GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS

> DATE RECEIVED SEP 2 6 1995

DIAMOND DRILLING REPORT

MAY 1995 DRILLING PROGRAMME

On The

BEATON CLAIM GROUP

Kamloops Mining Division British Columbia

NTS 0921/10E

Lat: 50 deg. 41'E - Long: 120 deg.37'W

Operator: Lakewood Mining Co. Ltd. 2245-W.13th Ave. Vancouver, B.C. V6K - 2S4

Claim Owner: Mr.Charles Boitard 2245-W.13th Ave. Vancouver, B.C. V6K - 2S4

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FILMED

Date: September 18,1995

GEOLOGICAL BRANCH ASSESSMENT REPORT

24.046

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I. SUMMARY

The Beaton Group consists of seventeen claims totalling eighty-five units located seventeen kilometres west of the City of Kamloops, B.C. and five kilometres west of the currently producing Afton Mine. Andesites of the Nicola Group are the predominant rock type with the Cherry Creek pluton and Kamloops Group volcanics also present within the claim area.

Four NQ-sized diamond drill holes were completed during May 1995 on the Beaton 1 mining claim. The principal rock types encountered were lapilli tuffs comprising an upper unit and volcanic sedimentary rocks of a lower unit. Both are andesitic in composition and probable members of the Nicola Group. The upper lapilli tuffs are extensively intruded by felsic dykes causing extensive hydrothermal alteration zones. No mineralization of economic significance was noted.

Pursuit of thorium/potassium low anomalies within the claims area is recommended along with additional focus on the Cherry Creek pluton contact area near the northeastern portion of the Beaton 1 claim.

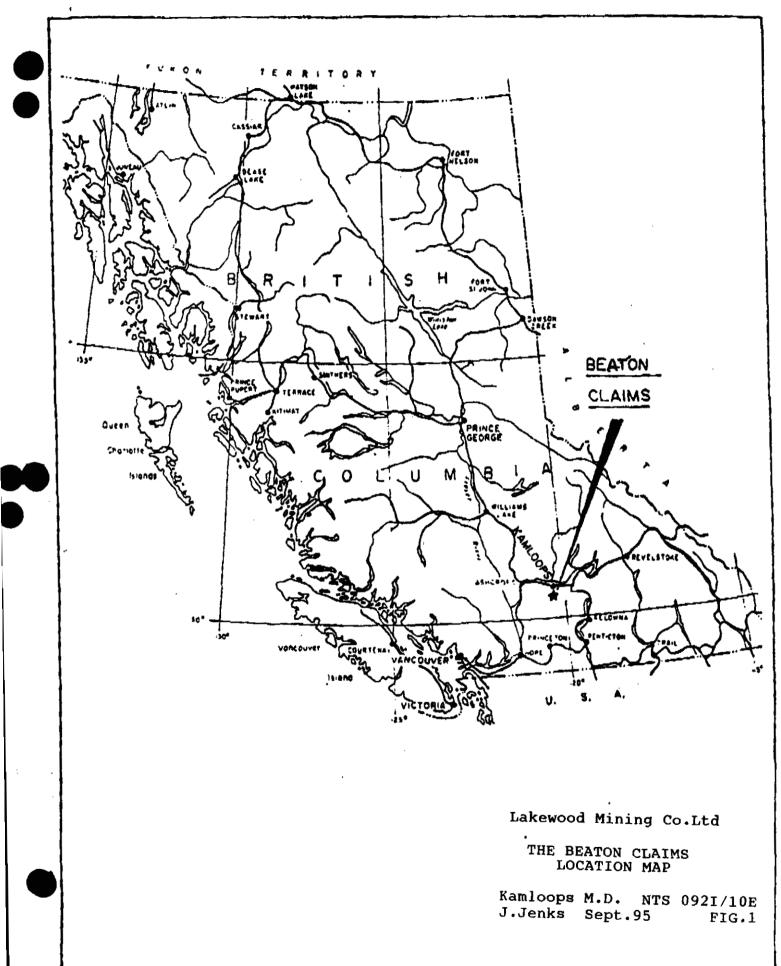
II. INTRODUCTION

The following was prepared at the request of Mr.Charles Boitard, President of Lakewood Mining Co. Ltd., the operator. Mr. Boitard is the registered owner of the grouped claims, collectively designated the Beaton Group, upon which assessment work as indicated in the following drill report was filed. Four NQ sized diamond drill holes totalling 1,371.08 metres were drilled on the Beaton 1 claim during May 1995 by LDS Diamond Drilling of Kamloops, B.C. The core is presently stored on site adjacent to the hole locations.

The holes were logged by the author of this report. While representative samples were kept of portions of the drill core no samples were submitted for assay.

III. LOCATION, ACCESS, TOPOGRAPHY

Situated seventeen kilometres west of Kamloops, B.C. and five kilometres west of Teck's Afton operation the area drilled is easily accessible from Kamloops via paved highway 1 and the Greenstone Mountain and Duffy Lake dirt roads. Within the claims boundary a network of reasonably good dirt roads provides access



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to most of the claim area and all of the drill sites.

Lying within the Thompson Plateau the area is generally hilly while upland sections are relatively flat. Though semi-arid a small sluggish stream, Beaton Creek, flows southeasterly and, except for the drier summer months, provides sufficient water for drilling operations. Much of the area is overlain by a moderate cover of pine and Douglas Fir, portions of which are second growth, as well as grasses and sage. Elevations range from 700-900 metres above sea level.

IV. LAND TENURE

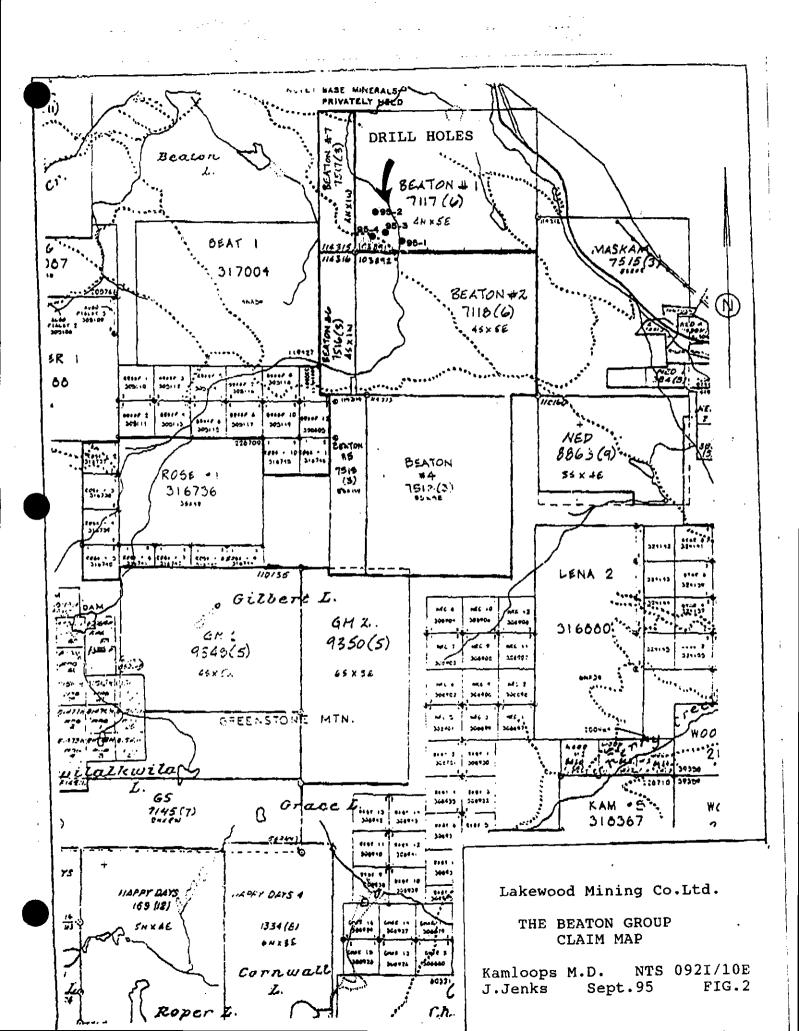
The Beaton Group comprises 17 claims totalling 95 units. They are listed as follows:

ROSE # 11231673623/03/98ROSE # 2131673723/03/98ROSE # 3131673820/03/98ROSE # 4131673922/03/98ROSE # 5131674023/03/98ROSE # 6131674122/03/98ROSE # 7131674223/03/98	CLAIM NAME	# OF UNITS	TENURE NUMBER	EXPIRY DATE *
ROSE # 2131673723/03/98ROSE # 3131673820/03/98ROSE # 4131673922/03/98ROSE # 5131674023/03/98ROSE # 6131674122/03/98ROSE # 7131674223/03/98	D000 # 1	10	215725	00 (00 (00
ROSE # 3 1 316738 20/03/98 ROSE # 4 1 316739 22/03/98 ROSE # 5 1 316740 23/03/98 ROSE # 6 1 316741 22/03/98 ROSE # 7 1 316742 23/03/98	••	12		23/03/98
ROSE # 4131673922/03/98ROSE # 5131674023/03/98ROSE # 6131674122/03/98ROSE # 7131674223/03/98	ROSE # 2	1	316737	23/03/98
ROSE # 5 1 316740 23/03/98 ROSE # 6 1 316741 22/03/98 ROSE # 7 1 316742 23/03/98	ROSE # 3	1	316738	20/03/98
ROSE # 7 1 316742 23/03/98	••	1	316739	22/03/98
ROSE # 7 1 316742 23/03/98	ROSE # 5	1	316740	23/03/98
	ROSE # 6	1	316741	22/03/98
	ROSE # 7	1	316742	23/03/98
ROSE # 8 1 316743 23/03/98	ROSE # 8	1	316743	23/03/98
ROSE # 9 1 316744 23/03/98	ROSE # 9	1	316744	23/03/98
ROSE # 10 1 316745 19/03/98	ROSE # 10	1	316745	19/03/98
ROSE # 11 1 316746 19/03/98	ROSE # 11	1	316746	19/03/98
BEATON # 1 20 217820 15/06/97	BEATON # 1	20	217820	15/06/97
BEATON # 4 20 217973 08/03/98	BEATON # 4	20	217973	08/03/98
BEATON # 5 5 217974 08/03/98	BEATON # 5	5	217974	08/03/98
BEATON # 6 4 217971 08/03/98	BEATON # 6	4	217971	08/03/98
BEATON # 7 4 217972 08/03/98	BEATON # 7	4	217972	08/03/98
MASKAM 20 217970 08/03/98	MASKAM	20	217970	08/03/98

* Includes assessment work currently being applied.

The claims are registered in the name of Mr. Charles Boitard. No title verification was undertaken by the author; accordingly, no guarantees are made with respect to ownership status.





V: HISTORY AND PREVIOUS ACTIVITY

A number of significant copper occurences in the general area are hosted by the alkaliic Iron Mask and Cherry Creek plutons, frequently at the plutonic margins. These occurences assume a variety of forms including veins, stockworks and fracturecontrolled disseminations (Carr & Reed, 1976).

Teck's Afton Mine, five kilometres west of the Beaton Group, began production in 1977 based upon a reserve figure of 30.84 million tons @ 1.0% Cu, 0.58 ppm Au and 4.19 ppm Ag (Carr & Reed, 1976). Production has surpassed the original reserve estimates and in recent months has come largely from the Ajax deposit seven kilometres east of the Afton deposit.

Portions of the Beaton group have been geologically mapped, magnetometer surveyed, IP surveyed and soil sampled. Nine percussion holes were drilled in 1992, one diamond drill hole in 1983. Three percussion and a single diamond drill hole was completed in 1993 and five diamond drill holes in 1994.

The claims fall within the area covered by the 1993 airbourne radiometrics/magnetics survey jointly conducted by Teck Corporation and the Geological Survey of Canada. The programme indicated a high degree of correlation between Th/K ratio lows, flanking magnetic anomalies and the alteration associated with Afton/Ajax mineralization as well as several other showings in the area.

VI: GEOLOGY

The Beaton group is situated within the Quesnel Trough, a belt of Lower Mesozoic volcanic and sedimentary rocks bounded by the older Cache Creek Group to the east and the younger Coast Intrusives to the west.

Within the claim group, though an outlier of the Cherry Creek pluton occurs on the northeastern corner of Beaton 1 flanked by possible Tertiary Kamloops volcanics, the prevalent formation on the property is the Nicola Group - consisting primarily of maroon to purple to green lapilli tuffs and related sedimentary rocks.

These are frequently intruded by relatively thin, porphyritic felsic dykes with associated alteration, likely related to the Cherry Creek pluton.

Outcrop in the claim area is sparse, probably comprising less than 5% of the surface area.

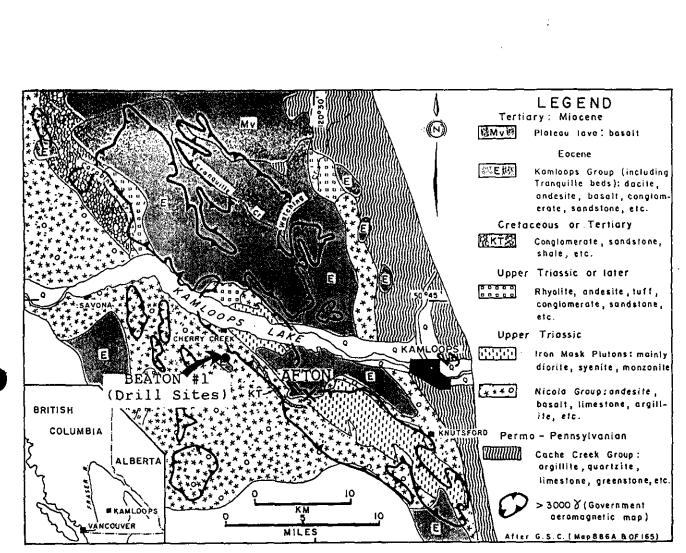


FIGURE 1 - Regional geological and aeromagnetic map of the Iron Mask district.

Lakewood Mining Co.Ltd.

THE BEATON GROUP REGIONAL GEOLOGY (After Carr & Reed,1976)

Kamloops M.D. NTS 0921/10E J.Jenks Sept.95 FIG.3

VII: DRILLING

During May 1995 four NQ sized holes were drilled by LDS Diamond Drilling of Kamloops on the Beaton 1 claim. These are summarized as follows:

HOLE NO.	ORIENTATION	TOTAL DEPTH
95-1	Vertical	337.5 M
95-2	230 az; -65 deg.	282.55 M
95-3	Vertical	355.70 M
95-4	Vertical	395.33

The core is currently stored next to the individual hole sites on the property. The drill programme was conceived and supervised by Mr. Charles Boitard. No samples were taken for analysis. Logging of the core was carried out by the author during July and September 1995. The drill logs are contained in Appendix I.

All of the holes collar in a green to maroon to purple, frequently mottled, lapilli tuff unit. This unit generally extends to depths ranging between 224 to 287 metres where it is succeeded by a deeper unit of volcanic sediments varying from argillite through sandstone to grit in which each hole terminated. All of the volcanics are andesitic in composition.

The contact between the lapilli tuffs and the volcanic sediments appears to be a low angle, conformable fault contact dipping from 10 to 20 degrees westerly. Hole 95-4 illustrates this feature particularly well.

Styles of veining, alteration and the presence of felsic dykes are markedly different between the upper lapilli tuff and the lower volcanic sediments. The upper lapilli tuff has been intruded by three to five felsic dykes ranging in thickness from one to twenty metres. Though generally porphyritic (plagioclase) the dykes may be homogeneous and/or albitic. They produce extensive hydrothermal alteration zones in which the enclosing lapilli tuffs may be bleached, albitized, hematized, mottled and extensively converted to clay minerals. The dykes also appear to be significant factors in localizing faulting and brecciation with resultant veining and zones of quartz/ankerite flooding. Sulphides are rare though may appear as hairline fracture fillings (pyrite, stibnite?, graphite?), generally within the alteration zones.

The underlying volcanic sediments appear barren of felsic dykes and consequently lack the hydrothermal alteration seen within the overlying lapilli tuffs. Though both units contain extensive fracture filling veinlets the upper unit hosts a quartz/ankerite variety while the lower unit is primarily calcite.

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APPENDIX I

DIAMOND DRILL LOGS

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LAKEWOOD	MINING	CO.LTD.	-	DIAMOND	DRTLL	RECORD
				DTUIDIO	011100	RECORD.

Description



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Hole No. 95-1	<u>Sheet</u>	<u>Coresize NQ</u>	
Property BEATON 1	Length 337.5 M.	Lat. Hor.Comp.	Ver.Comp.
District KAMLOOPS	Bearing VERTICAL	Dep. Etch at	<u>Rec % 100</u>
Commenced	Dip VERTICAL El	ev. 734.8 M True Dip	Logged by JJ
Completed	Objective	Location 705-24E	Date July95

Metrage: From

	rom	то	
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0 3.05 Casing

- 3.05 85.37 <u>LAPILLI TUFF:</u> 50% subrounded clasts to 4 cm. Clasts reddish to brownish to dark green in dark green tuffaceous sandstone matrix. Occasional tuffaceous sandstone horizon. Occasional pinkish coloration in matrix (K-spar alteration). Slight carbonate and magnetite content in matrix. 0 15.8 Very highly fractured (surface effect ?). 0 57.9: carbonate/qtz veinlet density is 6-13/M. 57.9 85.4: -do- 20/M.
- 85.37 113.72 <u>ALTERED LAPILLI TUFF</u>: 50% subrounded subrounded clasts in 1-4 cm. range. Probable heat source proximity and zones of quartz flooding have produced a mottled colour effect with reddish clasts, light green to cream-coloured /buff matrix. Moderately fractured. Veinlet density: 20/M.

- 113.69 150.78 <u>LAPILLI TUFF</u>: 50% subrounded, generally reddish clasts in dark green tuffaceous sandstone matrix with an occasional tuffaceous sandstone horizon. Cte/qtz veinlet density: 6-20/M. Slightly fractured.
- 150.78 152.25 <u>ALTERATION ZONE:</u> 50% subrounded clasts in 1-4 cm range. Lt green to buff to reddish buff coloured mottling. Moderately fractured. Veinlet dens:20-33/M. Veinlets are themselves fractured.
- 152.25 210.92 <u>LAPILLI TUFF</u>: Dark green, 50% darker subrounded clasts in the 1-4 cm. range. Pinkish white matrix is probably K-spar alteration. Slightly fractured. Cte/qtz veinlet density: 20-33/M.
- 210.92 249.02 <u>IAPILLI TUFF</u>: Mottled light green to light reddish grey probably subaerially deposited. 30% of rock volume is dark coloured rock fragments in tuffaceous sandstone matrix. Calcite/quartz density: 10-20/M. Slightly fractured.

^{98.7-99.7 &}lt;u>ZONE OF QUARTZ FLOODING:</u> Minor sulphides - silvery, very fine grained, probably pyrite.

^{90.53-97.84 &}lt;u>IAPILLI TUFF</u>: as per 3.0-85.37 with clasts generally reddish in colour in dark green tuffaceous sandstone matrix.

249.02 260.3 <u>FELSIC PORPHYRY DYKE</u>: Light grey, anhedral cream coloured plagioclase phenocrysts, to 4mm in diameter in a light grey matrix make up 20-30% of the rock volume. 0.67 M. section of very fine grained chilled material at hanging wall contact.

253.6-254.2 FAULT GOUGE.

- 260.3 263.04 <u>CONTACT ZONE:</u> Original tuffaceous sandstone contact altered to a mottled creamy buff, high clay mineral product. Moderately fractured.
- 263.04 273.10 <u>ALTERATION ZONE:</u> Tuffaceous sandstone with argillaceous portions. Sandstone portions are contact altered to a creamy buff colour (clay mineral). High density of fracturing. Carbonate/quartz veinlets comprise up to 10% of rock volume. Highly fractured.
- 273.10 275.23 FELSIC PORPHYRY DYKE: as before. Highly fractured.
- 275.23 279.20 <u>ZONE OF BRECCIATION/CALCITE-QUARTZ VEINLETS:</u> Tuffaceous sandstone host rock, as per 279.20 to 315.47. 10% of rock volume occupied by thin calcite/quartz veinlets which are themselves faulted.
- 279.20 337.41 <u>TUFFACEOUS SANDSTONE</u>: Medium grey with occasional brownish tint. Fine fine grained(0.5 to 1.0 mm), white subhedral plagioclase and dark minerals. Trace of magnetite. 10-25% of interval composed of thin bedded, dark grey to black argillite with the occasional horizon of tuffaceous grit. White calcite veinlets: density 14/ft. Moderately fractured.

284.68-285.60 FAULT GOUGE
312.42 Apparent dip: -40 deg.
279.20-282.55 ARGILLITE: Dark grey to black. Thin lamellar bedding.
Apparent dip: -30 deg.

- 315.47 318.21 <u>FELSIC PORPHYRY DYKE</u>: Light grey, anhedral cream coloured stretched plagioclase phenocrysts to 4 mm in diameter in a light grey matrix. Hairline fracturing.
- 318.51 337.41 <u>FAULT GOUGE</u>: Light grey to buff, reduced to gouge with occasional unbroken sections. Original rock a tuffaceous sandstone with minor argillaceous horizons. Qtz/calcite veinlet density: 13/M.

330.71-333.14: TUFFACEOUS GRIT

(Note: ALL THE VOLCANICS ARE ANDESITIC IN COMPOSITION)

337.41 END OF HOLE



LAKEWOOD MINING CO. LTD. - DIAMOND DRILL RECORD

Hole No. 95-2	Sheet 1 of 2	Cor	<u>esize NQ</u>	
Property BEATON 1	Length 282.55 M.	Lat.	Hor.Comp.	Ver.Comp.
District KAMLOOPS	Bearing 230 deg.	Dep.	<u>Etch at</u>	<u>Rec % 100</u>
Commenced D	Dip -65 deg. E	lev. 655.32	M True Dip	Logged by JJ
Completed (Objective	<u>Loc</u>	cation $605N-83$	2E Date Sept 95
Metrage:				

- From To Description
- 0 3.66 CASING
- 3.66 4.11 ALTERED LAPILLI TUFF: Rusty weathering.
- 4.11 12.50 <u>FELSIC PORPHYRY DYKE</u>: Light-grey to buff matrix, 30% subhedral white plagioclase phenocrysts to 5 mm in diameter. Highly fractured.
 - 8.84-12.50: Section is fine-grained and contains hairline fracture fillings of very fine-grained sulphide mineral(s) stibnite ?.
- 12.50 244.75 <u>LAPILLI TUFF</u>: Light-green to maroon. Clay mineral-altered lithic clasts to 10 cm in diameter, subrounded - some with reaction/alteration rims. Occasional zone of bleaching. Chlorite/kaolinite alteration in matrix. Moderately fractured. Quartz/ankerite veinlet density: 6-20 M.
 - 14.78-27.13: <u>FELSIC PORPHYRY DYKE</u>: (as above though slightly lighter in colour) Highly fractured.
 - 18.59-27.12: Bleaching effects from dyke.
 - 30.18-31.70: FAULT ZONE: brecciated tuff.
 - 56.08-59.44: Bleach zone the matrix of the tuff is bleached to a lightgreen clay mineral alteration product.
 - 46.94-52.43: Fracture Zone with Quartz Flooding. Shattered, altered tuff, limonite-stained with a quartz-flooded matrix.
 - 86.26-91.14: <u>FELSIC DYKE</u>: Light grey to buff, slightly porphyritic. Occasional fracture-filling filled with very fine grained sulphide - pyrite?, pyrrotite?, stibnite?
 - 85.04-86.26: Brecciated hanging wall with minor pyrite fracture filling.
 - 113.69-116.43: ALBITE ZONE: Light grey, bleached, fractured with traces of

sulphides.

108.20-116.43: Very highly fractured. Quartz/carbonate veinlets 6-20/M.

123.14: Quartz vein with a trace of mariposite ?

130.15: Epithermal style quartz veining (colloidal banding, chalcedonic)

139.90-142.04: Bleached zone. 154.53-157.28: -do-

182.88: Veinlet density: 6-20/M.

- 189.43-190.20: <u>ZONE OF QUARTZ/CARBONATE FLOODING</u>: Buff to white, altered tuff with primarily quartz/ankerite flooding.
- 220.07-221.59: <u>FELSIC DYKE</u>: Light grey, slightly porphyritic, traces of pyrite.

220.07-220.37: Faulted.

221.59-223.42 Bleached hanging wall lapilli tuff.

- 244.75 268.53 <u>GRIT/VOLCANIC SANDSTONE:</u> 50% of interval comprised of purple to buff, brownish-weathering grit (1-15 mm unsorted grain size), subrounded and 50% medium grey, homogeneous fine to medium grained (to 1mm) volcanic sandstone. Moderately fractured, guartz/ankerite veinlet density: 1-13/M.
- 268.53 282.55 <u>ARGILLACEOUS SEDIMENTS:</u> Medium to dark grey, brownish weathering, very fine-grained, 30% of the interval consists of thin, lamellar beds, the remainder is massive, fairly homogeneous. Moderately fractured with quartz/ankerite veining. Veinlet density: 6-26/M.

282.55 METRES End of hole.

- (NOTE: ALL OF THE ROCK EXCEPT FOR THE DYKE MATERIAL IS ESSENTIALLY ANDESITIC IN COMPOSITION)
- (NOTE 2: THE FINAL 76 METRES OF DRILLCORE HAS A VERY HIGH CLAY MINERAL CONTENT AND 50% OF THE CORE HAS SWELLED, DESSICATED AND TURNED TO POWDER THROUGH EXPOSURE TO THE ATMOSPHERE)



LAKEWOOD MINING CO. LTD. - DIAMOND DRILL RECORD

<u>Hole No</u>	o. 95-3	Sheet 1 of 4	. <u> </u>	<u>Coresize NQ</u>	
Proper	ty BEATON	1 Length 355.70 M.	Lat.	Hor.Comp.	Ver.Comp.
Distri	et KAMLOOF	S Bearing VERTICAL	Dep.	Etch at	Rec % 98.95
Commen	ced	Dip VERTICAL E	<u>lev. 701</u>	.04M True Dip	Logged by JJ
Comple	ted	Objective		Location 877N-950E	Date JUNE 95
Metrago From	e: To	Description		<u></u>	<u> </u>
0	3.66	CASING		· · · · · · · · · · · · · · · · · · ·	<u> </u>
3.66	10.06 <u>F</u>	ELDSPAR PORPHYRY: Buff/ feldspar crystals to 8 mm matrix; 5% scatter	diameter		l sausseritized
10.06	23.93 <u>7</u>	LTERED LAPILLI TUFF: Mo moderately fractured. Sausseritized matrix. 1	Possibly	secondary recrystalli	zed feldspar.
23.93	30.18 <u>co</u>	MPLEX CONTACT ALTERATION calcite and albite veinin tuff. Very highly	ng and ble	eached, buff-coloured a	
30.18	43.59 <u>A</u>	LTERED LAPILLI TUFF: Mot Possibly secondary rec Bleached alteratic	rystalli		
43.59	45.72 <u>vr</u>	IN ZONE: Zone of altered ankerite, quartz,		uff and multiphase vei and possibly albite	
45.72	116 .74 <u>I</u>	APILLI TUFF: Dark green, subangular fragments in s plagioclase (some K-spa epidote, chlorite. Qua 3-33/M., generally	sausseriti ar altera artz/calo	zed matriz containing n tion), calcite, hemati	rock fragments, ite/magnetite,
		64.00-64.62 FAULD 68.58-70.10 Very 72.54-75.29 77.42-78.33	T ZONE; T. Gouge highly -do- -do- -do-		
116.74	120.12 <u>0</u>	ONTACT ALTERED LAPILLI TU	<u>FF:</u> Mottl	ed light green to buff	to purple. 25%

rounded to sub-angular lithic fragments to 3 cm in diameter in a

sausseritized matrix. Quartz/calcite veinlet density: 3-7/M.

120.12 139.45 <u>FELDSPAR PORPHYRY DYKE:</u> 30% white, subhedral phenocrysts to 8 mm in diameter within a buff-coloured, sausseritized matrix. Hairline veinlet density: 2-7/M.

126.49-130.76 Very highly fractured. 131.46-132.53 XENOLITH: Altered lapilli tuff.

139.45 161.94 <u>CONTACT ALTERED LAPILLI TUFF</u>: Mottled light-green, buff/purple in colour. 25% rounded to sub-rounded lithic fragments to 3 cm in diameter in a sausseritized matrix. Quartz/calcite veinlet density: 3-7/M.

158.04-161.24 Very highly fractured.

161.94 200.25 <u>COMPLEX CONTACT ZONE:</u> Generally bleached, light buff to grey in colour, highly to very highly fractured zone containing porphyry dyke material, dyke chill zones, altered, bleached tuffaceous contact rock and breccia. Carbonate and veinlet poor. Somewhat silicified.

> 161.94-192.82 <u>PORPHYRY DYKE</u>: Buff-coloured with 30% rounded white feldspar phenocrysts to 8 mm in diameter. Contains extensive sections of very fine grained, chilled buff-coloured material. Carbonate poor.

164.29-166.42: Reddish colour variation. 169.47-171.91: Zone contains a number of black, hairline pyrite-filled, styolitic fractures. 195.77-198.24: <u>PORPHYRY DYKE:</u> As above with bleached contact margins at either wall. 198.24-200.25: <u>CONTACT-ALTERED LAPILLI TUFF:</u> As above though bleached light grey to buff in colour; some quartz veining.

- 217.02 220.74 <u>CONTACT ZONE</u>: Composed essentially of altered lapilli tuff; slightly bleached. Very highly fractured.
- 220.74 221.47 <u>PORPHYRY DYKE</u>: Felsic, light grey, porphyritic with 30% white, rounded feldspar crystals to 3 mm in diameter in a light-grey, very fine grained, bleached matrix.
- 200.25 224.85 <u>LAPILLI TUFF</u>: Reddish, iron-stained with occasional bleached sections proximate to faults and veins. 25 to 60% angular to sub-angular fragments to 5 cm in diameter. Veinlet density: 10-25/M.

210.46-212.75: FAULT ZONE: Brecciated, bleached lapilli tuff with calcite/quartz veinlets. 212.75-215.19: Veinlet density rises to 40% of the rock volume.

- 224.85 236.22 <u>TUFFACEOUS SANDSTONE</u>: Medium-grey, fine to medium-grained. Very highly fractured and faulted. Ankerite/calcite/quartz veining abundant. Occasional lithic fragment. Veinlet density: 13/M.
- 236.22 261.82 <u>LAPILLI TUFF:</u> 25% of rock volume occupied by subangular andesitic rock fragments to 4 cm in diameter with the matrix consisting of tuffaceous

sandstone as above. Mottled reddish to grey with occasional bleached portions. Veinlet density: 20/M. becoming more calcite/quartz in composition. Moderately fractured. Little sense of bedding.

236.22-238.96: FAULT ZONE: Bleached in places. Mottled red.

261.82 293.52 <u>TUFFACEOUS SANDSTONE</u>: Fine-grained, dark grey to black. Minor tuffaceous zones. Occasionally pinkish in colour after hematite. Carbonate veinlets to 15% of rock volume. Moderately fractured.

> 264.26-264.57 TUFFACEOUS SANDSTONE BRECCIA: As before but red in colour. 264.26-265.27 FAULT ZONE: Highly brecciated. Reddish in colour. 265.27-267.31: FAULT ZONE: Highly brecciated. Grey colour. 267.31-270.78: <u>ALTERATION ZONE:</u> Rock bleached to a light buff to grey colour (argillic alteration?). 270.78-270.94: QUARTZ VEIN: White, minor albite, trace of black tourmaline. 271.12-271.42: FAULT ZONE 273.41-277.06: <u>ARGILLITE</u> 279.20-280.11: ARGILLITE: Thin-bedded. Apparent dip: -60 deg.

- 293.52 300.84 <u>TUFFACEOUS ARGILLITE</u>: Dark-grey to black, medium-grained with 20% of rock volume composed of argillaceous sandstone. Secondary calcite-filled tension veinlets throughout. Vein density: 10-33/M. Moderately fractured.
- 300.84 311.51 <u>TUFFACEOUS SANDSTONE:</u> Medium to coarse-grained, greenish-grey. 40% subhedral feldspar, 10% white mineral (feldspathoid? - generally guartz defficient), 50% ferromagnesian minerals (hematite, magnetite, epidote). Minor pinkish calcite. To 15% of rock volume composed of dark basaltic fragments to 6 mm in diameter. Grain size: 2-5 mm. Pinkish coloration common after hematite.
- 311.51 330.40 <u>ARGILLITE:</u> Dark-grey to black, occasional subtle bedding. Minor tuffaceous zones to 30% of rock volume. High carbonate content.

313.64-313.94 Very highly fractured. Crushed appearance. Faulting compressional in nature. 318.82: Apparent dip: -50 deg. 319.13-323.70: Veinlet density to 100/M. 320.04-320.95: Very highly fractured 323.70-324.31: -do-

330.40 333.45 <u>TUFFACEOUS GRIT</u>: Similar though coarser than the tuffaceous sandstone above. Angular basaltic rock fragments to 10 mm in diameter comprise 25 % of the rock volume.

> 330.86-331.32: FAULT 333.45-333.76: -do-

333.45 353.57 <u>ARGILLITE:</u> Dark-grey to black, very fine-grained. Minor tuffaceous zones. Occasional subtle bedding. High carbonate content. Has a crushed appearance. Moderately fractured. Fracture density: 20-35/M.

341.38: Apparent dip : -40 deg.

341.38-342.60FAULT ZONE. Brecciated, fractured, abundant gouge.350.52-351.43FAULT ZONE. -do-349.30:Apparent dip: -25 deg.

353.57 355.70 <u>TUFFACEOUS SANDSTONE:</u> Similar to 300.8-311.51 interval though finergrained (to 1 mm grain size). Minor pinkish calcite. Up to 10% of rock volume composed of dark basaltic fragments to 6 mm in diameter. Moderately fractured. Hairline to 4 mm thick veinlets of 3 generations as follows: 1) calcite, clay, minerals, quartz; pink in colour (the oldest). 2) white calcite. 3) white calcite tension veinlets (youngest). Fracture density 20-33/M.

355.70 Metres END OF HOLE

(NOTE: ALL OF THE ROCK EXCEPT FOR THE DYKE MATERIAL IS ESSENTIALLY ANDESITIC IN COMPOSITION)



LAKEWOOD MINING CO. LTD. - DIAMOND DRILL RECORD

Hole No.	95-4	<u>Sheet 1 of 3</u>		<u>Coresize NQ</u>	
Property B	EATON 1	Length 395.33M.	Lat.	Hor.Comp.	Ver.Comp.
<u>District K</u>	AMLOOPS	Bearing Vert.	Dep.	Etch at	<u>Rec % 100</u>
Commenced	<u>E</u>)ip Vertical	Elev. 70	1.04M True Dip	Logged by JJ
Completed		Objective		Location 240N-696	DE Date Sept 95
Metrage: From	То	Description			
0	3.66	CASING			
3.66 250	m dia	ottling. Angular li ameter are generally 13-25/M. 3.66-74.07: Redd:	thic and p clast-sup ish color K-spar (c	ally dark green with plagioclase crystal co ported. Quartz/calcite cation predominant. or hematite ?) altera tractured.	lasts to 4 cm in veinlet density
	5	2.73-54.25 FAULT	ZONE: W	th calcite/quartz	flooding.
	60	.05-63.40 FAULT ZO	<u>NE:</u> Compo	sed of breccia, catao	clast and gouge
				(E: Buff to light grey white plagioclase cry	
	1	.84-130.15 <u>ZONE OF</u> quartz,minor and 31.98-133.20 35.33-137.16		<u>DODING:</u> Brecciated tu -do- -do-	Ef infilled with
		bleaching, clay min	neral alte	ermal alteration effe ration, coloration). ly quartz/ankerite.	Veinlet density
		160.63-160.93 FA	ULT		
		166.73-167.64 FA	ULT ZONE		
	160.			ects: Particularly the	

160.02-195.38 Heavy Alteration Effects: Particularly the matrix portion of the lapilli tuff. Includes a light green to buff colorization, albitization, bleaching; clasts generally are marcon rather than green in colour. Quartz/ankerite veinlet density: 3-13/M. 195.38-202.69 <u>ALBITE DYKE</u>: Buff to greyish-white, slightly porphyritic. Contains xenoliths of altered lapilli tuff.

198.73-200.25 FAULT ZONE

- 202.69-230.58 <u>ALTERED LAPILLI TUFF</u>: Alteration, particularly of the matrix consists of light coloration, albitization, bleaching while the fragments tend to be maroon coloured (hematite ?). Occasional minor black hairline fracture fillings (pyrite, graphite?, stibnite?). Veinlet density: 3-13/M.
- 230.58-240.18 <u>ALBITIC FELDSPAR PORPHYRY DYKE</u>: Buff coloured, albitized, bleached with faint outlines of plagioclase phenocrysts making up 30% of the rock volume. Highly fractured,
- 250.24 253.59 <u>FELSIC PORPHYRY DYKE</u>: Light grey with 30% of rock volume consisting of white subhedral plagioclase phenocrysts to 6 mm in diameter.

251.46-252.37 XENOLITH OF LAPILLI TUFF

- 253.59 287.12 <u>ANDESITIC LAPILLI TUFF</u>: Mottled maroon, light to dark green, subrounded to subangular lithic clasts to 3 cm, though generally 1-2 cm in diameter. Volume of clasts ranges from 30-60%. Selective epidote and/or hematite alteration - generally an epidote rich matrix and hematite stained clasts though the reverse may occur. Quartz/carbonate veinlet density: 13-40M.
- 287.12 <u>MAJOR FAULT CONTACT</u>: Apparent dip: -10 degrees. Appears to be a conformable bedding plane fault.

278.89-287.12: Hanging Wall Fault Effects include gouge, red colouration, cataclastic fabric. Veinlet type becomes quartz/ankerite and occupies 35% of the rock volume.

287.12-288.65: Footwall Fault Effects include gouge, calcite veinlets, cataclastic material.

287.12 337.41 <u>ARGILLACEOUS VOLCANIC SEDIMENTS:</u> Dark grey to black, very fine grained, thin lamellar bedding common. Argillaceous portions make up 80% of the interval, sandstone and minor grit the remainder. Calcite veinlet density: 20-50/M.

287.12-290.17: Calcite veinlets, swarms make up 40-50% of the rock volume.

308.46: Apparent dip: -18 degrees.

287.12 395.33 <u>ANDESITIC VOLCANIC SEDIMENTS</u>: Medium to dark grey with varying horizons ranging from sandstone (to 1 mm in grain size, homogeneous, 60% of the section), argillaceous sediments (black, grain size in the clay mineral range, thin lamellar bedding in places, 25% of the interval) and grits (subrounded to subangular clasts to 2 cm in diameter, 15% of the interval). All are similar in composition and include plagioclase,ferro-magnesian minerals, hematite and magnetite. Calcite veinlet density: 10-24/M.

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(NOTE: ALL OF THE ROCK EXCEPT FOR THE DYKE MATERIAL IS ESSENTIALLY ANDESITIC IN COMPOSITION)

^{395.32} END OF HOLE