82L/10E

DRILLING REPORT

on the FX

BLACK JACK PROPERTY

KINGFISHER CREEK AREA

VERNON MINING DIVISION, B.C.

for

COLBY MINES LTD.

APRIL 1974

4933

Co-Ords: 19+49N -0+07W

Azimuth: 325°

Dip: -40°

Elevation: ~2630'

Length: 302'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: DBS1 - AQ

Dip Tests:

Core stored on property on FX #21

Hole No. 73-1

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Nov 12/73

Date Completed: Nov 17/73

Logged By: WRG/Mr. Owen

Date Logged: Dec/73

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation angle to core	% Sulphides
0	30.5	OVERBURDEN - 9.5' of broken rock							
30.5	35	MARBLE - grey-green to white, impure - medium grained ± phlogopite ± diopside ± quartz - ± minor po	51	31.5	35	3.5	90%	70°	
35	40	MARBLE - similar to above except more siliceous	52	35	42	7	70%		
40	42	FELDSPATHIC QUARTZITE - pegmatitic & finer grained ± biotite						NO	
42	47	MARBLE - similar to 35'-40'	53	42	47	5	95%		
47	57	MARBLE - greenish to white, relatively pure - phlogopite up to 10% - ± minor altered green matic mineral(s) - @54' - shear zone	54 55	47 52	52 60	5 8	90% 65	60°	

4933

Sheet No:.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
57	60	QUARTZITE - grey, pure, slightly calcareous						
60	90	QUARTZITE — SULPHIDE ZONE	56	60	65	5	55%	
		- dark green to grey, impure	57	65	70	5	75	
		- ± diopside, ± hedenbergite & feldspar	58	70	75	5	95	50
		- ± minor pegmatitic feldspathic	59	75	80	5	100	60
		quartzite.	60	80	85	5	95	50
		- medium to coarse grained sulphides,	61	85	90	5	100	
		irregular blebs, only slightly						
		oriented along foliation						
		- po, sp, py						
90	94	QUARTZITE	62	90	95	5	55	
		- grey, pure						
		- ± minor biotite						
		- po blebs						
94	100.5	FELDSPATHIC QUARTZITE	63	95	100.5	5.5	90	
		- pegmatite						
		- ± biotite						
		- + po						
100.5	111	ANDESITE DYKE	26	100.5	111	10.5	95	
		- green, non-foliated						
111	132	MARBLE	27	111	121	10	65	
		- white, pure	28	121	132	11	75	
		- ± minor quartzite						
		- shear zone 125-131						
		- ± sparse po & py - disseminated &						
		on fractures						
132	135	MARBLE	29	132	139	7	100	
		- green, siliceous						
		- + feldspar ± diopside						

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
135	139	FELDSPATHIC QUARTZITE - medium to fine grained - ± garnet ± biotite						
139	149	MARBLE - white, pure - phlogopite 5%	30	139	149	10	100	
149	168	FELDSPATHIC QUARTZITE - pegmatite - ± quartz - ± minor biotite - in quartzites - diopside, biotite, altered green mafics & 1% py & po	31 32	149 160	160 172	11 12	100 100	
168	172	MARBLE - green, impure - siliceous ± diopside						
172	220	MARBLE - grey to white, pure - ± minor quartz - ± muscovite, phlogopite - minor po & py	33 34 35 36 37	172 180 190 200 210	180 190 200 210 220	8 10 10 10 10	100 100 95 100 100	70° 60°
220	230	QUARTZITE - impure - gneissic, calcareous, pegmatitic sections - po & py ~~up to~~ 2%	38 39	220 228	228 239	8 11	100 100	50° 80°
230	234	QUARTZITE - grey, relatively pure - 1% - 3% po blebs						
234	236	FELDSPATHIC QUARTZITE - pegmatite						

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
236	238	MARBLE - green-grey, impure - siliceous						
238	239	FELDSPATHIC QUARTZITE - pegmatite						
239	265	GNEISS - calcareous, siliceous, biotite, feldspar, ± garnet - pegmatite & finer-grained feldspathic quartzite sections - sporadic diss. po & fracture coating of py	40 41 42	239 245 255	245 255 265	6 10 10	100 100 90	60°
265	284	MARBLE - white, pure	43 44	265 275	275 284	10 9	100 100	
284	292	MARBLE - green & white, impure - ± minor phlogopite & red brown garnets - + diopside & altered grey-black mafics - ± thin quartzite sections	45	284	294	10	100	
292	302	FELDSPATHIC QUARTZITE - pegmatite - @ 297' - marble & minor sp. - @ 300' - quartzite & 3% po blebs	46	294	302	8	100	70°
		END OF HOLE						

Co-Ords: 1947N - 0+61W

Azimuth: 350°

Dip: -43°

Elevation: ~2630'

Length: 201'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBSI - AQ

Dip Tests:

Hole No. 73-Z

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Nov 18/73

Date Completed: Nov 21/73

Logged By: W R Guinsor W.R. Guinsor

Date Logged: Dec/73

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation Angle to c.a.
0	16	OVERBURDEN - 5' of broken rock						
16	18	FELDSPATHIC QUARTZITE - pegmatite	64	16	18	2	100%	
18	48	MARBLE - SULPHIDE ZONE	65	18	23	5	100	
		- dark green to white, splotchily & speckled	66	23	28	5	90	
			67	28	33	5	100	
		- phlogopite up to 20%	68	33	38	5	100	
		- po > py	69	38	43	5	100	
		- splotchy aggregates of sulphides	70	43	48	5	100	
		- Sp @ 22 & 31'-33'						
		- Shear zone @ 41'						
		- po, py, Sp						
48	53	FELDSPATHIC QUARTZITE	71	48	53	5	100	
		- pegmatite						
		- sulphides <1%						
53	73	MARBLE - SULPHIDE ZONE	72	53	58	5	100	
		- similar to 18 - 48 except	73	58	63	5	75	
		more pure, white marble	74	63	68	5	90	
			75	68	73	5	95%	

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
73	80	ANDESITE DYKE - green, non foliated - fault zone		73	80	7	50%	
80	100	MARBLE - green to white - siliceous with altered green mafic minerals)		80 90	90 100	10 10	65% 85	
100	142	FELDSPATHIC QUARTZITE ± slightly calcareous feldspathic quartzite ± minor peymatite ± gneissic bands - ± minor py & po - ± garnet & biotite		100	110	10	95	80°
142	153	GNEISS - biotite, quartz, feldspar, garnet - po & py ~ about 1% (disseminated) - Siliceous gneiss grading into calcareous rock		142	153			70° to 80°
153	186	MARBLE - white, pure						
186	193	GNEISS - biotite, quartz, feldspar - calcareous - 1% - 3% diss. po ± (py)			@ 190			80°
193	196	MARBLE - grey white - Siliceous - 4% po.			@ 195			80°

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length
196	198	FELDSPATHIC QUARTZITE				
		- pegmatite				
		- calcareous				
198	201	QUARTZITE				
		- grey, pure				
		- @ 201' 3% po blebs				
		END OF HOLE				

Sheet No.....

Co-Ords: 19+00N – 1+13W

Azimuth: 290°

Dip: -40°

Elevation: ~2630'

Length: 249'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1 AQ

Dip Tests:

Hole No. 73-3

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Nov 23/73

Date Completed: Nov 26/73

Logged By: W.R. Gilmour W.R. Gilmour

Date Logged: Dec/73

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angle to core
0	12	OVERBURDEN – 1.5' of broken rock						
12	33	GNEISS – biotite, quartz, feldspar ± garnet – ± quartzite bands			@14			60°
					15			80
					20			50
					29			45
					30			50
					[illegible]			[illegible]
33	49.5	MARBLE – pale green to white – ± minor pegmatite – phlogopite 0–15%, diopside 0–5% – pol %			46			70
49.5	52	QUARTZITE – grey, pure – po blebs up to 2%						
52	133	SULPHIDE ZONE in QUARTZITE &	101	52	55	3'	100%	
		minor MARBLE	47	55	60	5'		20°
		– marble at	48	60	65	5'		15
		78–81	49	65	70	5'		55
		98–100	50	70	75	5'		55

Sheet No...

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
		108–111 with orange brown garnets	76	75	80	5	100%	
		125–132	77	80	85	5		
			78	85	90	5		
		- quartzite & banded quartzite	79	90	95	5		60
		- banding parallel with sulphides	80	95	100	5		
		(med. grained)	81	100	105	5		40
		- some coarse grained sulphides	82	105	110	5		
		- Sp & ga 5%–15%	83	110	115	5		
		- Po 5%–25%	84	115	120	5		15
		- Sp & ga averages > Po in quartzite	85	120	125	5		60
		- narrow band (2"–6") of pure quartzite	86	125	130	5		
		at each end of sulphide zone	87	130	133	3		45
		- calcite & altered feldspar in quartzite						
		- marble						
		- Po 5–40%						
		- Sp & ga 5–10%						
		- diopside up to 10%						
		- phlogopite up to 5%						
133	136	QUARTZITE						
		- grey-green, calcareous						
		- ± m. diopside						
		- Po 1%						
		± pegmatite						
136	148	GNEISS						
		- biotite, quartz, feldspar ± garnet						
		- increase in calcareous & decrease						
		in biotite through 136–148						
		- foliation of biotite complex–folding						
		- Po 1%–2%						
148	159	MARBLE						
		- light green tan white siliceous						
		- biotite 5%						
		± pegmatite						

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation				
159	165	GNEISS - biotite, quartz, feldspar, garnet (5%) - altered, contorted & sheared sections										
165	189	GNEISS - biotite, quartz, feldspar, ± garnet - ± pegmatite - py aggregates & calcs on sporadic vertical fractures			@182 187			50° 70				
189	202	GNEISS - biotite, quartz, feldspar, garnet (10%) - pink-red garnets common - Pt very sparse - py occurrences same as above - foliations more consistent			@193 198 200			60 70 80				
202	209	GNEISS - similar to above except altered & sheared - grading into siliceous marble										
209	222	MARBLE - white, pure - biotite 5%, ± minor muscovite										
222	230	MARBLE - green to white, siliceous - biotite 5% - @224 po & sp noted			223			60°				
230	247	QUARTZITE - grey, pure - increase in fracturing (tending to be vertical) - py on fractures - some banding @ 234-235 with po 1-2%										

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length						
247	249	MARBLE										
		-pale green to white										
		END OF HOLE										

Sheet No.....

Co-Ords: 19+00N – 1+13W

Azimuth: 290°

Dip: -65°

Elevation: ~2630'

Length: 349'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: BBS1-AQ

Dip Tests:

Hole No. 73-4

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Nov 26/73

Date Completed: Nov 30/73

Logged By: W.R. GILMOUR W.R Gilmour

Date Logged: DEC/73

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation angle to C.A.
0	17	OVERBURDEN – 3' of broken rock						
17	21	MARBLE – pale green to white		17	21	4	90%	
21	30	GNEISS – biotite, quartz, feldspar, ± garnet – ± minor pegmatite – minor po (diss. blebs) & py (on fractures)			@25 28 30 21 51	30	85%	30° 60
30	34	QUARTZITE ~~highway~~						
34	36	MARBLE						
36	51	GNEISS – similar to 21-30'			@38 @50°			60° 60°
51	63	MARBLE – green to white – biotite 5-10%, diopside 1-3% – minor thin quartzite (po 2%) & Siliceous marble						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
63	80.5	FELDSPATHIC QUARTZITE - pegmatite - ± minor calcareous quartzite & marble bands - minor micaceous sections - marble 70'-71'										
80.5	110	MARBLE - similar to 51'-63' - biotite 5%, diopside up to 5% - @97' pegmatite - 80.5-85.5 marble sheared & altered appearence.										
110	132	GNEISS - biotite quartz, feldspar ± garnet - calcareous in places - grading between gneissic quartzite & siliceous gneiss - biotite 5-40%, diopside 5-10% - po 1-3%			@122			60°				
132	140	GNEISS - biotite, quartz, feldspar, garnet (6%) - pegmatite like quartz - foliations of biotite complex										
140	143	MARBLE - green & white, siliceous										
143	146	GNEISS - similar to ~~132~~ 132-140										
146	148	MARBLE - similar to 140-143 - diopside 10% - ~~dass~~ po up to 5%			@145'			70°				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
149	150	FELDSPATHIC QUARTZITE - pegmatite						
150	154	MARBLE - impure, siliceous & feldspathic - diss. po. up to 5%						
154	156½	QUARTZITE - grey, pure - minor banding			@155			50°
156½	182½	QUARTZITE - SULPHIDE ZONE - banded, grey - minor biotite, diopside - medium grained sulphides parallel banding - Mo - 175 sp > po - PO, SP, PY	E8	156½	160	3½	100	
			E9	160	165	5	100	
			90	165	170	5	95	60°
			91	170	175	5	90	55
			92	175	180	5	100	
			93	180	182½	2½	100	
182½	195	QUARTZITE - greenish grey quartzite - minor banding - ± pegmatitic bands			@188			70°
195	198	MARBLE - green to white						
198	202½	QUARTZITE - similar to 182½ - 195'						
202½	217	~~MASSIVE~~ - SULPHIDE ZONE in QUARTZITE & minor MARBLE - marble @ 214 - 217 - quartzite similar to 156½ - 182½ - ± minor pegmatite - PO, SP, PY	94	202½	205	2½	100	
			95	205	213	8	100	50°-70°
			96	213	217	4	100	
217	224	GNEISS biotite, quartz, feldspar, ± garnet			@220'			60°

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Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
		- folations complex						
224	243	GNEISS			@228			60°
		- biotite, quartz, feldspar, garnet (10%)						
243	256	MARBLE			@249			60°
		- white, pure						
		- biotite <5%						
256	267	MARBLE			@264			70°
		- green to white						
		- diopside 5%, biotite 5%						
		- py 2% (with mafics)						
		- ± quartzite & pegmatite bands						
267	288	QUARTZITE - [illegible]	98	276	281	5	100	60
		- grey, occasionally banded	99	281	286	5	100	50
		- ± marble bands	100	286	291	5	95	
		- sp @ 282 & 288 (2%)		[illegible]				
		- py, sp						
288	298	MARBLE		296	301	5	80	
		- sulphide zone						
		- green to white						
		- ± biotite, ± diopside						
		- minor sp.						
		- shear @ 297						
298	307	QUARTZITE		301	307	6	100	
		- grey, pure						
		- py & po blebs, traces of sp.						
307	349	MARBLE		333	339	6		
		- green & white		339	344	5		
		- biotite up to 15%, diopside up to 10%			@315			60°
		- minor py & po			328			50
		- shear @ 308			336			60
		- ± quartzite (some banding) & pegmatite						

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length
		bands				
		- trace sp.				
		END OF HOLE				

Sheet No. .....

Co-Ords: 18+00N — 1+00W

Azimuth: 290°

Dip: 40°

Elevation: ~2630'

Length: 318'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1 - AQ

Dip Tests:

Hole No. 73-5

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Dec 2/73

Date Completed: Dec 5/73

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: Dec/73

Footage From	Footage to	Description	Sample No	Footage from	Footage to	Length		foliation angle to core				
0	9	OVERBURDEN										
9	12	MARBLE -green, siliceous -diopside 10%										
12	17	MARBLE -white, pure										
17	41	FELDSPATHIC QUARTZITE -pegmatite -feldspar > quartz -± biotite, ± garnet			@34' 37			80° 80				
41	51	MARBLE -pale green to white										
51	68	GNEISS -biotite, quartz, feldspar, garnet(10%) @58-59 sheared, altered section -± pegmatite bands (feldspar rich)			@52 56 62 65 68			50 80 65 50 60				
68	74	FELDSPATHIC QUARTZITE -pegmatitic & fine to medium grained -± biotite ± garnet (in non-pegmatitic										

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation
		usually)						
		-@ 72' -gneissic, altered, sheared						
74	82	MARBLE			@ 74			60°
		-green grey to white						
		-phlogopite 0-15%						
		-diopside 0-15%						
		-± gneissic & siliceous bands						
		-diss. po 5% in green siliceous bands						
82	86	FELDSPATHIC QUARTZITE						
		-pegmatite						
		-± quartzite bands						
		-feldspar ≈ quartz						
86	100	SULPHIDE ZONE in MARBLE &	102	86	91	5	100	
		minor FELDSPATHIC QUARTZITE	103	91	96	5	100	
		86-88 pegmatite	104	96	100	4	100	
		99-100 pegmatite						
		88-99 marble						
		-green & white to white						
		-phlogopite 0-10%, diopside 0-20%, ± orange brown garnets						
100	117	GNEISS			@ 106			40
		-biotite, quartz, feldspar, garnet (5%)			108			20
		-with green & white marble bands to 103'			110			60
		-± pegmatite bands						
		-grading into quartzite with pod (py)						
117	130	MARBLE			@ 129			45
		-green to white						
		-diopside up to 15%						
		-@ 125' trace sp with po & py						

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Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		- in green marble po up to 10% - ± minor quartzite & banded quartzite sections f - 118 - 121 shear zone										
130	153	QUARTZITE - green grey to grey - some calcareous banding - ± pegmatite bands - quartzite contains fair amount of feldspar in places - diss po in impure quartzites @ 145-146 2% Zn with 15% po & py			@134 138 143 146 152			20 45 50 50 40				
153	156	MARBLE - green & white - ± diopside, ± phlogopite										
156	174	GNEISS - biotite, quartz, feldspar, ± garnet - up to 5% diss. po - @ 157 & 160-161 trace galena in thin quartz bands			@166 177			60° 50°				
174	183½	GNEISS - similar to above except 10% garnet - garnets up to ¾" - some complex folding			183			60				
183½	206	ANDESITE DYKE - green, non-foliated - fine grained slightly porphyritic (<15%) - phenocrysts of plagioclase, Kspar, & dark green mafic mineral - random calcite filled fractures - @ 183½ contact										

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
		-sharp contact						
		-60° to core & 60° to gneissosity						
		-slight (¼") chill margin						
206	209	GNEISS						
		-biotite, quartz, feldspar, garnet						
		-altered & sheared						
		-contact with gneiss shear or fault zone						
209	222	ANDESITE DYKE						
		-similar to before						
		-contact (shearing @ 40° to core)						
222	226	GNEISS			@223			75°
		-biotite, quartz, feldspar						
		-py on fractures						
226	244	FELDSPATHIC QUARTZITE			@233			60°
		-pegmatite						
		-± minor quartzite (some banding) & calcareous & gneissic sections						
		-sparse po.						
244	254	ANDESITE DYKE		244	254	10	50%	
		-similar as before						
		-py on fractures						
		-@246 strong shear						
254	261	QUARTZITE			259			80
		-grey			261			60
		-± pegmatite bands						
		-@259' 1% Zn with 2% po & py						
261	272	SULPHIDE ZONE in QUARTZITE & MARBLE	105	261	266	5'	100	
		-po, py, sp	106	266	272	6'	100	

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		261-266 quartzite - greenish grey to grey - slightly banded										
		266-272 marble - green to white - ± minor quartzite - ± phlogopite, ± diopside										
272	281	GNEISS - biotite, quartz, feldspar - ± minor quartzite sections - diss. po 1%			@275 279			65 80				
281	294	GNEISS - biotite, quartz, feldspar, garnet (10%)			284 291			80 70				
294	318	MARBLE - white, pure - ± phlogopite, ± minor muscovite - @ 302 shear - ± quartzite (end of hole) 2% po.			317			50				
		END OF HOLE										

Co-Ords: 1600N - 0+81W

Azimuth: 290°

Dip: -40°

Elevation: ~2580'

Length: 217'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: P1351 AQ

Dip Tests:

Hole No. 73-6

Property: BLACK JACK

Location: KING FISHER CREEK

Date Started: Dec 5/73

Date Completed: Dec 7/73

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: DEC/73

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angle to core				
0	15	OVERBURDEN										
						34						
15	54	GNEISS		15	49		75%					
		- biotite, quartz, feldspar, garnet			@21			70				
		- garnet 5-15%			35			55				
		- py on fractures			43			60				
		- ± minor quartzite & pegmatite bands			51			70				
					58			70				
54	65	FELDSPATHIC QUARTZITE			68							
		- pegmatitic & fine-medium grained										
		- ± biotite ± garnet										
		- ± marble bands										
65	84	MARBLE			68			60				
		- white & green, impure										
		- diopside 0-15%, phlogopite 0-10%										
		- minor quartzite & gneissic bands										
		- minor po										
84	100	ANDESITE DYKE										
		- green, non-foliated										
		- slightly porphyritic (feldspars)										
		- @84' andesite fragments in marble (calcite)										

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
		~~MARBLE (calcsilicate)~~						
		-calcite on fractures						
100	115	QUARTZITE			@112			50°
		-grey, minor banding (calcareous)			@114			60°
		-± feldspar						
		-minor impure marble bands						
115	120	MARBLE						
		-green to white						
		-±diopside ± phlogopite						
120	127	FELDSPATHIC QUARTZITE						
		-shear zone with calcite on fractures						
		-± minor garnet						
		-pegmatite						
127	134	MARBLE						
		-green to white						
		-±diopside, ± phlogopite						
134	~~134~~ 159	GNEISS			@136			70°
		-biotite, quartz, feldspar, garnet			139			60
		-garnet 5-10%			144			65
		-± pegmatite			150			50
		-@142' complex folding			159			75
		-~~CHALCO~~ py on sporadic fractures						
159	160	ANDESITE DYKE						
		-green, non-foliated						
		-fault zone						
160	206	GNEISS			172			50
		-similar to 134-159			180			70
		-@197-200' complex folding			186			60
					190			50

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
[illegible]					@194			40
					@202			65
206	216	FELDSPATHIC QUARTZITE			@209			50
		- fine to medium grained, pegmatite			@215			60
		in places						
		- ± garnet, ± biotite						
216	217	MARBLE						
		- green & white						
		- ± phlogopite						
		- diopside 10%						
		END OF HOLE						

Sheet No.....

Co-Ords: 16 + 17N — 14 17E

Azimuth: 284°

Dip: −30°

Elevation: ~2580'

Length: 180'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: BBS1 - AQ

Dip Tests:

Hole No. 73-7

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Dec 8/73

Date Completed: Dec 11/73

Logged By: W.R. Gibson W.R. Gibson

Date Logged: Dec/73

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angle to Core				
0	22	OVERBURDEN - 1' of broken rock										
22	49	FELDSPATHIC QUARTZITE - pegmatitic & some fine to med. grained - biotite ± garnet - minor po blebs - minor py on fractures										
49	54	MARBLE - green to white - diopside 5-15%, phlogopite 5-10%, ± minor biotite - ± siliceous, green marble with 5% po - ± quartzite - broken rock										
54	58	GNEISS - biotite, quartz, feldspar, garnet, hornblende										
58	63	MARBLE - similar to 49'-54'			055			55°				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
63	70	FELDSPATHIC QUARTZITE - fine to medium grained - ± biotite ± garnet						
70	74	MARBLE - white, pure - phlogopite 10%						
74	76	FELDSPATHIC QUARTZITE - pegmatite						
76	93	MARBLE - similar to 70-74 - trace of magnetite (?) @ 89'			@83'			60°
93	94	MARBLE - green to white marble - phlogopite 10% - diopside 0-10%						
94	96	GNEISS - biotite, quart, feldspar, garnet						
96	109	MARBLE - similar to 93-94 - ± minor thin quartzite bands - 105-108 area of shearing						
109	131	GNEISS - biotite, quartz, feldspar, garnet - rock sheared along foliations from 117-131 - minor py on fractures		109	131	26	85%	@110 35° 113 20 116 55 121 20 124 40 127 10 131 10

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
131	143	QUARTZITE -greenish grey to grey -diopside 0.5% -much fracturing -± minor thin quartzitic & calcareous bands -in more mafic & calcareous rocks up to 5% diss po.		131	154	23	80%	
143	145	MARBLE -green & white, impure -diopside 20% -quartz 25% -5% diss. po.						
145	154	QUARTZITE -similar to 131-143			@151			50°
154	158	QUARTZITE -grey, some banding -± minor biotite & altered green mafic mineral(s) - probably feldspar & tremolite & diopside -@156' - 5% po blebs -minor py on fractures			@156			20°
158	163	FELDSPATHIC QUARTZITE -pegmatite						
163	180	QUARTZITE -similar to 154-158 -@177-180 5% po blebs -± pegmatite END OF HOLE			@165			25°

Sheet No.....

Co-Ords: 18+00N - 2+00E

Azimuth: 290°

Dip: 45°

Elevation: ~2620'

Length: 426'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1 - AQ

Dip Tests: 300', -38°
402', -38°
426', -40°

Hole No. 73-8

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Dec 13/73

Date Completed: Dec 18/73

Logged By: W.R. Gilmour W.R. Gilmour

Date Logged: Jan/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation angle to core
0	15	OVERBURDEN - 4' of broken rock						
15	20	MARBLE - green & white (impure & pure) - ± phlogopite & diopside - rock broken			@20			45°
20	28	QUARTZITE - SULPHIDE ZONE - sulphides orientated along foliations (no consistent angle of foliations) - sulphides in places concentrated along sporadic fractures - ± diopside - po, py, sp	107	20	28 @25 @28	8	100	 25° 60°
28	29	QUARTZITE - grey, pure - ± minor biotite						
29	31	GNEISS - biotite, quartz, feldspar			@31			65°
31	43.5	FELDSPATHIC QUARTZITE - ± biotite (5%) - pegmatite						

Sheet No..

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Inclination	[redacted]	[redacted]		
4.35	56	MARBLE		45	50	5	70%					
		- white to green			@47			55°				
		- ± phlogopite ± green altered mafic mineral(s)										
		- fault at 46'										
56	66	QUARTZITE										
		- green to grey to white										
		- calcareous										
		- ± diopside up to 15%										
		- disseminated po & py (5%)										
66	68	GNEISS			@66			55°				
		- biotite, quartz, feldspar, garnet										
		- non-gneissic siliceous sections have diss. po up to 5%										
68	76	MARBLE			@73			50°				
		- mainly pure, white (ie 90% calcite)										
		- ± minor quartzite										
		- phlogopite 0% to 20%										
76	78	FELDSPATHIC QUARTZITE										
		- pegmatite (ie. coarse grained)										
		- ± biotite.										
		- feldspar & quartz										
		- rounded feldspar crystals (c. grained) in finer grained quartz										
78	87	QUARTZITE			@80			35°				
		- banded			@85			40°				
		- small, discontinuous calcareous blebs form banding										
87	115	MARBLE			@95			65				
		- white to greenish white marble			@109			70				
		- ± minor quartzite, gneiss &										

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
		pegmatitic sections; mostly all < 1' thick - ± phlogopite 0-20% with little apparent foliation						
115	139	GNEISS - biotite, quartz, feldspar, garnet - ± minor quartzite, calcareous quartzite & pegmatitic sections - broken rock - minor py on sporadic fractures		115	139 @120 @123 @130	24	85%	65 20 60
139	143	QUARTZITE - relatively pure, grey - ± biotite		139	164	25	80%	
143	156	FELDSPATHIC QUARTZITE - greenish tinge - pegmatitic to medium grained - ± minor biotite - ± minor quartzite			@158			45°
156	164	QUARTZITE - pure, grey - @158' 2% po blebs						
164	177	ANDESITE DYKE - non foliated, green - fault zone		164	177	~~13~~	20%	
177	179	MARBLE - pure, white		177	191	14	80%	
179	188	FELDSPATHIC QUARTZITE - greenish-grey - ± minor biotite - 183-187 is pegmatite						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
188	220	MARBLE			@193			65°
		- mainly white, pure			@210			70°
		- ± minor phlogopite						
220	235	~~QUARTZITE~~ QUARTZITE			@222			65
		- ~~Muscovite~~ green-grey			@226			70
		- ~~Feldspar~~, ± biotite ± minor diopside, ± feldspar						
		- calcareous in places						
		- tending to gneissic sections in places						
		- sections of 5-10% diss. po (slightly ~~fo~~ oriented)						
		- 228-229 1% to 2% Zn, 10-15% po & py						
235	247	QUARTZITE						
		- white-grey						
		- pegmatite veining common						
		- @241 - 5% po blebs						
247	258	FELDSPATHIC QUARTZITE						
		- fine-medium grained						
		- biotite ± minor garnet						
258	261	FELDSPATHIC QUARTZITE						
		- pegmatitic						
		- 5% po & py						
261	262	MARBLE						
		- impure, siliceous						
262	277	QUARTZITE		263	277	14'	40%	
		- grey, pure			@268			55°
		- broken rock						
		- 5% po & (py)						
		- faults @ ~~262~~ 264						
		@ 273-276						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
~~0~~		± minor thin (few inches) bands of pegmatitic feldspathic quartzite (feldspar, quartz, biotite ± garnet) – diss. po up to 5% – in places marble grades into calcareous quartzite						
377	381	FELDSPATHIC QUARTZITE – fine to medium grained – ± biotite, ± minor garnet						
381	387	GNEISS – quartz, feldspar, biotite, garnet – ± thin pegmatitic bands – py on fractures			@ 386			50°-70°
387	398	MARBLE – white to green & white – ± pegmatite, ± fg. feldspathic quartzite, ± quartzite bands – also green & white siliceous marble, ± diopside, 5% po in places, – ± minor magnetite (?)			@ 390			50°
398	411	GNEISS – quartz, feldspar, biotite – py on fractures – ± pegmatitic bands			@ 399			60°
					@ 401			80°
					@ 404			70°
					@ 410			65°
411	426	MARBLE – green & white to white – ± phlogopite, ± diopside – also siliceous greenish marble with diss po up to 5% – ± minor gneiss, ± minor pegmatite			@ 422			60°
		END OF HOLE						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
277	297	MARBLE		277	297	20	90%	
		- green & white, speckled appearance			@ 293			60°
		- siliceous						
		- + diopside						
		- ± minor pegmatite						
		- diss. po 5%						
297	329	MARBLE			@ 325			70°
		- white, pure						
		- minor muscovite & phlogopite						
		- minor magnetite (?)						
329	335	MARBLE			@ 331			65°
		- green & white, impure						
		- diopside, siliceous						
		- similar to 277-297						
		- ± minor pegmatite						
		@ 332-333 10-15% po & 1% Zn						
335	339	FELDSPATHIC QUARTZITE						
		- pegmatite						
		± minor biotite (also tending to be coarse grained)						
339	344	FELDSPATHIC QUARTZITE			@ 342			70°
		- fine to medium grained						
		- grey-white						
		- + biotite ± garnet						
		- minor foliation of biotite in places						
344	358	MARBLE						
		- white, pure						
		- ± minor phlogopite						
358	377	MARBLE			@ 361			65°
		- green & white, speckled			@ 376			55°
		- siliceous, + diopside (up to 10%)						

Sheet No.....

Co-Ords: 18+00N — 1+44E

Azimuth: 120°

Dip: -50°

Elevation: ~2010'

Length: 192.5'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Hole No. 74-1

Property: BLACK JACK

Drill Type & Size: PBS1-AC

Location: KINGFISHER CREEK

Dip Tests:

Date Started: Jan. 7/74

Date Completed: Jan. 9/74

Logged By: W.R. GILMOUR

Date Logged: JAN/74 W.R. Gilmour

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angle to C.A.				
0	11	OVERBURDEN - 2' of broken rock										
11	32½	MARBLE - white - @ 21' Bn 1%, 5-10% po - @ 32' Bn 1%, 5-10% po - ± minor red-brown garnet, ± minor muscovite ± minor splotchy green-black altered mineral(s)		27	40 (@ 23' 3'	13	70	10° 45				
32½	34	QUARTZITE - grey, slightly banded - 5% po blebs -										
34	39	MARBLE - white & green - splotchy green-black altered minerals										
39	45	QUARTZITE - grey-green - 5% po - ± feldspar (coarse grained)										

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
45	59	MARBLE -white to green - phlogopite up to 10% - ± diopside - ± minor feldspathic quartzite & gneissic sections			@49 51			40° 60
59	62	GNEISS - biotite, quartz, feldspar, ± garnet			@60			50
62	109	FELDSPATHIC QUARTZITE - pegmatite, also fine to medium grained - ± very minor garnet, ± very minor marble - tending to quartzite in places - biotite 1%						
109	120	FELDSPATHIC QUARTZITE - similar to above, but increase in garnet - very minor py on fractures			@112			45°
120	148	FELDSPATHIC QUARTZITE - similar to above, except medium-grained.			@132			30°
148	158	FELDSPATHIC QUARTZITE - similar to 109-120			@150			20°
158	166	GNEISS - biotite, quartz, feldspar, garnet - pegmatite sections			@165			35°
166	167	MARBLE - white to greenish - phlogopite						
167	168	MARBLE - siliceous, green						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation				
168	170	GNEISS - biotite, quartz, feldspar, garnet			@ 169			15°				
170	174	QUARTZITE - green, calcareous										
174	183	QUARTZITE - grey, pure - banded to non-banded - 0-10% po blebs			174 177			50 35				
183	197½	FELDSPATHIC QUARTZITE - pegmatite										

Sheet No. .....

Co-Ords: 2+00N – 4+55E

Azimuth: 265°

Dip: -45°

Elevation: ~2520'

Length: 204'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBSI – AQ

Dip Tests:

Hole No. 74-2

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan 11/74

Date Completed: Jan 12/74

Logged By: W R GILMOUR W R Gilmour

Date Logged: JAN/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angle to core
0	14	OVERBURDEN – 1 foot of core						
14	26	GNEISS – biotite, quartz, feldspar, garnet – coarse grained quartz & feldspar "eyes"			15			60
					21			70
26	28	FELDSPATHIC QUARTZITE – pegmatite – minor garnet & biotite – complex foliations in places						
28	47	GNEISS – similar to 14–26			31			60
					38			60
47	50	QUARTZITE – biotite common – py on occasional fractures – feldspathic in places			49			60
50	61	GNEISS – similar to 28–47 – garnet up to 10% in places			54			80

Sheet No. 1

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
61	63	QUARTZITE -ca/carecus -± mica -5% py			66.2'			60°
63	66.5	MARBLE - SULPHIDE ZONE -siliceous & feldspathic throughout -py & po in impure sections	246 247	63 66.5	66.5 71.5	55 3'	100% 100	
66.5	71.5	QUARTZITE - SULPHIDE ZONE -py & po - feldspathic in places						
71.5	73.5	FELDSPATHIC QUARTZITE -pegmatite						
73.5	88	MARBLE -green-white to white - diopside, quartz, feldspar, biotite, phlogopite total up to 5% - disseminated po up to 5% in section -87-88 2% sp			@ 76 84			55° 65°
88	89	QUARTZITE -grey, pure						
89	93	MARBLE -similar to 73.5-88			93			60
93	94	QUARTZITE -similar to 88-89						
94	96	MARBLE -similar to 89-93						
96	98	QUARTZITE -similar to 93-94						

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	fiber
98	109	MARBLE -similar to 95-96			105'			70°
109	110	FELDSPATHIC QUARTZITE - fine grained - minor biotite			109			65
110	120	MARBLE -similar to 95-109			113			65
120	158	MARBLE -mainly white, pure -phlogopite 0-15%			123 141			70 65
158	163	MARBLE -similar to 110-120						
163	168	FELDSPATHIC QUARTZITE -pegmatite -±garnet & biotite						
168	175	MARBLE -similar to 120'-158'			169			40
175	1845	MARBLE -similar to 158-163			170 182			50 60
1845	190	FELDSPATHIC QUARTZITE -pegmatitic & med. to fine grained -±biotite						
190	204	GNEISS -biotite, quartz, feldspar, garnet -10 septa -fault zone -mineralized		@190 191	204	13	15%	70
		END OF HOLE						

Sheet No.....

Co-Ords: 4+00 N - 0+45 E

Azimuth: 295°

Dip: -45°

Elevation: ~2530'

Length: 140'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: FBS1 - AQ

Dip Tests:

Hole No. 74-3

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan 13/74

Date Completed: Jan 14/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: JAN/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation or Bedding
0	14	OVERBURDEN -2' of core						
14	24	GNEISS -biotite, quartz, feldspar, garnet			@16 22			70° 60
24	30	MARBLE -green & white, impure -diopside						
30	65	QUARTZITE -impure, calcareous -calcareous sections & thin marble bands very common -banding & gneissic foliation common -biotite 0-15% -light green to green black minerals (diopside, tremolite, chlorite, altered feldspars) up to 25% -quartzite grading into feldspathic quartzite or gneiss & garnet -disseminated po & tr cpy over degree, py as minor throughout section	25E	36	38 @43 48 53 59 62	2'	low	75° 70 70 70 75

Sheet No...

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		- sulphides in glassy more like massive texture (on small scale) - sulphides < 2%										
65	79	MARBLE - similar to 30-65 except more calcareous & less siliceous - green & white to white - biotite & phlogopite < 2% - green minerals < 2% - diss py & py < 5%			@73' 70			65 55				
79	84	GNEISS - biotite, quartz, feldspar, garnet - ± marble bands - minor py on some fractures			82			80°				
84	139	MARBLE - greenish white to white - ± quartzite & minor gneiss bands - more pure white marble bands but greenish calcareous quartzite bands still fairly common - these quartzite bands contain 5% diss. py - the siliceous green bands contain garnets - in marbles: biotite & phlogopite 0-2%, altered green minerals 0-10% - ± minor feldspathic quartzite - @ 95' through fold with fold axis approx. perpendicular to core axis			87 93 94 100 106 110 125 129 133			60° 70 50 55 80 55 55 75 65				

Sheet No. ..... of .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
13	14	GNEISS			14			65°				
		-biotite, quartz, feldspar, garnet										
		END OF HOLE										

Sheet No. .....

Co-Ords: 6+12N - 2+93E

Azimuth: 290°

Dip: -45°

Elevation: ~2530'

Length: 150'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: EBSI - AQ

Dip Tests:

Hole No. 74-1

Property: BLACK TACK

Location: KINGFISHER CREEK

Date Started: Jan 15/74

Date Completed: Jan 16/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: JAN/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length		Alpha angle to core				
0	13	OVERBURDEN - Not core										
13	43	MARBLE - Impure, green & white - marble similar to that in 74-2 - thin gneissic sections - biotite & phlogopite			@ 19' 26 34			50° 65 70				
43	45	QUARTZITE - calcareous, feldspathic										
45	49	GNEISS - biotite, quartz, feldspar, garnet - feldspathic sections			46			55				
49	67	MARBLE - similar to 13-43			54 61			50 55				
67	72	QUARTZITE - greenish - calcareous			68			55				
72	76±	MARBLE - similar to 49-67			76			80				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
76½	78½	FELDSPATHIC QUARTZITE - pegmatite										
78½	85	QUARTZITE - calcareous, gneissic - pyritic - ± marble										
85	88	GNEISS - biotite, quartz, feldspar			@85 @88			60° 55				
88	89	QUARTZITE										
89	90	MARBLE - similar to 72-76½										
90	94	GNEISS - biotite, quartz, feldspar - ± feldspathic quartzite & quartzite			91			60				
94	112	FELDSPATHIC QUARTZITE - pegmatite - biotite 10%										
112	118	GNEISS - biotite, quartz, feldspar, garnet			113			45				
118	123	FELDSPATHIC QUARTZITE - mostly pegmatitic										
123	138	GNEISS - biotite, quartz, feldspar - migmatitic - altered			125 130 135 138			60 80 75 60				

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		Foliation				
138	142	FELDSPATHIC QUARTZITE -pegmatite										
142	150	GNEISS -biotite, quartz, feldspar, garnet -siliceous -altered appearance			@143 150			15° 60				
		END OF HOLE										

Sheet No. .....

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Co-Ords: 2/+00N -0+41E | Hole No. 74-5

Azimuth: 290° | Property: BLACK JACK

Dip: -45° | Drill Type & Size: PBS1-AQ | Location: KINGFISHER CREEK

Elevation: ~2660° | Dip Tests: | Date Started: Jan. 17/74

Date Completed: Jan. 18/74

Length: 152' | Logged By: W.R. GILMOUR W.R. Gilmour

Section: | Date Logged: Jan/74

Purpose:

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation angle to core
0	15	OVERBURDEN - 1 foot of core						
15	17	GNEISS - biotite, quartz, feldspar - minor Spo			@17			55°
17	33½	FELDSPATHIC QUARTZITE - fine grained grading into pegmatite in places - biotite 5% to 10% - minor thin, calcareous sections						
33½	36½	QUARTZITE - grey, banded - banding due to buff to pale green calc-gneiss & feldspathic mineral foliations - no sulphides			@34			55°
36½	62	QUARTZITE-SULPHIDE ZONE	226	36½	40	3½	100%	75°
		- similar to 33½ - 36½	227	40	45	5	95	40
		- grey banded quartzite	228	45	50	5	100	50
		- Spo > Py	229	50	55	5	100	55
		- sulphides (Spo, Sp, Gn, Py)	230	55	60	5	100	50

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
		form foliations	231	60	64½	4½	100	
62	64½	MARBLE - SULPHIDE ZONE - green & white - Shearing @ 64' - @ 64½' massive 2" po, sp, (py)						
64½	68	QUARTZITE - grey, banded			@68			55°
68	75	MARBLE + siliceous marble & thin banded quartzite - up to 2% diss. po in places						
75	81	GNEISS - biotite, quartz, feldspar, garnet - minor py on fractures - @ 80' shearing (¼") @ 30° (@ 70° to foliations)			@76			50°
81	87	FELDSPATHIC QUARTZITE - white-grey - pegmatite - minor biotite, garnet, po						
87	105	GNEISS - biotite, quartz, feldspar, garnet - thin pegmatitic sections			@87 88 [illegible] 92 [illegible] 96 103			40° 20 [illegible] 60° 70 55
105	111	FELDSPATHIC QUARTZITE - pegmatite - minor po						

Shee

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
111	130	GNEISS						
		- biotite, quartz, feldspar, garnet		121	130	9	40%	
		- pegmatite in places			@113			55°
		- 121-130 broken rock			125			55
130	140	MARBLE - SULPHIDE ZONE	232	130	135	5	95%	40°
		- green, white	233	135	140½	5½	90	
		- po ~ py	234	140½	142½	2	95	
		- Shearing throughout section, contorted folding		@ 140				45°
		- po, py, sp						
140	152	QUARTZITE		@ 150				45°
		- grey						
		± contorted banding (near end of hole)						
		- sp & po @ 142'						
		END OF HOLE						

Co-Ords: 2+00N -2+00E

Azimuth: 285°

Dip: -45°

Elevation: ~2680'

Length: 167'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1 -AQ

Dip Tests:

Hole No. 74-6

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan. 18/74

Date Completed: Jan. 19/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: Jan/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	°	foliation angle to core	
0	16	OVERBURDEN -1 foot of core							
16	23	FELDSPATHIC QUARTZITE -pegmatite							
23	36	GNEISS -biotite, garnet -grading into feldspathic quartzite (f. grained) & pegmatite) -complex folding @ 34-35			@23 30			65° 70	
36	39	FELDSPATHIC QUARTZITE -biotite 1%							
39	46	MARBLE -white to green -phlogopite up to 15% -diopside up to 10% -clear to pale green siliceous sections							
46	51	FELDSPATHIC QUARTZITE -pegmatite & gneiss bands minor garnet, biotite 10%			@47			55°	

Sheet No. ...

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
51	60	GNEISS - biotite, garnet - Complex folding in places			@53' 56 58			35° 45 15
60	74	FELDSPATHIC QUARTZITE - ± pegmatite, calcareous quartzite, quartzite						
74	80	MARBLE - minor phlogopite - diss. po 3% in green siliceous bands - minor sp @ 78'						
80	85	GNEISS - biotite, garnet			@81 84			20 80
85	88	FELDSPATHIC QUARTZITE - minor biotite						
88	90	MARBLE - greenish siliceous						
90	94	FELDSPATHIC QUARTZITE - ± pegmatite, quartzite with some calcareous sections - up to 5% po, py in some calcareous quartzite sections			@92			10°
94	97	QUARTZITE - SULPHIDE ZONE - po, py ± sp	235	95	100	5'	100%	
97	100	MARBLE - SULPHIDE ZONE			@98			55°
100	102½	FELDSPATHIC QUARTZITE - fgrained grading into pegmatite - minor sp	236	100	102½	2½	100	65

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
102½	106	MARBLE - SULPHIDE ZONE			@102½			50°
		- white to green			104			10
		- ± pegmatite	237	102½	108	5½	100	
106	115	QUARTZITE - SULPHIDE ZONE		@ 106'				20°
		- grey, banding		@ 109				50
		- ± pegmatite	238	108	113	5	100	
			239	113	115	2	100	
					@ 111			45
					@ 113			25
115	119	FELDSPATHIC QUARTZITE	265	115	119	4	100	
		- pegmatite						
		- biotite						
119	136	QUARTZITE - SULPHIDE ZONE	240	119	124	5	95	
		- grey, banded	241	124	129	5	100	
		- po > py	242	129	133	4	100	
		- alignment of sulphides to form			@ 119			50°
		sulphides			124			35
		- py ~ po @ 129-133			129			25
		- ± green altered c.g. feldspar			133			15
			243	133	136	3'	100	
[illegible]								
136	140	MARBLE - SULPHIDE ZONE	244	136	140	4	100	
		- phlogopite			@ 136			60°
		- ± garnet			@ 139			65°
		- ± greenish quartzite						
140	159	GNEISS		149	159	10'	10%	
		- biotite, garnet			@ 144			65
		- minor py			148			65
		- generally gneiss more altered						
		appearance than previous sections						
		- 149-159 - 9' seam						

Shee

Footage from	Footage to	Description
159	160	MARBLE - white
160	164½	QUARTZITE - slightly banded
164½	166	MARBLE ± pegmatite & quartzite
166	167	ANDESITE DYKE - brownish green, altered - slightly porphyritic - shear zone
		END OF HOLE

Sample No.	Footage from	Footage to	Length	Recovery	foliation
245	161	164½ @163	3½	100%	55°

Shee

Co-Ords: 25+00N -4+94E

Azimuth: 290°

Dip: -46½°

Elevation: ~2690'

Length: 206'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBSI -AQ

Dip Tests:

Hole No. 74-7

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan. 20/74

Date Completed: Jan. 21/74

Logged By: W.R. GILMOUR W R Gilmour

Date Logged: JAN./74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation angle to core				
0	14	OVERBURDEN -14 feet of core										
14	51	FELDSPATHIC QUARTZITE -pegmatite -biotite -minor py on some fractures -@ 18-23' seam (no core)										
51	61	GNEISS -biotite, ±garnet -altered micas -59-61 broken ground			@51' 57			70° 60				
61	70	MARBLE -white to green, impure -± quartzite, pegmatite -up to 5% po in altered, green, siliceous feldspathic bands			@64 70			50 60				
70	80±	QUARTZITE -~~green slightly banded~~ -green to grey -feldspathic & gneissic -slightly calcareous			73 76			50 25				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
80½	81½	FELDSPATHIC QUARTZITE -pegmatite										
81½	85	QUARTZITE -grey, minor banding			@82'			50°				
85	89	FELDSPATHIC QUARTZITE -pegmatite										
89	94½	QUARTZITE -similar to 70-80½ -impure -some banding			@90 94			65 15				
94½	99½	FELDSPATHIC QUARTZITE -pegmatite										
99½	101	ANDESITE DYKE -green, non-foliated -@ 99½', contact @ 90°										
101	104½	[illegible] QUARTZITE - [illegible] - impure - gneissic & feldspathic bands			103			50				
104½	111	FELDSPATHIC QUARTZITE -pegmatite										
111	116	MARBLE -white -phlogopite										
116	131	FELDSPATHIC QUARTZITE -pegmatite & medium grained (± garnet)			129			35°				

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
131	133	GNEISS - biotite - greenish siliceous sections										
133	135	FELDSPATHIC QUARTZITE - pegmatite										
135	144½	MARBLE - white & green - phlogopite & biotite ± diopside - siliceous in places - up to 5% po in some impure sections			136 141			65 60				
144½	146	FELDSPATHIC QUARTZITE - pegmatite										
146	148½	GNEISS - biotite - calcareous, siliceous			147			65				
148½	151½	FELDSPATHIC QUARTZITE - pegmatite										
151½	154	QUARTZITE - impure calcareous, feldspathic, gneissic - banding			152			65				
154	158½	MARBLE - greenish white - slightly feldspathic										
158½	159½	QUARTZITE - grey - some banding			@159			60°				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation
159½	189	QUARTZITE - SULPHIDE ZONE	248	160	165	5'	100	60°
		- blebs of sulphides (po, py, sp)	249	165	170	5	100	
		aligned to form foliations	250	170	175	5	100	
		- po > py	251	175	177	2	100	
		- white to gray to greenish color	252	177	178½	1½	100	30°
		- banded & feldspathic (c.g.	253	178½	181½	3	100	
		green altered) quartzite	254	181½	184	2½	100	65°
		- ∠ in sulphides as impure, feldspathic	255	184	189	5	100	
		quartzite			@168			45
		- ± tremolite			170			30
		- @ 177½ - ½" thick band of			175			60
		c. grained sp. section			176			10
		- towards end of [illegible] > py			180			65
					188			45
					191			60
189	199	MARBLE - SULPHIDE ZONE	256	189	192	3	100	
		- White	264 [illegible]	192	197	5	100	
		- ± minor phlogopite, tremolite	258	197	199	2	100	55°
			257					
199	206	FELDSPATHIC QUARTZITE						
		- pegmatite						
		END OF HOLE						

Co-Ords: 29+07N -5+37E

Azimuth: 285°

Dip: -45°

Elevation: ~2810'

Length: 151'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBSI -AQ

Dip Tests:

Hole No. 74-8

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan 24/74

Date Completed: Jan 25/74

Logged By: W.R. GILMOUR

Date Logged: Jan 1/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation angle to core
0	16	OVERBURDEN -1 foot of core						
16	36	QUARTZITE - SULPHIDE ZONE	259	16	18	2	80%	
		-most sulphides blebs orientated	260	18	21	3	70	
		along foliation	261	21	26	5	95	
		-weathered to ~28'	262	26	31	5	65	
		-in places up to 50% sulphides	263	31	36	5	100	
		(po, sp, py)			@18'			45°
		-med grained sulphides			24			20
		-± tremolite			28			50
					31			60
					35			40
36	56	MARBLE		36	56	20	25%	
		-white to green & white			@40			60°
		-broken ground			@45			60°
		-± biotite & muscovite						
		-minor po						
		-± calcareous gneiss (+garnet)						
		sections						
56	59	FELDSPATHIC QUARTZITE						
		-pegmatite						
		-feldspar, quartz, biotite, garnet						

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation				
		- feldspar > quartz										
		- feldspar coarser grained than quartz										
		- ± gneissic sections										
		- minor py on fractures										
59	71	GNEISS			@ 59			60°				
		- similar to 56-59 except > in biotite giving foliated appearance			64			55				
					71			55				
		- much more light colored than most gneiss										
		- pegmatitic sections										
		- up to 10% garnets in places										
71	80	ANDESITE DYKE		71	80	9	35%					
		- Contacts sheared										
		- f. grained, non-foliated										
		- thin aphanitic chill margin										
		- probable fault zone - rusty fractures										
		- calcite coating on fractures										
		- diss py 2% plus py on fractures										
80	99	FELDSPATHIC QUARTZITE			@ 82'			70°				
		- pegmatite			92			45				
		- gneiss sections			99			40				
		- py cubes & aggregates on fractures										
		- ± garnet, biotite										
		@ 81' tr sp, po in minor quartzite band.										
99	113	GNEISS			105'			50°				
		- biotite, garnet			110			60				
		- some sheared appearing sections			112			45				
		- minor py										

Sheet No. .....

Footage from	Footage to	Description
113	121	FELDSPATHIC QUARTZITE - pegmatite - biotite 10%
121	151	GNEISS - similar to 99'-113' - ± minor pegmatite - rock commonly fractured with slickensides common along mica foliations END OF HOLE

Sample No.	Footage from	Footage to	Length		foliation
		@ 122'			60°
		129			65
		134			55
		142			70
		146			60
		151			60

Sheet No. ..... of .....

Co-Ords: 31+32N – 5+13E

Azimuth: 290°

Dip: –45

Elevation: ~2860

Length: 163±

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1 – AQ

Dip Tests:

Hole No. 74 – 9

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan 28/74

Date Completed: Jan 29/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: FEB/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length		Foliation angle to Core				
0	15	OVERBURDEN										
15	61½	MARBLE – white, pure – mostly calcite, medium to coarse grained – ± phlogopite – ± minor chlorite			@25 36 51 61			25° 30 55 40				
61½	63	FELDSPATHIC QUARTZITE – pegmatite – biotite (also c. grained)										
63	64	MARBLE – white & green										
64	84	GNEISS ± pegmatite (e.g. feldspar, quartz, biotite) sections – biotite, garnet – py coating on some fractures			65 70 75 81			65 55 30 50				
84	100	FELDSPATHIC QUARTZITE – biotite rare – mostly c.g., some fine grained			98			50				

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		(slightly foliated)										
100	100.1	ANDESITE DYKE - f. grained - non foliated										
100.1	101.5	FELDSPATHIC QUARTZITE - pegmatite										
101.5	104	ANDESITE DYKE - contact sheared - py & calcite on fractures										
104	113	FELDSPATHIC QUARTZITE - pegmatite, some fine grained - py coatings on occasional shear fractures			@107			55°				
113	123	MARBLE - white, pure - inclusions greenish, siliceous - ± minor biotite			@115 122			50 45				
124	125	QUARTZITE - calcareous, feldspathic - 3% po, py			124			15				
125	126	FELDSPATHIC QUARTZITE										
126	127	ANDESITE DYKE										
127	138	MARBLE ± minor pegmatite - mostly white - ± muscovite altered phlogopite - ± minor diopside - 1% sulphides - @127½ 1% SP, 5% po (py)			132			45				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		-@133 1% sp, 5% po (py)										
138	145	MARBLE			@138			10°				
		-impure, mica rich			145			45				
		-phlogopite & muscovite 20%										
		-± diopside										
		-1-2% diss. po										
145	161	QUARTZITE			152			15				
		-rock much more fractured than marble			157			55				
		-grey, pure										
		-occasional bands										
		-1% diss po & py										
		-py on occasional fractures										
		-± biotite										
161	163½	MARBLE			161			60°				
		-white										
		-± phlogopite										
		-± graphite										
		END OF HOLE										

Sheet No.....

Co-Ords: 32+39N - 5+78E

Azimuth: 290°

Dip: -45°

Elevation: ~2900'

Length: 151

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PSBI - AQ

Dip Tests:

Hole No. 74-10

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Jan 31/74

Date Completed: Feb 1/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: Feb/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation Angle to Core
0	27½	OVERBURDEN - 6' of core						
27½	28½	MARBLE - Sulphide ☆ zone - green & white ; po, py, sp - py >> po	266	27½	28½ @28	1	100	25°
28½	38	FELDSPATHIC QUARTZITE - pegmatite - feldspar > quartz - 1% py, po disseminated & on fractures						
38	42½	QUARTZITE - SULPHIDE ZONE - grey - minor calcareous sections - ± tremolite	267	38	42½ @42	4½	100	40°
42½	44½	FELDSPATHIC QUARTZITE - pegmatite - feldspar > quartz	268	42½	44½	2	100	
44½	50½	MARBLE - sulphide zone - grey/white to white - ± diopside ; phlogopite - po + py	269	44½	50½ @48	6	100	40°

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation
50½	51½	FELDSPATHIC QUARTZITE - pegmatite - 1% po, py						
51½	88	GNEISS - biotite, garnet - minor feldspathic quartzite sections			@53' 57 66 71 77 82 87			40° 75 50 70 45 60 50
88	92½	MARBLE - white, pure - ± minor muscovite, phlogopite, tremolite			90			45
92½	101	QUARTZITE - fine grained, grey - slightly foliated - biotite 15% - ± feldspar			95 100			40° 55
101	106	MARBLE - siliceous, gneissic in places - ± muscovite & biotite						
106	107	QUARTZITE - grey, pure - calcareous bands - @106½, 1% sp						
107	109½	MARBLE - similar to 101-106			108			35°
109½	115	FELDSPATHIC QUARTZITE - pegmatite						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
		- feldspar > quartz - ± biotite						
115	118	QUARTZITE - calcareous - banding common			@116'			60°
118	120	FELDSPATHIC QUARTZITE - similar to 109½ - 115						
120	123½	QUARTZITE - grey - ± pegmatite - c.g. greenish feldspar in places		122½	129	6½	20%	
123½	129	FAULT ZONE - ANDESITE DYKE in MARBLE @ 124 1% sp, 5% po, py						
129	134½	MARBLE - white & brown color - phlogopite & muscovite total 20% - ± diopside - 1% po			@132			70°
134½	141	FELDSPATHIC QUARTZITE - pegmatite - ± quartz						
141	145	QUARTZITE - grey, calcareous - feldspathic in places						
145	146	MARBLE - white, pure						

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
146	151	QUARTZITE			@146			35°				
		-grey, some banding			@150			35°				
		- @ 146, 3% po&py, tr. sp										
		- 150-151, 5% po&py, 1% sp										
		END OF HOLE										

Sheet No.....

Co-Ords: 30+00N – 5+73E

Azimuth: 290°

Dip: -45°

Elevation: ~2840'

Length: 170'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1-AQ

Dip Tests:

Hole No. 74-11

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: FEB 3/74

Date Completed: FEB 4/74

Logged By: W.R. GILMOUR W.K Johnson

Date Logged: FEB/74

Footage From	Footage to	Description	Sample No	Footage from	Footage to	Length		Foliation Angle to Core				
0	15	OVERBURDEN -2' of core										
15	16	QUARTZITE -calcareous ₱ -f.g. biotite 15% -± diopside, feldspar -5% diss. po			@16'			60°				
16	19½	FELDSPATHIC QUARTZITE -pegmatite -± biotite, garnet										
19½	23	QUARTZITE -similar to 15-16 -biotite & calcite common -± marble bands -5% diss. po.			21			40				
23	29½	MARBLE -similar texture & appearance to 19½-25 except ≥ in calcite ≤ in quartz -5% diss po			29			35				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
29½	33½	MARBLE -greenish white, purer than previous section -± muscovite						
33½	35	FELDSPATHIC QUARTZITE -pegmatite -feldspar > quartz						
35	44½	QUARTZITE - SULPHIDE ZONE -grey, pure -po esp orientated along foliation -± tremolite -± m. pegmatite (44-44½) -po, py, sp	270 271 272	35 38½ 43	38½ 43 44½ @37' 40' @47	3½ 4½ 1½	100% 100 100	50° 45° 60°
44½	51	GNEISS -biotite, garnet -± pegmatite						
51	73	FELDSPATHIC QUARTZITE -mostly pegmatite -garnet, biotite -± minor gneissic sections		51	@56 73	22'	80%	60°
73	87	GNEISS -± minor pegmatite sections -biotite, garnet (5%) -some areas of small scale folds			@75 81 86			75 70 70
87	101	MARBLE -white -± minor phlogopite, tremolite, muscovite, chlorite -± minor quartzite			92 99			55 60

Shee

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
101	108	FELDSPATHIC QUARTZITE -mostly fine grained -biotite, garnet -tending to gBite in places			@104'			65°				
108	108½	ANDESITE DYKE -green, non-foliated -highly fractured rock										
108½	110	FELDSPATHIC QUARTZITE -similar to 101-108										
110	115½	MARBLE -white -minor muscovite, phlogopite, amber colored garnet			111			60				
115½	118½	ANDESITE DYKE -contacts slightly irregular @80° -@116' - slight banding near contact in chill zone @ 60°										
118½	130	MARBLE -white -minor muscovite, phlogopite, chlorite, tremolite			121			55				
130	133	GNEISS -biotite, garnet			137			45				
133	133.7	ANDESITE DYKE -contacts at 70° (not conformable to gneiss										
133.7	170	GNEISS -similar to 130-133		141	170 170	23	70%	50				

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		-py on some fractures										
		-pegmatitic & siliceous in a			153			40°				
		few places			163			60°				
		-155-158 - seam										
		-@ 146' - 2 foliations present -										
		20° & 45° in biotite										
		END OF HOLE										

Sheet No. 1

Co-Ords: 28+02N - 4+28E

Azimuth: 10.5°

Dip: -45°

Elevation: ~2750'

Length: 179'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1-AQ

Dip Tests:

Hole No. 74-12

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Feb 6/74

Date Completed: Feb 7/74

Logged By: N. R. GILMOUR W. R. Gilmour

Date Logged: Feb/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	foliation angle to
0	22	OVERBURDEN -1' of core						
22	38½	FELDSPATHIC QUARTZITE -pegmatite & fine grained -biotite <10%, ± garnet -36-38½ - Some quartzite with Po, Py, Sp (core ground up)						
38½	86	QUARTZITE - SULPHIDE ZONE - banding & alignment of sulphides - foliation angles non consistent - ± diopside, calcareous in places - some brownish carbonate - chlorite (especially along small shears) & tremolite - feldspars (altered, greenish) - some calcareous banding - some fractures seem to have control on mineralization - @ 46-48' pyrite, sphalerite (in core) - calcite filled (½ - 1" wide) shear w/ ft apparent displacement along shear. - Po, Py, Sp	273 274 275 201 202 203 204 205 206 207 208 209 210 211 212 213	38½ 43 48 53 58 63 68 73 78 83 86 88 90 92 94 96	43 48 53 58 63 68 73 78 83 86 88 90 92 94 96 98	4½ 5 5 5 5 5 5 5 3 2 2 2 2 2 2 2	75% 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	50° 45° 45° 45° 45°

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Inclination
					64			45°
					68			20
					72			15
					76			30
					80			45
					84			50
86	106	MARBLE - SULPHIDE ZONE	208	86	91	5	100	
		- white with 0-5% sulphides	209	91	96	5	100	
		- essentially non foliated	219	96	99	3	90	
		- phlogopite, diopside	211	99	101½	2½	90	
			212	101½	106	4½	95	
					@96			15°
					103			10
106	126½	QUARTZITE - SULPHIDE ZONE	213	106	111	5	100	
		± mi-pegmatite (@ 117 unaltered pegmatite)	214	111	113	2	100	
			215	113	116	3	100	
		- similar to 38½-86	216	116	121	5	95	
		- altered greenish feldspars	217	121	125	4	100	
		(up to 1½") common in some sections	218	125	126½	1½	100	
					@107			15
					111			40
					115			80
					119			25
					123			35
126½	139	MARBLE - SULPHIDE ZONE	219	126½	132	5½	100	
		- similar to 86-106	220	132	138	6	100	
		- marked increase in gp	221	138	141½	3½	20	
		- ± minor amber colored garnets	222	141½	145½	4	100	
			223	145½	147	1½	100	
139	147	QUARTZITE - SULPHIDE ZONE			127			60
		- similar to 106-126½			131			45
		- feldspars also aligned			135			45
					142			15
					146			45

Sheet

Footage from	Footage to	Description
147	158	FELDSPATHIC QUARTZITE -pegmatite -m. biotite -tr po, py
158	161	QUARTZITE -grey, fine grained -phlogopite? 15% -slightly feldspathic
161	165	QUARTZITE -grey, pure -5% mica
165	166	MARBLE -green & white, siliceous -± diopside
166	170	GNEISS -biotite, garnet -±greenish, calcareous, quartzite -3% diss po in quartzose bands
170	179	MARBLE -similar to 165-166 -muscovite, phlogopite, chlorite -gneissic texture END OF HOLE

Sample No.	Footage from	Footage to	Length	Recovery	foliation
	148	158	10'	50%	
		@161			40°
		166			60
		170			55°
		177			65°

Co-Ords: 28+68N — 4+43E

Azimuth: 95°

Dip: -45°

Elevation: ~2770'

Length: 253'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1 - AQ

Dip Tests:

Hole No. 74-13

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: FEB 7/74

Date Completed: FEB 11/74

Logged By: W. R. GILMOUR

Date Logged: FEB/74

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angle to core				
0	30.5	OVERBURDEN -3' of core										
30.5	52	FELDSPATHIC QUARTZITE -pegmatite -minor biotite & garnet -broken ground		30.5	52	21.5	30%					
52	63	GNEISS -biotite, garnet -pegmatite seams -broken ground -m. py on fractures		52	63 @52' 56	11	70%	65° 20°				
63	137	ANDESITE DYKE -dark green non-foliated -thin calcite coatings on fractures -py cubes up to 5% disseminated on fractures		63'	137'	74'	50%	-				
137	138	GNEISS -sheared, fractured -biotite, garnet			138			35°				

Sheet No. 1

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Hole Dip
138	142	ANDESITE DYKE - Similar to 63 - 137		138	142	4'	15%	
142	145	GNEISS - biotite, garnet - Complex folding - altered & broken rock		142	145 143	3'	30%	 50°
145	167	FELDSPATHIC QUARTZITE - ± garnet & biotite - mostly f.g. to m.g. - minor gneissic sections - ground not as broken			149 159 167			45° 0 55°
167	175	GNEISS - biotite, garnet - m.py on fractures ± pegmatitic sections			171 174			40 10
175	199	FELDSPATHIC QUARTZITE - f.g. with some pegmatite - biotite 10% to ± garnet - slight foliation in places - also m. gneissic sections			178 190 198			35 35 30
199	217	GNEISS - biotite, garnet - pegmatite & siliceous sections			200 203 207 212			50 10 25 55
217	219	MARBLE - greenish white - siliceous			216			65
219	221	QUARTZITE - grey to green-grey - [illegible]			220			50°

Sheet No. [illegible]

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
221	222½	FELDSPATHIC QUARTZITE - mostly f-g - biotite 15%						
222½	224	MARBLE - sulphide zone, po, py, sp - greenish white - phlogopite & diopside	224	222½	224 @224	1½	100	20°
224	225	FELDSPATHIC QUARTZITE - pegmatite	225	224	225	1	100	
225	230	MARBLE - similar to 222½-224	176	225	230 @229	5	100	40°
230	235½	QUARTZITE - sulphide zone, po, py, sp - calcareous, grey - with marble sections - ± altered greenish feldspars	177	230	235½ @233	5½	100	35°
235½	240	QUARTZITE - sulphide zone - grey, pure - po blebs dominant sulphide	178	235½	240 @237 @240	4½	100	35° 40°
240	245	QUARTZITE - pure, grey						
245	250	FELDSPATHIC QUARTZITE - pegmatite - biotite - ± quartzite & marble, gneissic banding - altered appearance common - @ 249½ [redacted] ¼" andesite dyke @ 80° core angle			249			50°

Shee

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length
25)	253	MARBLE				
		- mostly pure calcite				
		- ± muscovite				
		END OF HOLE				

Sheet No. .....

Co-Ords: 77+00N -3+42E

Azimuth: 110°

Dip: -45°

Elevation: ~2750

Length: 317'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBSI-AQ

Dip Tests:

Hole No. 74-14

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: FEB 13/74

Date Completed: FEB 19/74

Logged By: W. R. GILMOUR

Date Logged: MARCH 1974

Footage From	Footage to	Description	Sample No	Footage from	Footage to	Length	% Recovery	Foliation angle to core				
0	12	OVERBURDEN -2' of core										
12	45½	FELDSPATHIC QUARTZITE -pegmatite -± biotite & minor garnet										
45½	64	GNEISS -biotite, garnet -54-59 fault zone -gneiss commonly altered (esp. biotite), fractured, green-grey color.		54	@46 48 52 74 61	20'	40%	65° 10 10 45				
64	68	FELDSPATHIC QUARTZITE -pegmatite -± minor biotite & garnet -fractured rock										
68	86	GNEISS -biotite, garnet -similar to 45½-64 -± kyanite & pegmatite feldspathic quartzite			68 72 76 80 84 @			15 40 50 35 35				

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation
86	89	FELDSPATHIC QUARTZITE - fine grained - biotite & garnet - ± gneissic bands.			@ 89			35°
89	95	GNEISS - similar to 68-86 - minor py, calcite &/or chlorite on fractures			93			50
95	97	FELDSPATHIC QUARTZITE - pegmatite						
97	136	GNEISS - similar to 89-95 - ± m. pegmatite			97 101 105 109 113 117 121 125 129 133 136			30 15 0 0 5 15 15 15 35 10 10
136	138½	FELDSPATHIC QUARTZITE - @ 136' - sharp contact @ 70° - @ 138½' - gneiss @ 15° foliation @ 5° - both direction of dip different - possible sharp contact - finding: ½ garnet & no plag						
138½	143	GNEISS - feldspathic - siliceous section - biotite (greenish, altered) & garnets			140			30°

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Bedding				
143	148	QUARTZITE - gneissic - grey color - 45° biotite			@145			90°				
148	182	GNEISS - similar to 138½ - 143 - siliceous & feldspathic sections - biotite & garnet - biotite - greenish & shearing common - minor py & calcite fractures			149 153 157 161 167 171 175 179			10 20 20 10 20 5 0 5				
				161	166	5'	30%					
182	196	FELDSPATHIC QUARTZITE - pegmatitic (feldspar crystals up to 1½") - + minor c.g. biotite - 60% feldspar, 40% quartz										
196	204	FELDSPATHIC QUARTZITE - f.g. to m.g. - 10% "disseminated" biotite - strong slight foliation in places			202			60°				
204	225	FELDSPATHIC QUARTZITE - pegmatitic			219			70°				
225	237	MARBLE - grey & white marble - phlogopite, diopside, biotite, chlorite - banding at 45° to core axis - contact @ 225 - sharp			225 229 234			50 30 70				

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
237	243	MARBLE - pure, white - minor phlogopite & muscovite			@242			55°
243	253	GNEISS - highly altered, fractured & crumbly - with thin marble bands			246			60
					250			65
				243	253	10	90%	
253	260	MARBLE - mostly pure, white - with feldspathic sections (feldspar c. grained & altered)		@255				60
260	269	QUARTZITE - greyish-grey color - calcareous, feldspathic (f.g. to c.g.), & banded		263	264	1	10%	
					264			40°
					266			65
269	273	MARBLE - impure, green-grey - siliceous - diopside, chlorite, m. disseminated py			270			75°
273	275	FELDSPATHIC QUARTZITE - pegmatite						
275	282	MARBLE - similar to 269-273			277			60
282	288	GNEISS - similar to 243-253 - pegmatite sections			285			60
288	292	MARBLE - graphitic, green-grey, impure - siliceous			289			60

Sheet No.

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
292	307	QUARTZITE	195	300	305	5	100	
		- minor sulphide zone (Po, py, Sp, Ga)			@~~296~~			
		- mostly pure, grey, with only			@296			40°
		slight, occasional banding			300			40
		- ± altered green, e.g. feldspathic			304			35
		sections			308			35
		- occasionally calcareous						
		- sulphides occur as rounded blebs						
		orientated along foliations						
		- minor loss py > po; 0-6% sulphide						
		-@301 1% Sp						
		-@305 tr Sp, tr Ga						
		-@302 vuggy, euhedral quartz						
307	314	QUARTZITE						
		- green-grey						
		- feldspathic						
		- 5-10% biotite						
314	317	MARBLE			@316			60°
		- grey & white, impure						
		- impure						
		- similar to 275-282						
		END of HOLE						

Sheet

Co-Ords: 2640ON -2+94E

Azimuth: 110°

Dip: -40°

Elevation: ~2730'

Length: 235'

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Drill Type & Size: PBS1-AQ

Dip Tests:

Hole No. 74-15

Property: BLACK JACK

Location: KINGFISHER CREEK

Date Started: Feb 20/74

Date Completed: Feb 21/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: MARCH 1974

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length		Tolerable single core				
0	17	OVERBURDEN -3' of core										
17	21	FELDSPATHIC QUARTZITE -pegmatite -± biotite & garnet										
21	43	GNEISS -biotite, garnet -± pegmatitic sections -minor py on fractures			@21' 28 32 40			5° 15 10 20				
43	56	FELDSPATHIC QUARTZITE -pegmatite -± biotite, garnet										
56	88	GNEISS -biotite, garnet -a few zones of fractured rock			57 61 65 71 79 83 87			45° 20 5 15 30 15 0				

Sheet No. 1

Co-Ords: 2200N - 2400E

Azimuth: 290°

Dip: -45°

Elevation: ~2660'

Length: 349

Section:

Purpose:

K. L. DAUGHTRY & ASSOCIATES LTD.

Diamond Drill Record

Hole No. 74-17

Property: BLACK JACK

Drill Type & Size: PBS1-AQ

Location: KINGFISHER CREEK

Dip Tests:

Date Started: Feb 28/74

Date Completed: March 2/74

Logged By: W.R. GILMOUR W.R. Gilmour

Date Logged: MARCH 1974

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation angles to Core
0	26	OVERBURDEN - 1' of core						
26	36	ANDESITE DYKE - grey-green, non-foliated - major disseminated py - Calcite coating on fractures - fractures common - minor rounded phenocrysts of feldspar						
36	37	FELDSPATHIC QUARTZITE - pegmatite - feldspar crystals in quartz intergrowth						
37	40	MARBLE - green & white, medium grained impure - siliceous, diopside, chlorite - ± pegmatite - speckled appearance not flaked - @ 39', 5% py (fractures)		38	45	7	60%	
40	41	ANDESITE DYKE - similar to 26-36						

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length
		- fault zone - minor diss. po				
138	141	MARBLE - pure, white, 95% calcite - ± minor muscovite & phlogopite				
141	142	ANDESITE DYKE - fractured @ 142' sharp contact @ 60°				
142	152	MARBLE - Similar to 138-141				
		END OF HOLE				

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
88	99	FELDSPATHIC QUARTZITE - biotite, ~~magnetite~~ garnet - pegmatite			@91' 99			35° 30
99	102-	GNEISS - biotite, garnet			101			5
102	118½	FELDSPATHIC QUARTZITE - pegmatite - almost no mafics - minor py on fractures						
118½	122	FELDSPAR PORPHYRY DYKE (DACITE) - grey-green color - white, subhedral feldspar phenocrysts up to ¼" - calcite in fractures - py cubes 2% - ground mass greenish, siliceous - contact @ 118½ - 25° @ 122 ~15° but irregular - quartz 15%						
122	125	FELDSPATHIC QUARTZITE - pegmatite - similar to 102-118½						
125	127	QUARTZITE - SULPHIDE ZONE - aphanitic, dark green - chlorite, altered feldspars - 15% po	179	125	128½	3½	100	
127	128½	MARBLE - SULPHIDE ZONE - 25% po, most of rock mostly - calcite - ~~1~~ minor phlogopite & diopside						

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	∠ Core
128½	132½	MARBLE	180	128½	132½	4	100	
		- mostly white, pure			@131			20°
		- 1% po & py						
		- ± muscovite & chlorite						
132½	134	MARBLE - SULPHIDE ZONE	181	132½	134	1½	100	
		- similar to 127-128½						
		- @ 134' - ½" chlorite shear @						
		35° with 3% Sp						
		- po, py, Sp						
134	142	FELDSPATHIC QUARTZITE						
		- pegmatite						
142	189½	QUARTZITE - SULPHIDE ZONE	182	142	147	5	95	
		- similar to 160-189' in 74-7	183	147	152	5	95	
		- disseminated blebs of sulphides	184	152	157	5	95	
		along foliations	185	157	162	5	100	
		- in places sulphides more massive	186	162	167	5	100	
		& not so strongly orientated, also	187	167	172	5	100	
		in few fractures & shears	188	172	177	5	100	
		- saltzbed greenish f.g. to c.g. feldspar	189	177	182	5	95	
		- ± minor diopside	190	182	187	5	95	
		- banding common	191	187	189½	2½	100	
		- pale green altered minerals			@142'			45°
		(feldspars?), chlorite)			146			25
		- minor calcite			153			20
		- up to 5% greenish mineral in places			157			30
		- py - po in places			162			0°
		- po + py - sp in places			166			10
		- sp > po & py occasionally			170			5
					174			10
					178			20
					182			15
					186			10
					189			15

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	foliation
189½	193	QUARTZITE - no banding, low in sulphides - 191-193' minor sulphide zone - po, py, trace sp. - white to grey color - relatively pure	192	189½	193 193'	3½	95	45°
193	196	FELDSPATHIC QUARTZITE - m. grained & pegmatitic - ± minor quartzite band with po, py, sp - Contact @ 193' appears to be truncated (20°) - Contact @ 196' conformable	193	193	196	3	95	
196	198½	QUARTZITE - SULPHIDE ZONE - grey, no banding	194	196	198½ @197	2½	95	65°
198½	203	QUARTZITE - pure grey - grading into pegmatite						
203	205	FELDSPATHIC QUARTZITE - pegmatite + marble bands						
205	207	MARBLE - green-grey, impure - siliceous			@205			60°
207	210	FELDSPATHIC QUARTZITE - pegmatite						
210	216	QUARTZITE - green-grey color - impure, calcareous, feldspathic foliation			211 215	1	"	60 35

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length
		- with bands of impure marble & pegmatite				
		- slight banding				
		- 3% Po in greenish quartzite sections				
216	235	FELDSPATHIC QUARTZITE				
		- fine grained & pegmatitic				
		- ± minor biotite & garnet				
		END OF HOLE				

Sheet No.....

Co-Ords: 24+00N - 3+85E

K. L. DAUGHTRY & ASSOCIATES LTD.

Hole No. T4-16

Azimuth: 290°

Diamond Drill Record

Property: BLACK JACK

Dip: -45°

Drill Type & Size: PBSI - AQ

Location: KINGFISHER CREEK

Elevation: ~2680'

Dip Tests:

Date Started: Feb 22/74

Date Completed: Feb 24/74

Length: 152

Logged By: W.R. GILMOUR

Section:

Date Logged: FEBRUARY 1974

Purpose:

Footage From	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Relative angle to core				
0	16±	OVERBURDEN - 1 of core										
16±	29	MARBLE - impure, green & white - siliceous & feldspathic - ± diopside, chlorite & altered green mafics			@ 19' 24 28			60° 55° 60°				
29	34	~~RHYOLITE QUARTZ~~ FELDSPAR PORPHYRY DYKE (DACITE) - pale grey-grey color - feldspar phenocrysts up to ± ¼" - flow banding in places - fine-grey matrix - secondary calcite common - 0.3' inclusion marble - contact @ 29.1' irregular - fairly fresh		27	40 @ 33	13	80%	65°				
34	35	FELDSPATHIC QUARTZITE - ± garnet - ± biotite & garnet										
35	43½	MARBLE - Pink to white			38			60°				

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
		-phlogopite & biotite up to 15% -± minor gneissic bands -siliceous in places (up to 5% diss po & py)										
43½	52	FELDSPATHIC QUARTZITE -pegmatite -biotite 5-10%										
52	66½	GRAPHITIC QUARTZITE -diss. graphite up to 15% aligned along foliations -some banding -± biotite, diopside, altered pale green feldspars(?) -diss. po			54' 58' 62' 66'			50° 40 50 35				
66½	70	FELDSPATHIC QUARTZITE -fine grained -biotite, ±garnet -foliation of biotite			69			65				
70	83	MARBLE -white, 90% calcite -± minor gneissic & siliceous bands ± minor phlogopite & muscovite			74 79			60 45				
83	84	GNEISS -garnet, biotite			84			40				
84	93	MARBLE -calcite -biotite 10%, ± diopside			89			50				
93	104	QUARTZITE -calcareous & gneissic			94 99			55 50				

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation				
		- locally up to 20% ± garnets, ± diopside & hornblende ± thin impure marble bands - po up to 5% in places			@104'			50°				
104	109	FELDSPATHIC QUARTZITE - pegmatitic - ± biotite & minor garnet - siliceous sections - 108-109 - calcareous, fractured altered			107			45				
109	120½	MARBLE - mostly white - some impure altered greenish marble - fractured rock		109	120½	11½	60%					
120½	125	GNEISS - fault zone - highly fractured & altered		120½	125	4½	30%					
125	130	ANDESITE DYKE - highly fractured - green grey color - ± py - disp. py - calcite filling fractures - fault zone		125	130	5'	30%					
130	133	GNEISS - Similar to 120½ - 125		130	136	6'	55%					
133	138	MARBLE - [redacted] - impure grey & white - foliated & siliceous - highly altered & fractured			@134 138			65° 55				

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
47	59	QUARTZITE			@50'			70°				
		- grey, pure (90% quartz)			54			65				
		- 1% py & py (up to 3% in places)			58			80				
		- occ diamict, slight banding										
		- py ~ po										
		- very minor calcareous & feldspathic bands										
59	61½	QUARTZITE										
		- strongly calcareous, also slightly gneissic in places										
		- green to grey color										
		- ± minor marble bands										
		- biotite, diopside, chlorite										
		- 2% disc po & py										
61½	63	GNEISS			@62			60°				
		- biotite, garnet										
		- most fractures chloritic & sheared										
63	65	FELDSPATHIC QUARTZITE										
		- pegmatitic										
		- biotite & garnet total ~10%										
		- minor gneiss bands										
65	72½	GNEISS			65			75				
		- similar to 61½-63			70			75				
		- relatively consistently foliation angle										
		- quartz + feldspar or feldspar + quartz in other sections										
		- py fairly common (mostly in fractures)										
72½	74½	FELDSPATHIC QUARTZITE										
		- pegmatitic										
		- minor biotite & garnet										

Sheet No.....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation				
74½	80	GNEISS			@75			55°				
		-similar to 65-72½		76	80	4	20%					
80	82	FELDSPATHIC QUARTZITE		@81				66°				
		-f.g'd to m.g'd, to pegmatite										
		-biotite & garnet										
		-with gneissic bands										
		-elongated garnets (with foliation noted										
82	83	GNEISS										
		-similar to 74½-80										
		-but slightly more altered appearance										
83	93	FELDSPATHIC QUARTZITE		83	85	2	75%					
		-pegmatite										
		-biotite 0-10% ± very minor garnet										
		-py on fractures beg @ 89'-91'										
		-± gneissic bands										
93	94	MARBLE		@ 94				45°				
		-white										
		-95% recrystallized c.g'd calcite										
		-very minor muscovite & quartz										
		-contact @ 93 apparently conformable										
94	96	ANDESITE DYKE										
		-similar to 40-47										
		-chloritized										
		-contact @ 94 @ 45°										
		marble @ 94 @ 45°										
		-dip direction 20° different										
		-slightly irregular contact										
		-dyke more leucocratic, grey at contact										

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
96	98	MARBLE - white to green & white - Chlorite, biotite total 10% - 96-96½ fractured, gneissic, calcareous rock - fragments of chlorite in Calcite										
98	99	GNEISS - biotite, garnet			@ 99			75°				
99	100	QUARTZITE - green-grey, impure - calcareous, slightly gneissic - diopside, chlorite, Calcite - 3% po										
100	103	MARBLE - ~~mag~~ phlogopite - phlogopite 10% - minor quartzite bands - trace buff coloured F.g.d dolomite(?)										
103	104	FELDSPATHIC QUARTZITE - pegmatite - biotite										
104	121½	QUARTZITE - impure - calcareous, feldspathic - impure marble & pegmatite bands common - some relatively pure grey banded quartzite - general altered crumbly appearance - chlorite, altered e.g. feldspars - biotite, phlogopite, muscovite noted			@ 104 115			50 75				

Sheet No. .....

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		foliation				
121½	123	QUARTZITE - grey, impure, banded.			@122			65°				
123	126	MARBLE - impure, green & grey - green calc-silicate siliceous bands			126			40°				
126	153	FELDSPATHIC QUARTZITE - pegmatite mostly common but bands of f-g. to m-g. sections - usually feldspar crystals or quartz intergrowth - biotite ~10% - slightly more in f-g'd sections - weak foliations - Commonly in pegmatite feldspar >> quartz & only minor biotite			139 146			45 65				
153	155½	MARBLE - white, m-g'd recrystallized calcite - ½" crust of blue-grey limestone - minor impurities			155			55				
155½	158	FELDSPATHIC QUARTZITE - pegmatitic - little biotite										
158	163	MARBLE - similar to 153-155½ - minor phlogopite, muscovite, quartz										
163	165½	QUARTZITE - somewhat similar to 104-121½ - similar to the pegmatite but not as fresh, unaltered - different as not characterized by feldspar crystals or quartz intergrowth										

Footage from	to	Description	Sample No.	Footage from	to	Length		Planar				
		- more irregular bands & masses of quartz & feldspars - muscovite & biotite & c.g. altered feldspars										
165½	168½	MARBLE - similar to 158-163			@166			60°				
168½	170	GNEISS - biotite - minor po										
170	181	FELDSPATHIC QUARTZITE - f.g. to c.g'd - biotite 15% - gneissic bands in some sections - commonly more siliceous than most feldspathic quartzites — gives appearance of more like a meta-sed. than other sections which look more like intrusive pegmatites - @ 170-171 - 15% po - m. po diss. throughout			@174			45				
181	182½	GNEISS - biotite, garnet - small scale folding			@182			40°				
182½	190½	MARBLE - mostly white, 90% calcite - phlogopite & muscovite 5% - minor diopside & quartz										
190½	193	FELDSPATHIC QUARTZITE - f.g. through to c.g. - biotite 10% - feldspar > quartz			@191			70°				

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	% Recovery	Foliation
193	196	QUARTZITE						
		-grey & green, impure						
		-Calcareous, peg matite, gneissic						
		-5% diss. po.						
		-diopside, chlorite						
196	198	QUARTZITE						
		-grey, pure						
		-slightly banded						
		-2% po. (py)						
198	201½	QUARTZITE - SULPHIDE ZONE	196	198	201½	3½	100%	
		-grey, pure, banded			@197			40
		-po, py, sp (go)			199			5°
		-sudden change in foliation angle (fold axis)			201			25°
		-6% po, 4% py						
		-sp. high Fe content						
201½	206	QUARTZITE						
		-pure, grey						
		-slightly banded						
		-0-2% po, py						
206	208½	QUARTZITE			@206			25
		-similar to 201½-206			211			75
		-except 8% po, py			216			60
		-thin peg matite bands (with minor py)						
		-chlorite, biotite						
		-tr. sp. 206-207						
		-sulphides medium grained on average (very few fine sulphides)						
		-sulphides aligned to form marked foliation						
208½	214	MARBLE						
		-green & white, impure						

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length		± Dip				
		- impure quartzite bands										
		- rock commonly altered & sheared										
		- biotite, diopside, chlorite & quartz										
214	221½	MARBLE			@221			60°				
		- mostly white, pure										
		- with impure, siliceous & gneissic bands										
		- minor phlogopite & muscovite										
		- @ 221 a 1" band of gneiss surrounded symetrically by ½" bands of calc-silicate quartzite & then by white marble - banding due to metamorphic reactions?										
221	237	QUARTZITE			230			70				
		- impure			235			55				
		- calcareous, gneissic & feldspathic as well as bands of marble, gneiss, pegmatite, pure quartzite										
		- overall green-grey to green-white color										
		- biotite, chlorite, green calc-silicates (diopside & probably tremolite), quartz, feldspars										
		- up to 5% diss pp most commonly in calc-silicate, calcareous quartzites										
		- rock actually thin (several inches wide) bands of great variety of rock types but general is a calcareous quartzite										
237	238	MARBLE										
		- white, pure										
		- very minor phlogopite & muscovite										

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Hole Dip
238	242	QUARTZITE -similar to 163-165½ -feldspathic -grading into pure quartzite						
242	244½	QUARTZITE -pure, grey -@ 246 tr sp, 5% po & py						
244½	259	QUARTZITE - SULPHIDE ZONE			@245			55°
		-par py, sp. (gn)			249			60
		-grey, pure			254			65
		-some banding & feldspathic sections			258			65
		-± qtz pegmatite bands (~6" wide)	197	244½	250	5½	100%	
		generally poorly mineralized	198	250	252	2	100%	
		-253-259' strong banded quartzite	199	252	255½	3½	100%	
		-discontinuous banding (feldspar)	200	255½	259	3½	100	
		-bands 1-2 mm wide - parallel						
		sulphide bands						
		-spacing of sulphide bands uneven						
		-po > py						
		-sulphides mg'd to c-g'd						
		-sample #197 - 4" pegmatite						
		-sample #198 - 1½" pegmatite						
		-sample #199 - 4" pegmatite, 1" dyke						
		-@ 252 pegmatite cutting quartzite						
		foliation of quartzite @ 60°						
		contact @ 40°						65
		- direction of dip ~ 150° different						
		-po & primary sp in pegmatite (non foliated)						
		-except @ 252' no pegmatite bands showed definite pre-deformable contact						
		-Andesite dyke @ 255½				5'		
259	264	QUARTZITE - Sulphide zone (po, py, sp (gn))	151	259	264		100%	
		- similar to 238-242						
		- impure						

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Rec'y	Foliation
		-up to 50% altered c.g. feldspars	1581					
		- feldspathic ± pegmatite sections						
		-grading into unaltered pegmatite						
		-sp throughout unit						
264	265	FELDSPATHIC QUARTZITE			@265			70°
		-pegmatite						
		-1% sulphide						
265	267½	MARBLE						
		-mostly white, pure						
		- ± phlogopite, muscovite, chlorite						
		-@266½ -1% sp, 5% sp						
267½	270	FELDSPATHIC QUARTZITE						
		- fine grained						
		-biotite 10% - ± garnet						
270	293	GNEISS			270			80
		-biotite ± garnet (up to 10%)			275			85
		- ± minor pegmatite bands			280			75
		-@287' & 291' highly fractured			285			75
		rock			290			65
		- foliation very consistent						
		-thin coatings of py occur on						
		fractures						
293	300	MARBLE			295			65°
		-white, pure						
		-95% calcite						
		- ± phlogopite & muscovite						
300	308	GNEISS		300	308	8'	15%	
		- biotite, garnet						
		- also thin bands of marble & pegmatite						
		-very little core						

Sheet No. [illegible]

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
308	310	MARBLE - impure, green & white, speckled, siliceous - chlorite, diopside, quartz - 5% diss. po			@ 308'			80°
310	311½	QUARTZITE - grey, 90% quartz						
311½	314½	QUARTZITE - Sulphide Zone (po, py, sp, gn) - slightly banded - chlorite & feldspar ~15% - po ~ 2 × py - sulphides similar mode of occurence as 244½ - 259	152	311½'	312 314½'	3'	100%	70°
314½	317	QUARTZITE - minor, intermittant sulphide zone - Chloritic alteration & fractured - altered & sheared - marble & pegmatite bands - chlorite & pyritic shear 2" wide @ 317	153	314½	317	2½	80%	
317	319½	MARBLE - white & green - ± chlorite - 0 - 10% po	154	317	321½ @ 318	4½	90%	70°
319½	321½	QUARTZITE - impure, green color - feldspathic - up to 50% altered e.g. feldspars - calcareous sections - chloritic alteration						

Sheet

Footage from	Footage to	Description	Sample No.	Footage from	Footage to	Length	Recovery	Foliation
321½	322½	FELDSPATHIC QUARTZITE - fresh, unaltered pegmatite	155	321½	322½	1	100%	
322½	324	QUARTZITE - similar to 319-321½	156	322½	324 @324'	1½	100	45°
324	331½	ANDESITE DYKE - green, non-foliated - slightly more phenocrysts than previous noted in hole - phenocrysts ≤ 2 mm (white & buff colored feldspars) - dark green specks (probably chlorite) - ½" inclusion of banded quartzite noted - calcite on sporadic fractures - nn. disp. - contact @ 324 @ 50° - dip direction 90° difference - contact @ 331½ @ 50°						
331½	334½	QUARTZITE - impure - feldspathic, calcareous & banded sections - chlorite - especially near dyke - @ 332 tr sp, 5% po & py			@332			70°
334½	349	GNEISS - biotite & garnet - py on fractures			@337 345 349			65 65 75
		END OF HOLE						

Shee

STATEMENT OF COSTS

A) Drilling

Apex Diamond Drilling Ltd. 5604 feet, AQ		$45,043.07

B) Professional Services & Crew

W.R. Gilmour, geologist 88½ days @ $55/day Nov. 16/73 - March 31/74	$ 4,867.50	
K.L. Daughtry, P.Eng. 3½ days @ $125/day Nov. 18/73, Jan. 13/74, Feb. 27/74, March 4/74	437.50	
E.O. Chisholm, P.Eng. 3½ days @ $150/day Nov. 16, 26 - 29/73	525.00	
J. O'Neill, Prospector 4 months @ $2000/month Nov. 10/73 - March 31/74	8,000.00	
	$13,830.00	13,830.00

C) Expenses & Disbursements

Transportation			
Vehicle rental, transportation, etc.	$2,924.68		
Gas, oil, insurance, maintenance, etc.	2,013.01		
	$4,937.69	$ 4,937.69	
Food and Accomodation		1,848.34	
Communications, equipment, telephone		1,591.38	
Photocopying, printing, etc.		278.58	
Supplies, repairs, etc.		1,785.89	
Power house & Generating plant		5,500.00	
Office & core storage building		5,000.00	
Living quarters, kitchen, washrooms, etc.		15,000.00	
		$35,941.88	35,941.88
			$94,814.95

STATEMENT OF QUALIFICATIONS

I, William R. Gilmour of the City of Vernon in the Province of British Columbia, hereby certify that:

1) I am a geologist with residence at 3415 Okanagan Ave., Vernon, B.C.;

2) I am a graduate of the University of British Columbia, Bachelor of Science, 1970;

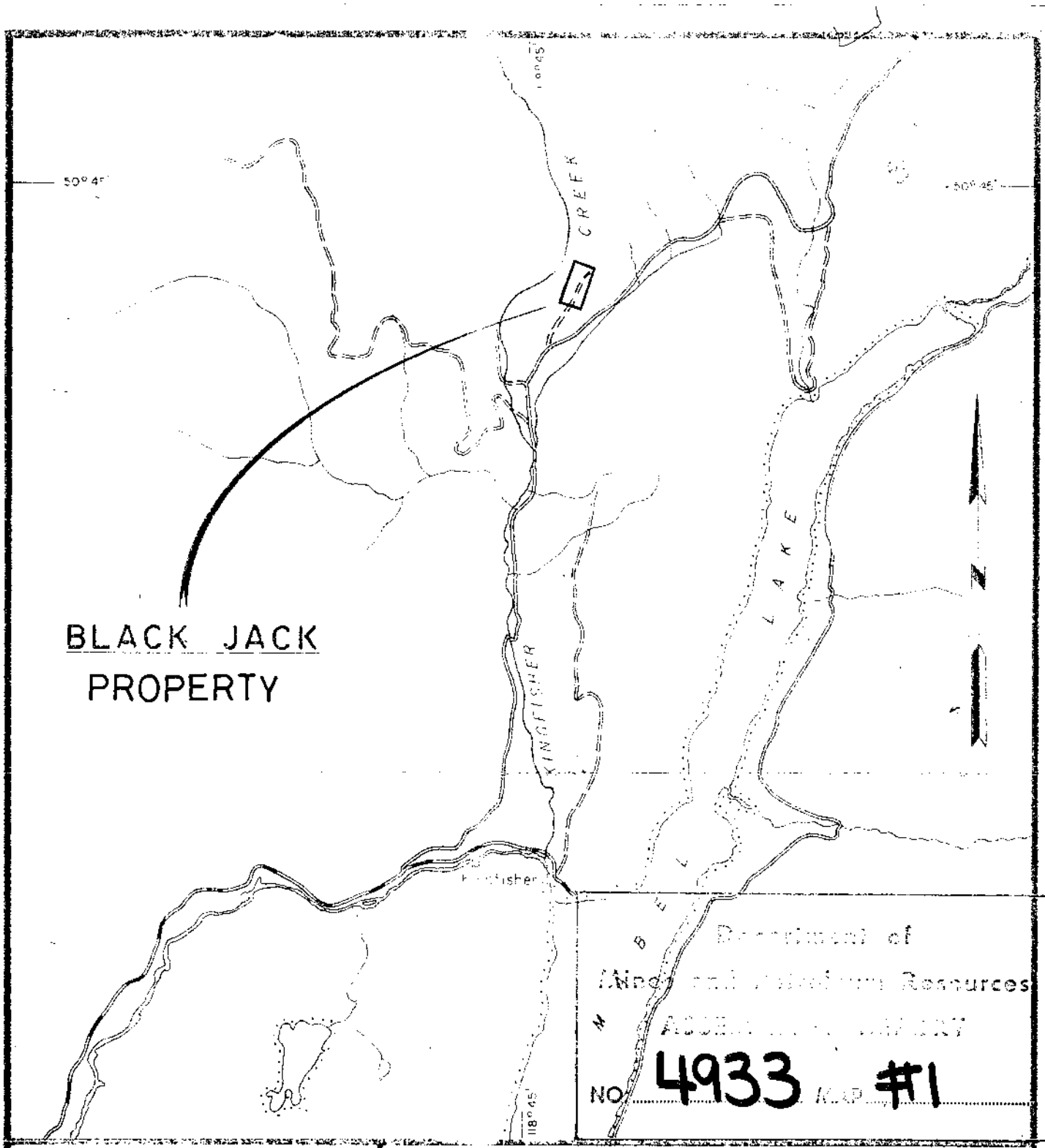
3) I have practiced as a geologist in mineral exploration for 3 years in British Columbia;

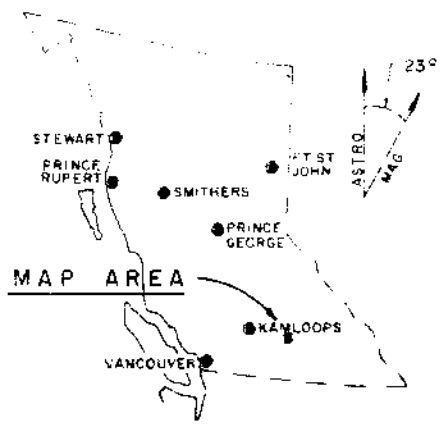
4) I have no direct or indirect interest in either the property or securities of Colby Mines Ltd. or its affiliates nor do I expect to receive any such interest.

Dated at Vernon, B.C.
April 17, 1974

William R. Gilmour

William R. Gilmour





K.L. DAUGHTRY & ASSOC. LTD.

LOCATION MAP OF BLACK JACK PROP.

VERNON MINING DIVISION — BRITISH COLUMBIA

2 0 2 4
SCALE IN MILES

W.R.G. MARCH 1974 | DRAWING NO. 1

BASE LINE @ 20°

FX # 22

EX 7 FR.

EX 6 FR.

FX # 21

FC # 11 FR.

FC # 10 FR

74-10

74-9

74-11

74-8

74-13

74-12

74-14

74-15

74-7

74-6

74-16

74-17

74-5

core storage

73-2

73-1

73-3

73-4

73-5

74-1

73-8

73-6

73-7

FX # 21

FX # 2 FX # 3

FX # 4 FC # 4

74-4

74-3

74-2

LEGEND

73-6 DDH location & number

claim boundary

road

extent of grid

new road

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4933 MAP #2

SCALE IN FEET
0 50 100 200 300

K.L. DAUGHTRY & ASSOCIATES LTD

COLBY MINES LTD

BLACK JACK PROPERTY

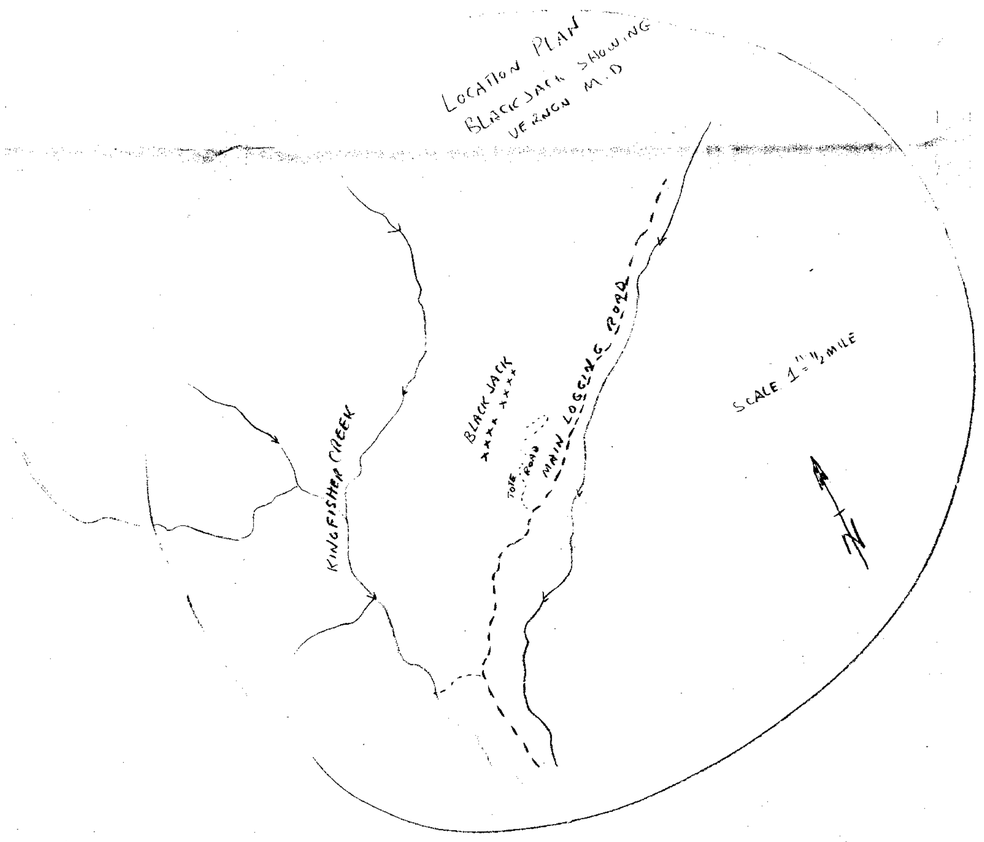
VERNON M.D.

PLAN of DRILL HOLE LOCATIONS

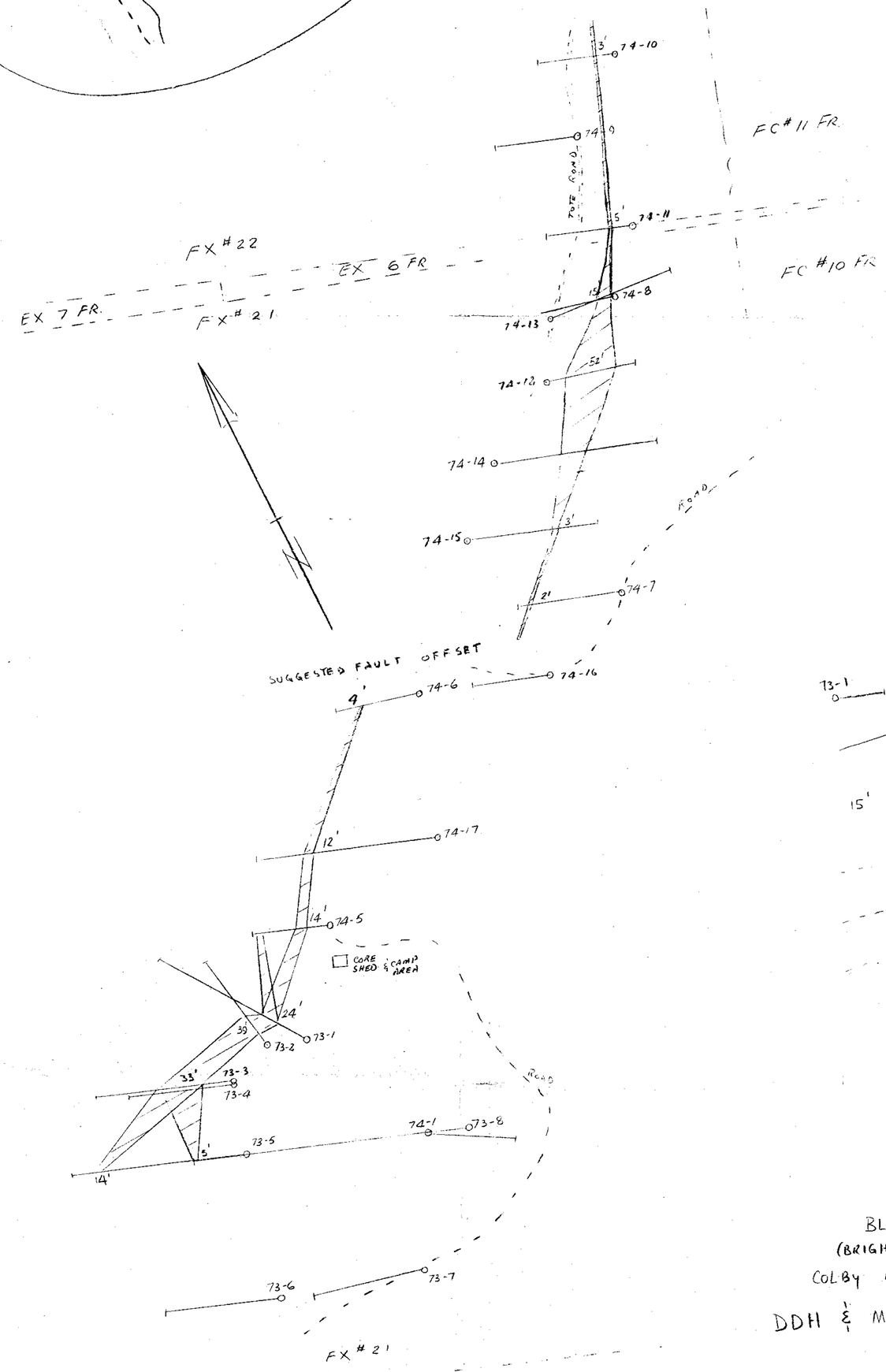
SCALE: 1" = 100'	DATE: MARCH 1974
DRAWN BY: WRG	DRAWING NO. 2

4933
M2

LOCATION PLAN
BLACKJACK SHOWING
VERNON M.D



GROUPING AND BALANCE ON THIS MAP IS LEFT TO THE DISCRETION OF THE DRAFTSMAN



SYMBOLS

73-1 ○—— DDH LOCATION & STRIKE

MINERALIZED ROCK OUTLINE EMPHASIZED BY HATCH MARKS.

15' GILMOUR CORRECTED TRUE MINERALIZED WIDTHS

CLAIM BOUNDARY

ROAD

TOTE ROAD

FIG 1

BLACKJACK PROPERTY
(BRIGHT STAR TR 10)
COLBY MINES LTD - VANCOUVER
VERNON MINING DIVISION
DDH & MINERALIZED ROCK OUTLINE PLAN

SCALE 1" = 100'

TRACED IN PART FROM A PLAN DRAWN BY
K.L. DAUGHTRY & ASSOCIATES, VERNON, B.C

DISTRICT GEOLOGIST
KAMLOOPS, B.C
AUGUST, 1974

COLBY MINES LTD
DRILLING See Ass Rept 4933
FROM GORDON WHITE

4933

824/10E

TABLE I

SUMMARY DATA

DIAMOND DRILL PROGRAM BLACK JACK PROPERTY

HOLE NUMBER	LOCATION	BEARING	DIP AT COLLAR	DATE STARTED	DATE COMPLETED	FINAL DEPTH	SIGNIFICANT Zn-Pb ZONE FOOTAGE INTERVAL	INTERSECTION WIDTH	TRUE WIDTH	% Pb	% Zn	HOST ROCK
73-1	19+49N-0+07W	325°	40°	NOV 12/73	NOV 17/73	302'	60'-90'	30'	24'	0.66	1.86	QUAR
73-2	19+47N-0+61W	350°	40°	NOV 18/73	NOV 21/73	201	28-73	45	39	0.03	1.35	MAR
73-3A	— ABANDONED —					30						
73-3	19+00N-1+13W	290°	40°	NOV 23/73	NOV 26/73	249	52-133	81	33	1.36	3.47	Q & M
73-4	19+00N-1+13W	290°	65°	NOV 26/73	NOV 30/73	349	156.5-160 165-182.5 202.5-217 276-281	3.5 17.5 14.5 5	2 9 7 3	0.30 0.33 0.26 0.17	2.74 2.73 2.22 1.56	Q Q Q & M Q
73-5	18+00N-1+08W	290°	40°	DEC 2/73	DEC 5/73	318	86-91 261-272	5 11	3.5 7	0.27 0.10	1.79 1.19	M M & Q
73-6	16+00N-0+81W	290°	40°	DEC 5/73	DEC 7/73	217	—	—	—	—	—	—
73-7	16+17N-1+17E	284°	30°	DEC 8/73	DEC 11/73	180	—	—	—	—	—	—
73-8	18+00N-2+00E	290°	45°	DEC 13/73	DEC 18/73	426	20-28	8	5	0.02	1.39	Q
74-1	18+00N-1+44E	120°	50°	JAN 7/74	JAN 9/74	192.5	—	—	—	—	—	—
74-2	2+00N-0+55E	285°	45°	JAN 11/74	JAN 12/74	204	63-68.5	5.5	5	0.35	1.52	M
74-3	4+00N-0+45E	290°	45°	JAN 13/74	JAN 14/74	140	—	—	—	—	—	
74-4	6+00N-0+93E	290°	45°	JAN 15/74	JAN 16/74	150	—	—	—	—	—	—
74-5	21+00N-0+41E	290°	45°	JAN 17/74	JAN 18/74	152	45-64.5 130-142.5	19.5 12.5	14 9	0.34 0.14	2.25 2.52	Q & M M & Q
74-6	24+00N-2+00E	285°	45°	JAN 18/74	JAN 19/74	167	108-115	7	4	0.54	4.82	Q
74-7	25+00N-4+94E	290°	46.5°	JAN 20/74	JAN 21/74	206	181.5-184	2.5	2	0.01	2.28	Q
74-8	29+07N-5+37E	285°	45°	JAN 24/74	JAN 25/74	151	16-36	20	15	1.95	3.70	Q
74-9	31+32N-5+13E	290°	45°	JAN 28/74	JAN 29/74	163.5	—	—	—	—	—	—
74-10	32+39N-5+78E	290°	45°	JAN 31/74	FEB 1/74	151	38-42.5	4.5	3	0.05		Q
74-11	30+00N-5+73E	290°	45°	FEB 3/74	FEB 4/74	170	38.5-44.5	6	5	0.42	3.00	Q
74-12	28+02N-4+28E	105°	45°	FEB 6/74	FEB 7/74	179	38.5-138 145.5-147	99.5 1.5	52 1.5	0.36 0.05	2.84 3.25	Q & M Q
74-13	29+89N-4+43E	95°	45°	FEB 7/74	FEB 11/74	253	—	—	—	—	—	—
74-14	27+00N-3+42E	110°	45°	FEB 13/74	FEB 19/74	317	—	—	—	—	—	—
74-15	26+00N-2+94E	110°	40°	FEB 20/74	FEB 21/74	235	152-162	10	3	0.04	2.48	Q
74-16	24+00N-3+85E	290°	45°	FEB 22/74	FEB 24/74	152	—	—	—	—	—	—
74-17	22+00N-2+00E	290°	45°	FEB 28/74	MAR 2/74	349	244.5-259	14.5	12	0.17	1.40	Q
					TOTAL	5604		423.5	258	194 .36	50.38 2.4	= 2.76% Comb

NOTE: SEE SECTIONS FOR DETAIL

Summary of Drilling By Colby Mines Ltd
by way of Gordon White
Kingfisher Cr. — Ass. Rept 4933

4933