey due to decrease in potassic alteration.	63.0	64.0			1541	132	98	1370	2.8	110	
64		62.5m quartz-sericite-pyrite-sphalerite along fractures (20° to core axis) dark sphalerite occurs as local clusters of subhedral crystals 1 - 2mm in size.	64.0	65.0			1542	43	28	33	2.4	115	
65		Calcite coatings on fractures occur throughout.	65.0	66.0			1543	15	37	146	1.2	45	
66		BOX 11 62.9 - 67.3 Felsic intrusive Light grey, finely crystalline, equigranular, same mineralogy as Box 10. Pyrite blebs (1 - 2mm) to 5% may represent pseudomorphs after mafic crystals. Pyrite clusters <1% are up to 2cm wide.	66.0	67.0			1544	77	58	605	1.8	40	
67		The core is moderately fractured throughout 67.1m - clay filled fracture (50° to core axis)	67.0	68.0			1545	78	126	1440	2.8	65	
68		67.3 - sub-euhedral crystals (1-2mm) of clear quartz, galena and sphalerite occur scattered along fracture planes (20-30° to core axis).	68.0	69.0			1546	71	80	1400	1.8	60	
69		Minor calcite coatings on fractures.	69.0	70.0			1547	55	96	1090	1.6	35	
70			70.0	71.0			1548	96	130	405	1.7	15	

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
8

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		BOX 12 67.3 - 73.0m											
71		Felsic intrusive Light grey, moderate to intense fracturing scattered irregularly shaped pyrite blebs, often elongate, occur throughout.	71.0	72.0			1549	98	260	364	2.6	245	
72		The intrusive has same general description as previous with a faint, weak, chloritic overprint 71.7 - 73.0 - highly broken core - fault gouge? - minor weak pinkish K-spar alteration (@ 70.0m) - minor calcite coatings along fractures	72.0	73.0			1550	101	170	437	3.5	35	
73	Granodiorite		73.0	74.0			1551	26	44	178	2.2	50	
		BOX 13 73.0 - 78.5m											
74		Felsic volcanic Core is very heavily fractured and broken throughout. Pervasive carbonate alteration throughout has imposed a white powdery appearance to the core locally.	74.0	75.0			1552	225	70	202	3.2	75	
75		73.0 - 74.5m - intense fracturing with heavy white calcite coatings along fractures. Plagioclase - carbonate.	75.0	76.0			1553	208	64	158	2.5	220	
76		74.5 - 75.0 - pink calcite coatings on fractures with minor calcite - pyrite stringers (30° to core axis).	76.0	77.0			1554	422	32	53	2.3	660	
77		75.0 - 75.3 - local fault gouge characterized by grey clays intermixed with pink calcite specks and minor light green sericite. 75.3 - 75.7 - weak pale pink potassic alteration with 2% pyrite.	77.0	78.0			1555	730	41	92	1.8	500	
78		75.7 - 75.8 - ground up core - fault gouge 75.9m - grey quartz-K-spar-pyrite-sphalerite stringer (20° to core axis) with a 0.5cm intense light green chloritic halo.	78.0	79.0			1556	880	47	146	1.9	2600	
79			79.0	80.0			1557	910	30	132	2.0	640	

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
9

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		76.4 - 76.5m - ground up core - fault gouge											
		76.5 - 77.0 - weak pale pink potassic alteration											
80		with abundant pink calcite coatings.	80.0	81.0			1558	464	103	197	1.9	415	
		77.0 - 78.5 - moderate chloritized with disseminated pyrite to 1% plagioclase-carbonate											
		BOX 14 78.5 - 83.6m	81.0	81.9			1559	505	540	715	17.5	13,500	
		Felsic intrusive											
		Variably altered moderately chloritization and carbonitization and weak to intense deep pink											
82		potassic alteration.	81.9	82.9			1560	365	450	1360	2.3	300	
		78.5 - 80.0m - moderate chloritized, intensely fracture with local heavy powdery white calcite											
83		coatings on fractures and disseminated pyrite to 1%.	82.9	83.7			1561	970	420	177	2.8	1350	
		80.0 - 81.9m - moderately chlorited intrusive with											
Granodiorite		20% pink, weakly carbonitized subhedral feldspar.											
		phenos (1.5mm avg) in a dark greenish grey chloritic groundmass (1-3% disseminated pyrite).	83.7	84.7			1562	253	750	1105	2.6	80	
84		Pyrite and pink calcite locally coat fractures (20° to core axis).											
		81.9 - 83.5 - intense deep pink potassic (K-spar)											
85		alteration with 8-10% disseminated pyrite and minor quartz-pyrite-galena-sphalerite stringers (20° to core axis).	84.7	85.5			1563	493	180	352	2.2	550	
		83.5 - 83.6m weak potassic alteration.	85.5	86.6			1564	505	430	1360	2.4	830	
86		BOX 15 83.6 - 87.9											
		Felsic intrusive	86.6	87.4			1565	680	500	1320	3.6	790	
		Same description as previous. Intrusive is moderately fractured and broken, weak to intense pale											
87		pink to deep pink potassic (K-spar) alteration	87.4	87.8			1566	1020	1800	4460	3.3	1300	
		occurs throughout the entire box.											
88			87.8	88.3			1567	990	1320	3980	4.4	2800	

TEXTURE, ALTER ['] N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
Granodiorite		89.1 - 91.4m - weak to moderate deep pink potassic alteration with 10% quartz-pyrite veinlets to 6mm (rare magnetite + chalcopyrite)	93.0	94.0			1573	414	160	1840	1.7	460
93		- 10° set cross-cuts and displaces (1-2cm) 60° set local vugs infilled by drusy clear quartz and later stage calcite and still later pyrite cubes.										
94		92.0 - 92.7 - same as 89.1 - 91.4	94.0	94.9			1574	309	260	1630	1.7	220
		BOX 17 92.7 - 98.6m										
95		Felsic intrusive	94.9	96.0			1575	511	920	2580	6.9	3700
		Same general description as previous. The box shows pervasive moderate K-spar-magnetite alteration throughout with local intense veining. Quartz pyrite ± trace magnetite veins range from stringer size to 1cm wide and are generally wavy in character but oriented about 10° to the core axis. With local 10° veins, magnetite occurs as minor 1mm blebs locally. The quartz veins are grey and drusy with later stage calcite and pyrite and local intense pink K-spar halos to 2cm wide.										
96		94.9 - 96.0 - cross-cutting quartz-pyrite vein stockwork (10° to core axis).	96.0	97.0	90%		1576	454	74	1090	2.0	510
97		97.0 - 98.0m - poor recovery (50%) heavily broken core (gravel).	97.0	98.0	50%		1577	272	48	890	1.3	430
98		Minor disseminated pyrite and calcite coatings on fractures occur throughout, magnetite occurs finely disseminated throughout.	98.0	99.0			1578	294	45	512	1.4	440
Granodiorite												
99			99.0	100.0			1579	472	62	660	1.4	630
100			100.0	101.0			1580	485	86	905	1.6	700
101			101.0	102.0			1581	476	134	1160	1.8	780

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		83.7 - 85.5m moderate deep pink potassic alteration with 5% pyrite as fine grained clusters and local stringers of quartz-pyrite-galena-sphalerite ± calcite + chalcopryrite (20° to the core axis).											
		85.4m - 10cm of intense potassic alteration with 10% pyrite.											
		85.5 - 86.6m - weak potassic ± clear quartz alteration with trace galena-sphalerite in quartz stringers and minor calcite-chlorite stringers (20° to core axis) - 5% disseminated pyrite.											
		86.6 - 87.4 approximately same as 83.7 - 85.5m but with lesser quartz-sulfide stringers											
		87.4 - 87.8 - weak potassic alteration. 87.8m massive grey quartz vein (10°) with dark grey fine sulfide patches cutting potassic - chloritic alteration zone.											
		BOX 16 87.9 - 92.7m											
88		Felsic volcanic											
Granodiorite		Same general description as previous. Variably altered throughout with dominantly weak to moderate Pink K-spar-magnetite alteration with lesser chlorite and sericite-chlorite-K-spar-clay-pyrite alteration with <1% disseminated pyrite. The lower contact of this zone with chloritized rock is sharp at 30° to the core axis.	88.3	89.1			1568	373	900	3970	3.6	1250	
89		88.3 - 89.1m - heavily broken; moderate chlorite sericite alteration with local quartz-pyrite ± chalcopryrite and dark fine grained magnetite stringers (20-30° to the core axis). Late stage drusy calcite. Quartz-magnetite stringers are associated with K-spar halos (<1cm).	89.1	90.1			1569	406	120	1070	1.6	380	
90			90.1	91.4			1570	660	280	1320	2.1	610	
91			91.4	92.0			1571	650	1840	5190	3.0	540	
92			92.0	93.0			1572	368	490	1020	1.6	375	

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
12

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		BOX 18 98.6 - 102.7m												
102		Felsic intrusive? Same description as Box 17. Moderate pervasive deep pink potassic (K-spar) alteration throughout. The core is extensively fractured and broken.	102.0	103.0			1582	433	182	890	1.4	620		
		Granodiorite												
103		Hairline quartz-pyrite stringers and veinlets (10-20° to the core axis) occur throughout and often carry trace amounts of magnetite and local thin (1mm) magnetite selvages. The quartz-veins are grey and drusy with later stage calcite and pyrite. Minor calcite-quartz stringers (20° to core axis) are white (ie 100.1m, 102.8m)	103.0	104.0			1583	484	320	1510	1.6	400		
104			104.0	105.0			1584	294	300	1030	1.2	285		
105		BOX 19 102.7 - 107.8m	105.0	106.0			1585	411	540	1690	1.5	790		
106		Felsic intrusive Same description as previous, extensively fractured and broken. Moderate, pervasive deep pink K-spar-magnetite alteration with disseminated pyrite \approx 1%. Quartz-pyrite stringers and veinlets decrease in abundance and change their preferred orientation from \approx 10°-20° to core axis to 50° to the core axis at about 105.0m.	106.0	107.0			1586	387	400	1530	1.3	460		
107		White calcite stringers cross-cut the 50° quartz-pyrite = magnetite-chalcopyrite veinlets at about 60-70° (ie 107.2m).	107.0	108.0			1587	443	140	1060	1.7	530		
108		106.5 - 107.2m - deep fleshy pink potassic alteration.	108.0	109.0			1588	1130	190	660	2.7	2250		
109		Minor disseminated pyrite and calcite coatings on fractures throughout.	109.0	110.0			1589	499	50	895	1.6	1150		
110			110.0	111.0			1590	340	145	850	1.2	540		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
13

TEXTURE, ALTER ⁿ MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		<u>BOX 20</u> <u>107.8 - 112.5m</u>												
111		Felsic intrusive Same as above, moderate pervasive deep pink K-spar. Magnetite alteration with locally abundant grey drusy quartz-pyrite-magnetite stringers and vein- lets. The veins often cross-cut one another and are	111.0	112.0			1591	283	68	710	1.1	470		
112		locally drusy with late stage calcite and pyrite infilling drusy quartz vugs. The veins show a preferred 20-30° orientation to the core axis but are locally ≈50°.	112.0	113.0			1592	275	205	820	1.5	490		
		Disseminated pyrite to 1% occurs throughout.												
113		Granodiorite	113.0	114.0			1593	475	230	1260	2.2	610		
114		<u>BOX 21</u> <u>112.5 - 117.9m</u>	114.0	115.0			1594	263	470	1550	1.5	250		
115		Felsic intrusive Same description as previous Extensively fractured and broken. Moderate per- vasive K-spar-magnetite alteration with ≤1% dis- seminated pyrite. Local quartz-pyrite-magnetite veins to 1cm wide are oriented 45-60° to the core axis. Magnetite occurs as elongate blebs normal to vein margins and as thin <1mm wide selvages. These veins locally cross-cut quartz-magnetite stringers oriented 10-20° to the core axis. Late stage calcite occurs as coatings on fractures and as infillings in vugs in quartz veins.	115.0	116.0			1595	440	460	1530	1.9	590		
116			116.0	117.0			1596	493	290	1450	2.0	850		
117			117.0	118.0			1597	428	180	970	1.9	860		
118		<u>BOX 22</u> <u>117.9 - 121.9</u>	118.0	119.0			1598	356	610	2250	2.1	900		
119		Granodiorite Felsic intrusive same description as previous Core is moderately fractured and broken. Weak to	119.0	120.0			1599	347	1170	3510	2.0	625		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
14

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		moderate K-spar-magnetite alteration throughout											
120		117.9 - 118.5 - moderate-K-spar-magnetite alteration with minor grey quartz \pm magnetite veinlets (20-30° to the core axis).	120.0	121.0			1600	274	680	1920	1.8	375	
		118.5 - 121.3m - weak K-spar alteration overprints weakly chloritized felsic intrusive, local, minor											
121		quartz-pyrite-magnetite veinlets (20-30° to core axis). 118.9m galena-sphalerite-chalcopyrite veinlet (SP:CP:GN = 5:3:trace) late stage drusy white quartz and calcite.	121.0	122.0			1601	288	1160	2750	3.6	300	
Granodiorite													
122		120.5m quartz-pyrite-magnetite-chalcopyrite veinlet 3mm wide (30° to core axis).	122.0	123.0			1602	284	1000	2270	2.0	740	
		121.3 - 121.9 - same as 117.9 - 118.5m.											
123		BOX 23 121.9 - 127.3m	123.0	124.0			1603	148	880	2010	1.6	270	
		Felsic intrusive											
124		Same as previous. Extensively fractured and broken. Weak to moderate deep pink K-spar-magnetite alteration throughout with local quartz-pyrite-magnetite veinlets (20°-40° to core axis) which	124.0	125.0			1604	201	540	1320	1.7	320	
		rarely have <1cm intense pink potassic halos and thin <1mm magnetite selvages. Disseminated pyrite is present throughout in amounts to 1%.											
125		122.3m - finely crystalline, grey sulfide rich quartz veinlet (10° to core axis) - probably sphalerite-pyrite-galena.	125.0	126.0			1605	177	575	1590	1.8	295	
126		122.3m - finely crystalline, grey sulfide rich quartz veinlet (10° to core axis) - probably sphalerite-pyrite-galena.	126.0	127.0			1606	116	700	1720	1.5	360	
		BOX 24 127.3 - 133.4											
127		Felsic intrusive	127.0	128.0			1607	210	700	2090	1.6	380	
Granodiorite		Same as previous											
		Moderate pervasive deep pink K-spar-magnetite alteration with <1-2% disseminated pyrite-magnetite											
128			128.0	129.0	70%		1608	480	1000	2180	3.0	1250	

KIDD CREEK MINES LTD

DRILL HOLE LOG

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		locally occurs as 1-2mm blebs within the altered rock. Minor quartz-pyrite-magnetite veinlets												
129		occur throughout with thin 1-2mm magnetite selvages	129.0	130.0	70%		1609	235	1020	2300	2.1	265		
		- Late stage calcite occurs on fracture surfaces and in drusy quartz vugs associated with veining												
130		128.9m - 2mm dark grey, fine grained sulphide rich (sphalerite-galena?) veinlet (10° to core axis). 132.5 - trace disseminated chalcopyrite in potassic alteration.	130.0	131.0	60%		1610	410	590	1580	2.2	375		
		- Relic primary textures are noted locally - 20% pink sub-anhedral plagioclase phenos (1-2mm). Probably partially replaced by K-spar.												
131			131.0	132.0	80%		1611	142	1320	3900	2.7	1000		
		BOX 25 133.4 - 138.2m												
132			132.0	133.0			1612	110	115	600	1.3	100		
		Felsic intrusive Same as previous												
133		Intense fracturing is decreasing (core is more massive).	133.0	134.0			1613	129	350	1120	1.5	85		
		Granodiorite												
134		Moderate deep pink K-spar alteration throughout with up to 10% 1 - 5mm magnetite blebs and trace disseminated pyrite, quartz-magnetite stringers are minor.	134.0	135.0			1614	105	66	615	1.2	70		
		- Calcite occurs as coatings in fractures, interstitially intermixed with the potassic alteration and as late stage fillings of vugs associated with quartz-magnetite stringers and veinlets.												
135			135.0	136.0			1615	94	118	830	1.2	80		
		- Relic primary porphyritic textures occur locally.												
136			136.0	137.0			1616	116	240	1050	1.3	115		
		BOX 26 138.2 - 142.8m												
		Felsic intrusive Same description as previous.												
137			137.0	138.0			1617	270	230	1020	1.8	110		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
16

TEXTURE, ALTER ^N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC ^Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		Core is mildly broken to massive.											
138		General moderate to intense, pervasive deep pink potassic (K-spar) alteration with 10% 1-3mm magnetite blebs (psuedomorphs after hornblende?) Local quartz-pyrite-magnetite veinlets to 5mm	138.0	139.0			1618	595	94	490	2.1	170	
139		(10-30° to the core axis) are cross-cut by minor 'bull' white quartz stringers also oriented 20° to the core axis and by quartz-pyrite-magnetite stringers. These stringers often have intense pink potassic alteration halos (0.2 - 0.5 cm on either side of vein ie 142.8m)	139.0	140.0			1619	209	240	1700	1.9	145	
140			140.0	141.0			1620	362	170	1040	1.9	75	
		BOX 27 142.8 - 148.4m											
141		Felsic intrusive and felsic dyke	141.0	142.0			1621	245	410	1720	1.9	120	
		- Core is massive											
		- Generally the same as previous											
Granodiorite		- Moderate, pervasive, deep pink potassic (K-spar) alteration with 10-15% magnetite blebs (1-2m avg - after hornblende and local blebs (≈1cm) of fine granular magnetite.	142.0	143.0			1622	131	250	990	1.2	115	
142													
143		≤ 1% grey quartz-pyrite-magnetite veinlets and veins to 1cm with late stage white calcite and local thin ≈ 1mm magnetite selvages. Veins vary in orientation from 20-60° to the core axis and in dip direction. Locally cross-cutting 146.1m -	143.0	144.0			1623	91	46	790	1.2	50	
144		3cm banded sulphate (gypsum) - sericite - pyrite vein - (upper contact ≈ 60° - lower contact 30°) which cross-cuts the quartz-magnetite-pyrite veins at 50°. The vein has an associated deep pink 1-3cm	144.0	145.0	80%		1624	87	28	685	1.0	75	
145		potassic (K-spar) halo around either side of vein. Just above the upper contact a 15cm remnant or 'island' of chloritized, fine grained, plagioclase(?) porphyritic rock in sharp contact	145.0	146.0			1625	123	46	655	1.3	90	
146		(2° to core axis) with intensely potassic	146.0	147.0			1626	106	58	202	2.4	125	

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
17

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO				Cu	Pb	Zn	Ag	Au		
		altered rock.												
Felsic Dyke		146.6 - 7cm - dark dirty pink, finely crystalline felsic dyke with sharp contacts (30° to core axis) which cross-cut quartz-magnetite veins and with thin ≈1mm pyritic bands (60° to core axis).	147.0	148.0			1627	126	18	390	1.4	65		
147														
		BOX 28 148.4 - 153.7m	148.0	149.0			1628	90	36	700	0.8	50		
148		Granodiorite												
		Felsic intrusive												
		Massive core-same description as previous.												
149		Intense, pervasive deep pink potassic alteration with 10% 1-3mm blebs and stringers of magnetite and local relic plagioclase crystals. Quartz-magnetite-pyrite veins to 3cm wide are scattered throughout (1%) with 2 dominant orientations	149.0	150.0			1629	132	410	1920	1.5	650		
150		0-20° to the core axis and 40-60° to the core axis. These veins are cross-cut by late stage, randomly oriented white calcite stringers. Minor pink gypsum veinlets (10" to the core axis)	150.0	151.0			1630	156	110	560	1.0	90		
151		ie 152.9.	151.0	152.0			1631	152	20	280	0.8	80		
		BOX 29 153.7 - 159.7m												
152		Felsic intrusive	152.0	153.0			1632	126	18	315	0.8	50		
		Same as Box 28, except for increase in intensity of veining.												
153		153.75 - 10cm grey quartz-pyrite vein with (50° to core axis) with upper contact marked by 2mm white sulphate selvage and lower contact marked by deep pink potassic (K-spar) halo.	153.0	153.7			1633	97	20	360	1.1	35		
154		Box shows moderate to intense pervasive deep pink K-spar alteration with more intense alteration associated with quartz-magnetite-pyrite veins. The veins are generally oriented 50° to the core axis and often exhibit quartz-magnetite banding. Minor	153.7	155.0			1634	130	18	116	1.3	15		
155			155.0	156.0			1635	116	35	705	1.3	10		

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
19

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
165		163.7m - 2cm - Finely crystalline greyish green quartz-sericite vein (20° to core axis) with 1cm deep pink potassic halos.	165.0	166.0			1645	113	152	335	1.0	5
		BOX 31 165.1 - 170.6m										
166		Granodiorite + Intrusive Breccia Felsic intrusive - intrusive breccia	166.0	167.0			1646	219	190	480	1.3	50
167		Massive, weak potassic alteration with equigranular textures visible. Minor pink to white finely crystalline sulphate (Gyp) ± specularite veins (40-60° to core axis).	167.0	168.0			1647	178	180	870	1.6	25
168		166.0m - 1cm sulphate vein (55° to core axis) with 1% specularite veins and 1cm light green sericite-chlorite halos surrounded by a local moderate potassic halo.	168.0	169.0			1648	240	180	680	1.6	80
169		167.8m - 1cm sulphate vein with a 1.5cm chlorite halo along upper contact and with 10cm intense potassic halos crosscut by sulphate-hematite stringers with 1cm sericitic halos.	169.0	170.0			1649	190	120	890	1.4	60
170		Sulphate stringers throughout are often cross-cutting.	170.0	171.0			1650	470	108	630	1.9	600
171		Granodiorite Intrusive Breccia Angular to subangular intrusive fragments show various degrees of potassic alteration and show pre-brecciation quartz-magnetite-quartz veins fragments (1-5%) (<1cm - >10cm) ie 170.1m. Trace disseminated pyrite throughout, weak carbonization throughout.	171.0	171.7			1651	175	175	825	1.6	55
172		BOX 32 - 170.6 - 176.0m	171.7	171.95			1652	8100	520	455	18.0	2720
			171.95	173.0			1653	345	162	1350	1.7	185
173		Felsic intrusive breccia Weak to moderate potassic alteration. Rare felsic	173.0	174.0			1654	252	178	530	1.8	260

KIDD CREEK MINES LTD

DRILL HOLE LOG

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		quartz-magnetite and magnetite stringer ≈ 20° to core axis.											
156		Cross-cut the 50° veins. The most intense veining is observed from 53.7 - 55.0m.	156.0	157.0			1636	98	36	390	1.4	20	
157		156.7 - 157.0m - crackle 'breccia' zone with grey quartz stringers cross-cut and displaced by a white sulphate stringers which form a vague network.	157.0	158.0			1637	97	20	94	1.3	25	
158		157.55m - 3mm white sulphate veinlet (80° to core axis.)	158.0	159.0			1638	96	25	560	1.0	10	
		BOX 30 159.7 - 165.1m											
159		Felsic intrusive + intrusive breccia. Moderate to intense deep pink potassic alteration abruptly decreases in intensity at 162.9m.	159.0	159.8			1639	88	27	220	1.0	40	
Granodiorite + Intrusive Breccia 160		159.8 - 162.9m - intense, pervasive, deep pink potassic (K-spar) alteration with massive grey to white intense silicification patches and local grey quartz veins to 3cm (50° to core axis). Blebs of fine grained specular hematite occur scattered throughout the quartz and as 1-3mm selvages around silicification patches and quartz veins.	159.8	161.0			1640	131	34	212	1.1	65	
161		A white sulphate stringer network occurs throughout which cross-cuts the quartz and silicification. The interval shows an abrupt decrease in magnetite (magnetite - specularite hematite).	161.0	162.0			1641	128	16	88	0.8	25	
162		162.9 - 165.1m - dk green to faintly pinkish intrusive with primary textures visible - 20-30% white to chloritized subhedral plagioclase (2mm avg) in a dark greyish brown felsic finely crystalline.	162.0	162.9			1642	183	44	300	0.8	60	
163		Groundmass (<1% disseminated-pyrite) absence of quartz-spec-hematite veins. Minor sulphate stringers.	162.9	164.0			1643	150	88	515	1.1	15	
164			164.0	165.0			1644	135	180	415	1.1	10	

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
		fragments (same lithology as host) are subrounded to subang, show variable potassic alteration and are locally cross-cut by sulphate stringers.											
		170.6 - 171.9m - Moderate deep pink potassic alteration with 10% magnetite blebs (1mm - 1cm). <1% grey subrounded, locally elongate, quartz fragments (≤ 3cm)											
		171.7 - 171.95 - quartz-sulphate-chalcopyrite (3%) vein (40° to core axis) with weak chloritic and potassic halo.											
173		171.95 - 173.6m - same as 170.6 - 171.9m - Rare gypsum-pyrite stringers with 1-3mm potassic halos (70° to core axis). - Weak potassic alteration - Local angular plagioclase porphyritic intrusive fragments. Fragments are generally coarser grained than matrix.											
174		173.6 - 173.75 - 10cm light green quartz-sericite-sulphate vein (55° to core axis) with weak chlorite - K-spar halo.	174.0	175.0			1655	210	195	1180	1.8	230	
175		White to pink sulphate stringers (30° - 50° to core axis) occur throughout.											
		176.0 m - 5mm quartz-gypsum-magnetite vein.											
176		BOX 33 176.0 - 181.3m	176.0	177.0			1657	348	610	4250	2.4	380	
Granodiorite Intrusive Breccia		Felsic intrusive breccia											
177		- Generally weak to moderate deep pink K-spar alteration with accessory magnetite ≤10%.	177.0	178.0			1658	189	280	1170	1.6	890	
178		Local subrounded to sub-angular intrusive fragments are characteristically pinker than the felsic matrix and locally show pre-brecciation quartz-magnetite veins. Fragments of grey quartz-magnetite veins are rare (<1%).	178.0	179.0			1659	148	470	2200	1.6	170	
		Veining throughout is dominated by white to pink											

KIDD CREEK MINES LTD

DRILL HOLE LOG

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
			179.0	180.0			1660	135	72	580	0.8	100
		cross-cutting sulphate (gypsum) stringers. Quartz veining is only evident in fragments										
180		sulphate stringers cross-cut magnetite stringers. Disseminated pyrite is present in amounts to 1%.	180.0	181.0			1661	153	390	2900	2.6	440
		BOX 34 181.3 - 187.1m										
181		Felsic intrusive breccia Same as previous	181.0	182.0			1662	306	810	3500	2.2	215
		Granodiorite										
		Intrusive Breccia										
182		Weak to moderate deep pink K-spar alteration with ≤10% magnetite subrounded to sub-angular fragments of K-spar alteration felsic intrusive and quartz vein material are present in amounts to 30%. Intrusive fragments are up to 10cm in diameter. Fragments are cross-cut by gypsum stringers.	182.0	183.0			1663	171	210	705	1.0	210
183		White gypsum veinlets are generally randomly oriented but local ≈ 80° to core axis stringers often have 5m - 1cm grey quartz. Sericite halos surrounded by a 1-3mm pink K-spar halo (182.3m, 186.0m).	183.0	184.0			1663	136	390	3200	1.6	120
184		Disseminated pyrite and blebs of pyrite to 2mm are present in amounts < 1%.	184.0	185.0			1665	250	410	2200	1.6	110
185		184.4 - 5mm white to pink sulphate (gypsum) vein - 50° to core axis with minor blebs of honey sphalerite and chalcopyrite and with 1cm greenish grey quartz-sericite-pyrite halos.	185.0	186.0			1666	220	210	2120	1.8	270
186		BOX 35 187.1 - 192.8m										
187		Felsic intrusive breccia Generally the same as Box 34 but with lesser breccia fragments and increase in sulfide (galena-chalcopyrite-sphalerite) bearing sulphate veins.	186.0	187.0			1667	115	370	1480	1.6	40
188			187.0	188.0			1668	257	640	700	2.6	75

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2

PAGE No.
23

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
			197.0	198.0			1678	132	260	3200	1.7	30
Granodiorite		Quartz-magnetite-pyrite veins (20° - 80° to core axis) to 1cm wide do not carry galena-sphalerite or chalcopyrite, locally have K-spar halos to 1cm and are cross-cut by sulphate veins.										
198			198.0	199.0			1679	75	102	640	0.8	40
		Intrusive and quartz vein breccia fragments are not apparent.										
199			199.0	200.0			1680	58	133	1010	1.3	20
		194.5 - 3cm - gypsum-sphalerite-galena vein (50°) SP:GN 2:1										
		195.0 - 195.1m - 10cm banded quartz-gypsum-sericite-K-spar vein (70-80° to core axis) - same as 194.0m where traces of chalcopyrite and pyrite occur.										
200			200.0	201.0			1681	72	64	830	1.2	30
		Disseminated pyrite is very minor except in veins.										
		<u>BOX 37</u> 198.4 - 203.9										
201			201.0	202.0			1682	65	51	443	0.8	50
		Felsic intrusive										
		Moderate pervasive deep pink potassic alteration with 20-30% magnetite blebs (2mm avg) which give a spotted appearance to core.										
202			202.0	203.0			1683	162	440	1590	2.1	40
		- Abundant quartz-magnetite ± pyrite veins (75° to core axis) are cross-cut by locally banded quartz-magnetite veins (0-20° to core axis). Sulphate veins show an abrupt decrease - only one noted at 202.6m.										
203			203.0	204.0			1684	71	58	421	0.8	20
		202.15 - 202.3m - grey quartz vein network with apple green chlorite halos surrounded by intense potassic alteration. Later cross-cutting quartz-magnetite veinlets (10° to core axis) which is cross										
204			204.0	204.5			1685	115	220	910	1.1	65
		cut by hairline chalcopyrite stringers, trace disseminated chalcopyrite.										
205			204.5	205.4			1686	328	720	2840	2.4	350
		203.1m - 1cm quartz-magnetite vein (10° to core axis) with traces of chalcopyrite.										
			205.4	205.9			1687	960	4200	5500	4.0	410

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
MB2-2PAGE No.
24

TEXTURE, ALTER' ^N MINERALIZATION, ETC.	GRAPH GEOLOG.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS						
			FROM	TO										
			205.9	206.8			1688	368	660	1810	2.2	610		
Granodiorite		Moderate carbonitization throughout.												
			206.8	207.9			1689	323	1700	4380	3.4	200		
207		BOX 38 203.9 - 209.6m												
		Felsic intrusive?												
		203.9 - 204.4m - same as Box 37												
208		204.4 - 204.5m - 5cm wide white to pink sulphate vein, banded appearance with clay-chlorite shears and slickensides (45° to core axis). Fault zone marks transition into different alteration and veining characterized by chlorite-sericite alteration and sulphate veins.	207.9	208.4			1690	360	4500	6400	5.9	350		
			208.4	209.4			1691	455	1650	3120	3.2	550		
209														
Granodiorite Intrusive		204.5 - 205.4m - Moderately chloritized felsic intrusive porphyry with 35% subhedral plagioclase phenos partially to completely altered to chlorite, ground mass is altered to a fine grained greenish mixture of quartz-chlorite-sericite with <1% fine disseminated pyrite minor sulphate stringers carry hairline stringers of galena ± chalcopyrite, sphalerite.	209.4	210.4			1692	341	1450	5010	2.7	470		
Breccia 210			210.4	211.0			1693	177	172	860	2.1	200		
			211.0	212.0			1694	127	44	408	1.0	120		
		205.4 - 205.9m - Intense chloritization with local pink sulphate (gypsum) - chalcopyrite-galena-sphalerite veins and patches (30° to core axis) cross-cutting white gypsum-pyrite stringers ≈70° to core axis.	212.0	213.0			1695	280	48	503	2.2	370		
212														
		205.9m - 206.8m - same as 204.5 - 205.4m												
213		206.8 - 207.9m - Moderate, pervasive, pale pink K-spar alteration superimposed over the chloritization.	213.0	214.0			1696	370	57	730	1.5	545		
		207.9 - 208.4m - Intense quartz-sericite-chlorite alteration (minor bleaching) with trace disseminated cubes of galena and minor pyrite-chalcopyrite and cross-cutting pyrite-galena hairline stringers (30° to core axis) which are cross-cut by gashes	214.0	215.0			1697	304	900	2610	3.3	1200		

KIDD CREEK MINES LTD

DRILL HOLE LOG

TEXTURE, ALTER'N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS				
			FROM	TO				Cu	Pb	Zn	Ag	Au
			215.0	216.0			1698	224	285	1130	2.2	175
Granodiorite Intrusive Breccia	216	and veinlets of white to clear gypsum. 208.4 - end of Box - Weak chlorite-sericite alteration with patchy potassic alteration. Minor sulfide stringers are associated with intense chlorite-sericite alteration (208.9m).										
		BOX 39 209.6 - 214.5m										
	217		217.0	218.0			1700	337	180	890	1.9	305
		Felsic intrusive breccia Weak, pale pink K-spar alteration with minor blebs of magnetite. Local subrounded intrusive fragments (<3cm) show intense K-spar alteration with 10% magnetite blebs.										
	218		218.0	219.0			1701	222	98	740	1.4	250
		Minor grey quartz-magnetite-pyrite stringers are cross-cut and displaced (<1cm) by white sulphate ± pyrite stringers.										
	219		219.0	220.0			1702	246	53	740	1.4	250
		210.1m - 3cm banded quartz-sulphate-K-spar-sericite vein (10° to core axis).										
	220	212 - end of Box - Sulphate ± pyrite stringers have associated 0.5cm K-spar halos.	220.0	221.0			1703	173	44	293	1.6	130
		BOX 40 214.5 - 219.4m										
	221		221.0	222.0			1704	189	40	465	1.0	245
		Felsic intrusive Generally the same as Box 39. Weak to moderate K-spar alteration throughout with magnetite quartz + sulphate veining is minor.										
	222		222.0	223.0			1705	198	40	448	1.2	255
		BOX 41 219.4 - 225.0m										
	223		223.0	224.0			1706	159	88	551	1.8	160
		Felsic intrusive breccia Generally the same as Box 39 Weak to moderate K-spar - magnetite alteration with minor gypsum stringers and veinlets (40° to core axis). Gypsum veins may have associated 1cm K-spar										

KIDD CREEK MINES LTD

DRILL HOLE LOG

HOLE No.
M82-2PAGE No.
27

TEXTURE, ALTER ['] N MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
			FROM	TO				Cu	Pb	Zn	Ag	Au	
Granodiorite Intrusive			233.0	234.0			1715	216.0	210	535	1.5	160	
Breccia		chloritized feldspar (plagioclase) in a finely crystalline deep pink potassically altered groundmass at 233.6, intense chlorite-pyrite-											
234 Andesite Dyke		quartz alteration occurs which grades into lighter green quartz-sericite-pyrite (5% pyrite) at 233.65m.	234.0	234.5			1716	576	2600	94,500	9.4	1920	
		234.0 - 234.5m - Red to white gypsum vein with 5% honey to grey sphalerite fragments to 1cm - trace galena-pyrite.	234.5	235.5			1717	24	104	280	1.0	25	
235		234.5 - end of Box - Intense silicification - with massive grey quartz with patches of gypsum and sericite shears (50° to core axis) 235.7m.	235.5	236.0			1718	75	380	933	1.9	110	
236			236.0	237.1			1719	144	54	522	1.2	240	
		BOX 44 235.8 - 241.25m											
237		Andesite porphyry dyke and felsic intrusive breccia. 235.8 - 236.0m intense light greenish grey quartz- sericite-gypsum-pyrite alteration (5% pyrite) with local gypsum veinlets.	237.1	238.0			1720	138	37	605	1.2	320	
Granodiorite Intrusive Breccia		236.0m - 237.1m - Moderately chloritized plagioclase. Porphyry dyke with patchy K-spar alteration. Non-magnetic <1% disseminated pyrite throughout. Minor pink and white gypsum veinlets.	238.0	239.0			1721	321	50	390	1.8	1100	
239		237.1m - Irregular, indistinct but sharp contact between andesite dyke and underlying K-spar- magnetite altered felsic intrusive. Local sub- rounded fragments of K-spar alteration intrusive and lesser grey quartz-magnetite fragments (≤1cm in diameter). Magnetite blebs to 1cm and sub- angular 'fragments' of magnetite to 3mm are present in amounts to 10% and local occur in concentrated clusters.	239.0	240.0			1722	187	54	805	1.5	295	
240			240.0	241.0			1723	128	86	401	1.1	190	
241		- Orange gypsum veins are minor. 240.3m - 5cm quartz-sericite-gypsum vein with 1cm K-spar halos (30° to core axis).	241.0	242.0			1724	450	62	250	1.8	1200	

MIN-EN LABORATORIES LTD.

705 WEST 15TH STREET, NORTH VANCOUVER, B.C. V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

Certificate of Assay

TO: Kidd Creek Mines,

PROJECT No. _____

701-1281 W. Georgia St.,DATE: Sept. 28/82.Vancouver, B.C.

File No. _____

SAMPLE No.	Cu %	Pb %	Zn %	Ag	Au	
				oz/ton	oz/ton	
1462	.012	.06	.18	.12	.012	
1463	.025	.08	.32	.13	.027	
1556	.086	.01	.02	.03	.027	
57	.102	.01	.02	.04	.014	
58	.044	.01	.03	.02	.010	
59	.049	.04	.09	.32	.262	
60	.041	.04	.15	.03	.010	
1561	.108	.03	.03	.05	.030	
5729	.698	.58	3.96	1.66	.048	
5730	.381	.39	.20	36.10	.799	
1776	.003	.04	.25	1.79	.023	
77	.002	.02	.13	.63	.007	
1778	.005	.07	.13	2.62	.019	
1782	.140	.26	.19	1.91	.030	
83	.080	.25	.05	24.50	.050	
84	.063	.24	.06	16.70	.010	
85	.061	.26	.07	12.75	.009	
86	.074	.94	.20	10.90	.006	
87	.059	.43	.27	9.60	.007	
88	.057	.20	.19	24.40	.010	
89	.066	.15	.06	11.20	.010	
90	.018	.27	.15	2.13	.001	
91	.007	.07	.17	.63	.001	
92	.012	.07	.23	.98	.001	
93	.008	.05	.15	1.02	.002	
94	.007	.14	.39	.60	.002	
95	.008	.13	.25	1.21	.002	
96	.008	.06	.16	2.04	.001	
97	.007	.07	.20	.19	.001	
1798	.096	.38	.10	9.00	.201	

MINE-EN Laboratories Ltd.

CERTIFIED BY: _____

Certificate of Assay

TO: Kidd Creek Mines,
701-1281 W. Georgia St.,
Vancouver, B.C.

PROJECT No. 04
 DATE: _____
 File No. _____

SAMPLE No.	Cu %	Pb %	Zn %	Ag	Au	File No.
				oz/ton	oz/ton	
1347	.003	.05	.48	.19	.001	2-404
1397	.005	.05	.10	1.33	.001	2-431
1427	.004	.01	.45	.03	.001	
35	.012	.31	.11	2.79	.002	
36	.023	.11	.09	2.80	.032	
60	.006	.30	.85	.47	.003	
1467	.050	.19	.31	.16	.026	
1511	.016	.01	.04	.02	.011	2-435
32	.010	.50	4.28	.13	.010	
67	.101	.15	.39	.15	.078	
71	.059	.20	.49	.12	.020	
75	.058	.09	.28	.20	.069	
1588	.130	.02	.07	.12	.059	
1652	.708	.06	.07	.58	.062	2-476
75	.054	.64	1.60	.16	.039	
77	.016	.05	.37	.07	.002	
87	.104	.46	.48	.14	.012	2-481
90	.042	.51	1.54	.23	.019	
1692	.032	.19	.44	.10	.019	
1716	.090	2.18	6.20	.34	.041	
1731	.140	2.58	2.62	.25	.017	
5642	.026	.45	1.51	.14	.002	2-506
5698	.393	1.62	2.21	3.24	.033	
5732	.067	.04	.43	.12	.011	2-664
5834	.074	.17	.48	.30	.029	
5846	1.915	.05	.04	.86	.049	
1758	.062	.17	.10	6.38	.008	2-393
68	.006	.01	.03	1.17	.002	
1772	.004	.01	.08	.17	.003	
1804	.006	.02	.13	.80	.003	

MINE-EN Laboratories Ltd.

CERTIFIED BY: _____

