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GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
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Gold Commissioner's Office  
VANCOUVER, B.C.

Report on Diamond Drilling

Green 1-4 Mineral Claims

**Omineca Mining Division**

NTS 93 K/14W

Lat 54° 58' N

Long 125° 28' W

Owner: Prithvi Raj Wallia

Operator: Global Metals Ltd.

#1730-505 Burrard Street

Vancouver, B.C.

FILMED

J.F. McIntyre, P. Eng.

R.F. McIntyre, B.Sc., Geologist

September 20, 1995

24,094

GEOLOGICAL BRANCH  
ASSESSMENT REPORTS

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## INTRODUCTION

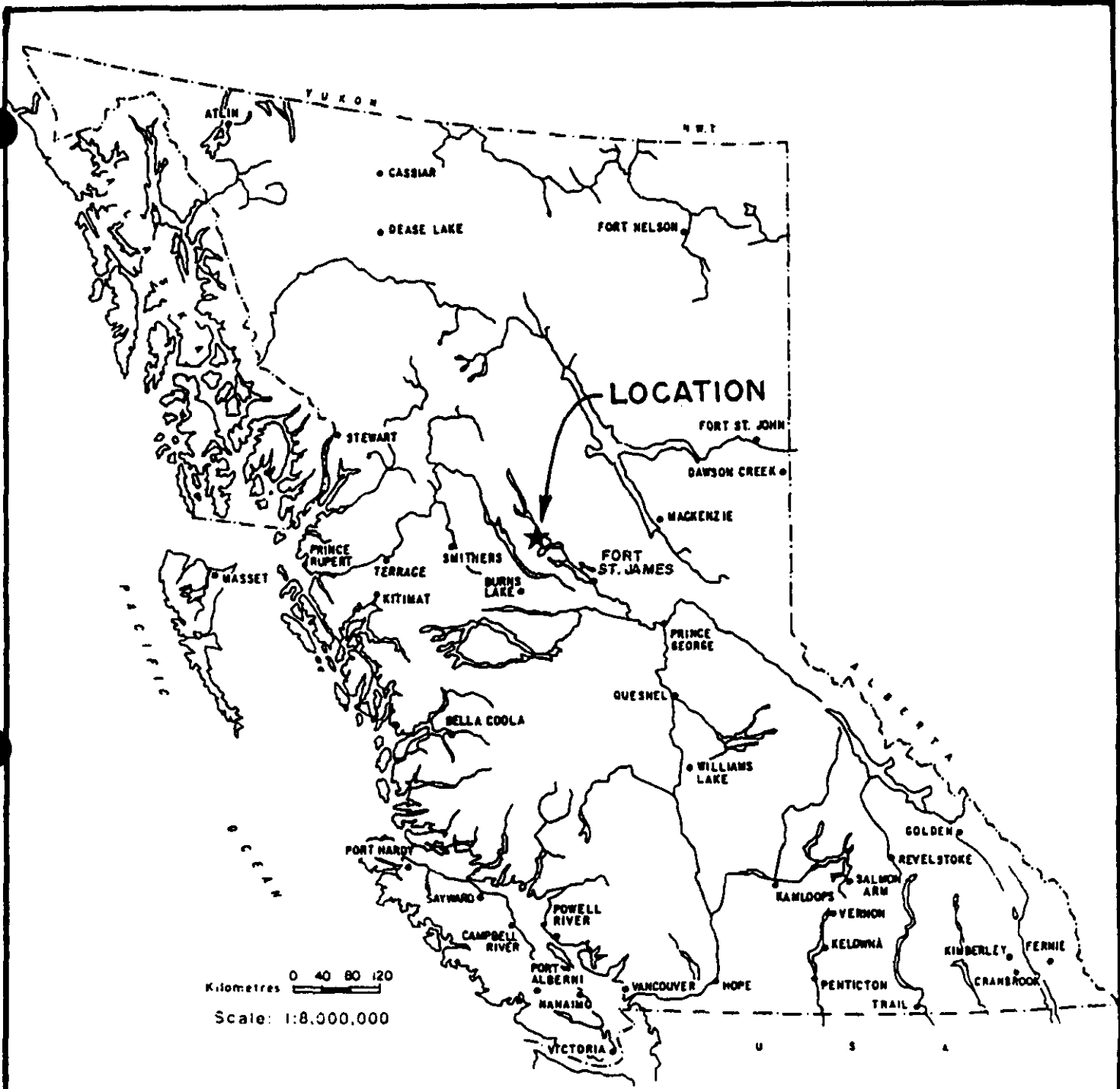
### **A) General**

The Green 1-4 mineral claims, also known as the O'Ne-el Creek jade deposit, are located in the Omineca Mining Division approximately 100 km northwest of the town of Fort St. James (Figure 1). The claims straddle O'Ne-el Creek some 5 km above its confluence with the Middle River. Access to the property is via logging road from Fort St. James to O'Ne-el Creek, then via helicopter to the site. The showings lie at an elevation of approximately 1,070m ASL on a section of the creek which is somewhat incised into bedrock and which lies immediately above a significant (+ 30 m) waterfall and a deeply incised canyon. Other than this, topographic relief in the area is moderate.

### **B) Property**

The Green property consists of four 2-post mineral claims (Figure 2) record numbers 322378, 322379, 322380, and 322381, owned by Mr. Prithvi Raj Walia of #1730-505 Burrard Street, Vancouver, B.C. The operator responsible for the 1995 exploration program is Global Metals Ltd. of the same address.

Available records show the property to have been discovered in 1968 by Winnifred B. Robertson and staked as the Genesis claims, with preliminary property work done by Tezzeron Nephrite Ltd. of Cloverdale, B.C. During 1969 small scale geological mapping and 8 small diameter (x-ray) diamond drill holes were completed by Jade Queen Mines Ltd. As well, an indeterminate quantity of nephrite was produced from boulders and the major

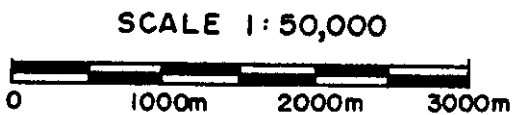
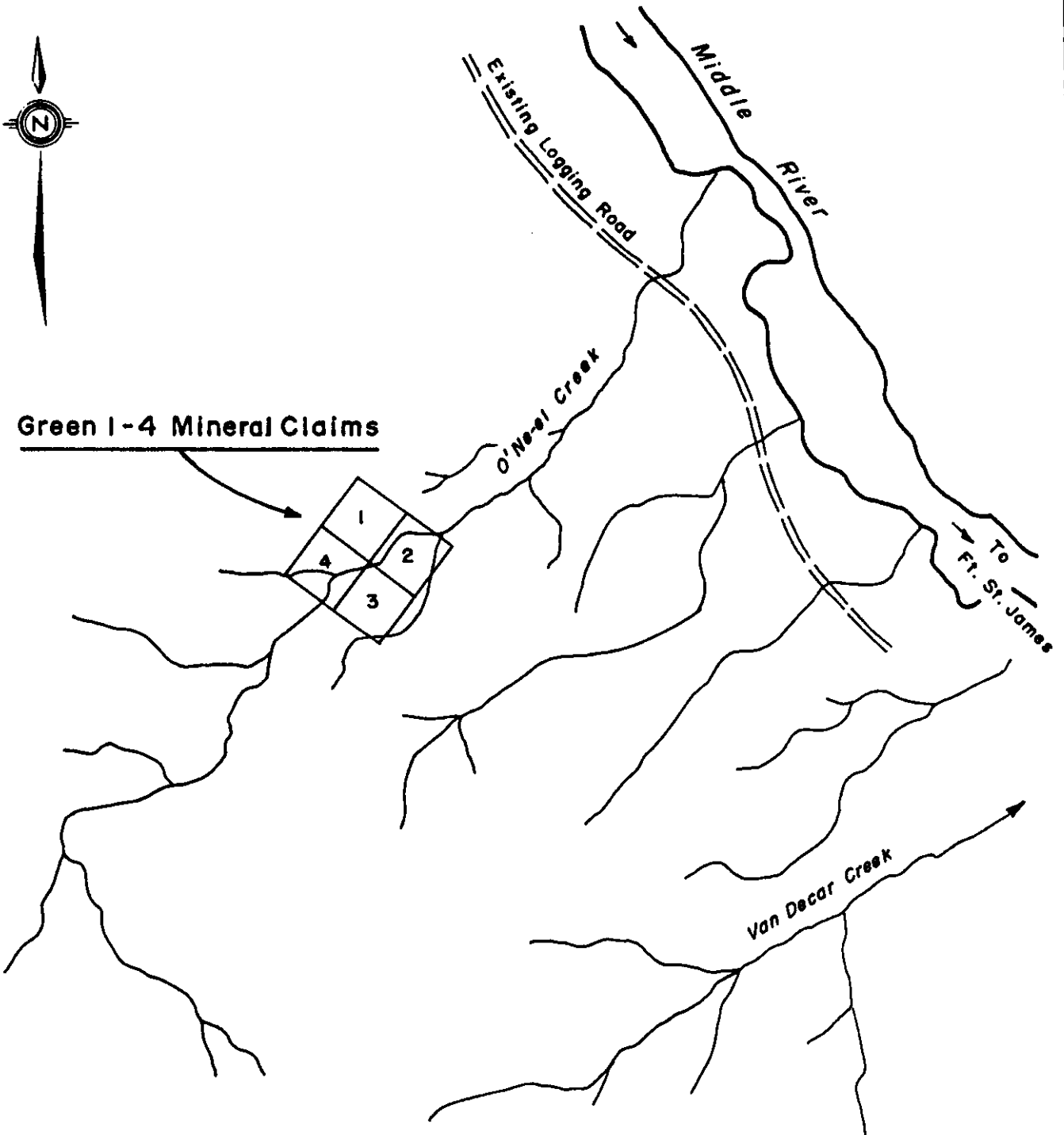


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<b>GLOBAL METALS LTD.</b>		
<b>O'NEIL CREEK JADE PROPERTY</b>		
<b>LOCATION MAP</b>		
Figure 1	R.F. McIntyre	Sept, 1995



Green 1-4 Mineral Claims



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<b>O'NEEL CREEK JADE PROPERTY</b>		
LOCATION MAP		NTS 93K/14W
OMINECA MINING DIVISION, B.C.		
Figure 2	R.F. McIntyre	Sept. 1995

jade outcrop and removed from the property via helicopter. Geological mapping and petrographic study of the property was carried out by J.R. Fraser during 1969<sup>1</sup>. Around September of 1969 control of Jade Queen Mines was sold to Athabasca Columbia Resources. No further property work has been reported since this time.

The B.C. Minister of Mines and Petroleum Resources Annual Reports for 1968 and 1970 show total reported jade production from the Omineca Mining Division to be 2,318 kg in 1968, 6,553 kg in 1969 and 110,223 kg in 1970 with only 998 kg reported from all prior years. Sources dating from the period of activity variously report jade on the O'Ne-el Creek property reserves of 23.6 million kg, 3.6 million kg or 45,900 tonnes. However, supporting documentation for these numbers is not at hand. Current estimates are considerably lower than this.

### **C) 1995 Property Work**

During late 1994 and early 1995 a detailed investigation of the area was carried out by Mr. George Mason, P. Eng. His study involved air photograph interpretation integrated with satellite based remote sensing data, and covered a large area surrounding the Green claims. Results were used in planning the subsequent drilling program.

The 1995 field work began with a reconnaissance trip to the property by R.F. McIntyre during April 10-12, 1995. The major field work consisted of 29 diamond drill holes (Table 1) located on 15 separate set-ups. These were completed during the period of June-July, 1995. Drilling totalled 498.4 meters (1,635.25 ft.). All work took place on the Green 1, 2 and 4 mineral claims and was supervised by R.F. McIntyre under the direction of J.F. McIntyre, P.Eng.

**Table 1 - Diamond Drill Holes**

<u>Hole #</u>	<u>Bearing,</u>		<u>Depth</u>
	<u>°True</u>	<u>Inclination</u>	
95-1	122°	56°	11.33 m
95-2	-	Vertical	24.84 m
95-3	-	Vertical	18.29 m
95-4	130°	55°	18.82 m
95-5	-	Vertical	15.55 m
95-6	-	Vertical	15.42 m
95-7	-	Vertical	21.95 m
95-8	107°	60°	11.89 m
95-9	282°	50°	15.09 m
95-10	-	Vertical	16.46 m
95-11	112°	52°	16.15 m
95-12	305°	51°	9.78 m
95-13	-	Vertical	13.26 m
95-14	303°	52°	15.14 m
95-15	105°	52°	18.14 m
95-16	-	Vertical	19.35 m
95-17	-	Vertical	19.96 m
95-18	-	Vertical	19.05 m
95-19	118°	44°	18.52 m
95-20	300°	45°	6.81 m
95-21	320°	53°	15.54 m
95-22	135°	50°	7.01 m
95-23	140°	56°	9.14 m
95-24	125°	54°	30.96 m
95-25	116°	60°	30.68 m
95-26	296°	46°	15.04 m
95-27	330°	45°	21.89 m
95-28	150°	50°	21.64 m
95-29	330°	60°	21.03 m

Immediately prior to drilling, a helicopter-supported tent camp was erected on the site of the 1969 camp. A considerable amount of debris left by the previous operator was cleaned up and either burned or removed from the property. All trash in the area of drilling was collected and removed, as was that found on the south side of O'Ne-el Creek. Similarly, the 1995 drill sites were cleaned up and no garbage or other materials have been left on site. The camp remains in place pending anticipated future work.

No road work was undertaken. A hand-cut all-terrain vehicle access trail had been planned but route reconnaissance revealed that a safe and useful trail could not be completed without excessive cost and effort. Fisheries concerns precluded mechanical road construction so the idea was dropped. Following completion of the 1995 drilling program the core was removed from the property and is currently in storage in North Vancouver, B.C.

## GEOLOGY

The O'Ne-el Creek jade deposit is located west of the Middle River in the Fort St. James map area. Primary geological references for the region are Armstrong (1949)<sup>2</sup> and Little (1949)<sup>3</sup>. The property geology is well described in Fraser (1972)<sup>1</sup>. His petrographic work is definitive for this property and his lithologic terminology is adopted herein.

The jade deposits occur close to the contact between the Pennsylvanian and Permian Cache Creek Group and the Permian to Middle Triassic Trembleur Intrusions. The Cache Creek Group is a highly heterogeneous series of sedimentary and volcanic rocks, typically



metamorphosed and intensely folded and faulted. On the property the Cache Creek rocks include chert, quartzite, greenstone, calcareous shale, sandstone and argillaceous sediments ranging from black and massive to buff with contorted laminae. Marble was not seen in significant quantities. Individual lithologies are shown in the cross-sections, but were seldom separable on the geology map (Figures 4, 5).

The Trembleur Intrusives are regionally closely associated with the Cache Creek Group. They consist of sills and stocks of ultramafic composition including peridotite, dunite, pyroxenite and occasional gabbro, mainly altered to serpentine. On the property the ultramafic types separately mapped are:

- a) Serpentinite Brown weathering, dark green to black when fresh, this is the most common rock on the property. It is often talc altered and can contain magnetite. Serpentinization has destroyed any original igneous textures.
- b) Quartz-Carbonate Rock This rock is an alteration of serpentinite and makes up most of drill holes 28 and 29. It weathers a distinct rusty-orange colour, and is confined to the western end of the area explored. It commonly contains magnetite and occasional agate in veins and veinlets. Traces of nickel staining (mariposite) were seen. The carbonate minerals present, ankerite and magnesite, do not react with dilute HCl.
- c) Talc-Carbonate-Serpentine Rock Distinguished by its softness and medium-greenish grey colour in outcrop, it is a minor alteration phase of the ultramafics and was seldom encountered.

Later dikes and sills of five distinct types intrude the area. They are, in order of abundance:

- a) Quartz-Albite-Clinozoisite Porphyry (herein shortened to Diorite), displaying pinkish-grey plagioclase phenocrysts of 4-8 mm size in a fine-grained light grey matrix. This appears to be the latest intrusive phase, cutting the Meta-diabase.
- b) Meta-diabase Olive-grey in colour, contains a few percent of fine feldspar phenocrysts generally 1-2 mm in size in a very fine groundmass. Distinct chilled margins are aphanitic and darker in colour. This unit cuts across several faults and appears to truncate the Albite-Amphibole rock.
- c) Albite-Amphibole Rock Medium to fine-grained, equigranular with a distinct black and white "salt and pepper" appearance. It only appears in outcrop near holes 95-6 and 95-24.
- d) Aplite Sugary, greyish-pink and fine-grained, this minor type was found only near the O'Ne-el Creek waterfall.
- e) Amphibole-Zoisite Rock Dark green and dense, the only outcrop occurs in isolation on the south side of the creek, west of the old helipad. Its association with the surrounding ultramafics is unknown.

Two significant alteration zones are also separately mapped. They are:

- a) Nephrite Typically green with dark inclusions and hard.
- b) Tremolite-Talc-Chlorite Typically grey to grey-green, variable in composition and hardness.

These two lithologies are further discussed below.

The property is structurally complex. Both pre and post-intrusion faulting are apparent. The details of folding remain poorly understood, mainly due to stratigraphic complexity and the general absence of relict bedding. However the broad structure consists of a series of folded Cache Creek rocks forming a relatively thin (10-20 m) plate or roof pendant above an irregular serpentine body. This sedimentary block is bounded by a fault immediately southwest of section D-D', by the canyon of O'Ne-el Creek to the east and southeast (itself a fault expression) and by intrusions or fault blocks of serpentine to the north. The area is cut by a number of dikes generally trending east-west to northeast-southwest and dipping moderately to the north. Jade and related alteration zones are found within the Cache Creek group rocks.

Several lensoid bodies of green nephrite and semi-nephrite were found in drilling, the largest of which is exposed on surface at the "jade cliff." Closely associated with this typical jade are similar bodies of tremolite, normally grey to greenish grey in colour and containing varying amounts of talc and chlorite. These minerals form a continuous alteration series ranging from fairly pure talc (soapstone) through soft, foliated tremolite-talc-chlorite rock, to hard grey tremolite to nephrite. Both foliated and massive occurrences of tremolite and nephrite were intersected in the drill holes.

Contrary to conventional theory, the jade and tremolite-talc alteration bodies are often confined to buff-coloured, fine to very fine-grained altered meta-sediments of the Cache Creek group rather than appearing as contact alteration of ultramafics. The contact between serpentine and overlying sedimentary rocks frequently exhibits similar tremolite-talc alteration, and talc alteration of serpentine is very common. However many of the nephrite and tremolite-talc occurrences are found at some distance from the intrusive

contact, sometimes as a series of alteration zones separated by other intervals. The geometry of the occurrences and the absence of relict serpentine in them makes it unlikely that local sills or dikes of serpentine are always involved. Thus it appears that the Cache Creek altered sediments control formation of nephrite and associated alteration zones, either structurally and/or compositionally. While clearly of metasomatic origin the significant zones often derive from the siliceous rocks rather than the ultramafics.

### DISCUSSION

The Drilling Plan (Figure 3), shows locations of all 1995 diamond drill holes, along with the azimuth, inclination and depth of each. This information is summarized in Table 1. The geological interpretation of the drilling is presented on the Geology Map (Figure 4) and on eleven cross sections designated A-A' through K-K' (Figure 5 a-c). Dip tests were not done since the holes were all quite short.

Jade zones and tremolitic zones were encountered between sections D-D' and J-J'. Significant intersections were found in most holes, as summarized in Table 2. The Asian jade market accepts many colours and textures of stone as "jade," including "red jade," "black jade," and "white jade" varieties. Thus the rigorous mineralogical constituent (nephrite, for example) is of less importance than the hardness and polishability of the stone and its desirability in a subjective marketplace.

The jade and tremolite zones present on the O'Ne-el Creek property vary from emerald green nephrite to milky grey tremolite. Hard and polishable rocks across this spectrum are present in the drill cores. Because of the vagaries of jade marketing the economic definition of reserves is highly problematical. This is compounded by the fact

**Table 2 - Significant Intersections**

<u>Hole #</u>	<u>Interval</u>	<u>Thickness</u>	<u>Character</u>
95-1	3.50m - 5.69m	2.19 m	Nephrite, minor semi-nephrite and tremolite. Tremolite-talc, altered serpentine.
	8.84m - 11.02m	2.18 m	
95-2	0.30m - 1.02m	0.72 m	Tremolite. Nephrite, minor semi-nephrite and talc.
	4.32m - 5.61m	1.29 m	
95-3	7.65m - 8.84m	1.19m	Tremolite, jade, tremolite-talc.
95-4	6.05m - 6.83m	0.78m	Variable tremolite-chlorite-talc. Talc-tremolite. Talc-tremolite-chlorite.
	9.45m - 10.36m	0.91m	
	15.75m - 15.95m	0.20m	
95-5	8.61m - 9.14m	0.53m	Tremolite, foliated with talc-chlorite.
95-6	11.84m - 13.41m	1.57m	Semi-nephrite, tremolite.
95-7	8.61m - 9.27m	0.66m	Semi-nephrite, tremolite, minor talc. Talc-tremolite.
	17.63m - 17.91m	0.28m	
95-8	5.79m - 7.16m	1.37m	Nephrite, semi-nephrite.
95-10	3.05m - 4.19m	1.14m	Tremolite, tremolite-talc.
95-11	3.96m - 8.18m	4.22m	Talc, occasional tremolite. Jade, tremolitic jade.
	8.18m - 9.68m	1.50m	
95-12	5.92m - 7.09m	1.17m	Tremolite-talc, fault zone.
95-13	5.72m - 6.55m	0.83m	Tremolite, talc, some chlorite.
95-14	5.99m - 6.58m	0.59m	Semi-nephrite. Jade, semi-nephrite. Talc, tremolite-talc.
	8.84m - 9.65m	0.82m	
	12.55m - 13.28m	0.73m	
95-15	12.98m - 13.49m	0.51m	Semi-nephrite, talc.
95-17	15.42m - 17.42m	2.00m	Steatite (Soapstone).
95-18	6.76m - 7.32m	0.56m	Tremolite. Tremolite.
	8.84m - 9.16m	0.33m	
95-19	11.33m - 13.00m	1.67m	Tremolite-talc-chlorite.
95-24	17.86m - 22.99m	5.13m	Talc altered sediments, minor tremolite.

that the zones are highly irregular, with large variations in thickness and with great variability in character over short distances being the rule.

The jade appears to be confined to a limited area. Southwest of section D-D' and northeast of J-J' neither significant alteration nor the typical altered sedimentary host rock were found. To the north serpentinite is frequently encountered, as is rapidly thickening overburden, limiting prospects for extension of the zones in this direction. To the south O'Ne-el Creek cuts off the jade-bearing strata.

The 1995 drilling was confined to the north side of the creek where jade outcrops and boulders are prominent. Across the creek several occurrences of Cache Creek Group rocks are known. However few indications of jade have been seen. If jade occurs here the deposits are "blind" and require further diamond drilling to prove.

Using the thickness of significant intersections (Table 1) converted to true widths and projected between drill holes on the cross sections D-D' through I-I' (Figure 5b, 5c) a series of net cross sectional areas was derived. These were averaged, then multiplied by the average distances between pairs of cross sections to arrive at net volume estimates. Volumes were further projected to the two faults bounding the area under investigation, just beyond sections D-D' and I-I' respectively (Figure 4). Summarized and converted to weight, the calculated tonnage was arbitrarily reduced by 25% to produce an estimate of useable stone.

Thus, based on the frequency of 1995 drill hole intersections of green and grey jade and tremolite within the area noted above we estimate that some 2,800,000 kg (6,150,000 lbs.) of usable stone are present on the property. We are unable to attach specific dollar figures to the stone grades, and so this estimate should be considered tentative.

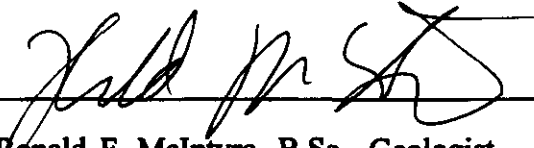
**CONCLUSION**

The O'Ne-el Creek property is known to host jade and has produced an indeterminate tonnage in the past. Current drilling has outlined an estimated 2,800,000 kg of jade and tremolite within a delimited area. Further possibilities for jade occurrences exist both on the south side of O'Ne-el Creek and to the north of the area drilled, under thick overburden cover. Additional drilling will be required to prove the existence of jade in these areas.

September 20, 1995



John F. McIntyre, P. Eng.



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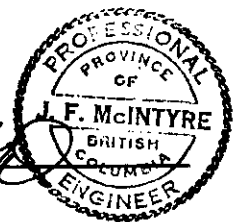
Ronald F. McIntyre, B.Sc., Geologist

**Certificate**

I, John F. McIntyre, hereby declare that:

- 1) I hold the degree of Bachelor of Science in Mining Engineering, University of Alberta, 1949, and
- 2) I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia, and
- 3) I carry on practice as a consulting mining and geological engineer, and
- 4) I have practised my profession continuously since 1949 and have had wide experience in mining and mineral dressing in many parts of Canada, the United States, Mexico and Southeast Asia, and
- 5) I oversaw and directed the diamond drilling programme reported on herein, carried out by Ronald F. McIntyre, B.Sc., and
- 6) I have never, do not, nor expect to hold any direct or indirect interest in Global Metals Ltd., nor the subject property, and
- 7) My sole remuneration for this work is the professional fee charged for it.

  
\_\_\_\_\_  
John F. McIntyre, B.Sc., P.Eng.  
Mining Engineer



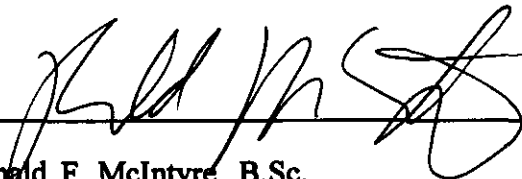
September 20, 1995



**Certificate**

I, Ronald F. McIntyre, do hereby certify that:

- 1) I hold the degree of Bachelor of Science in Geology from the University of British Columbia, 1977, and
- 2) I have practised continuously as a geologist in British Columbia, the Yukon and the western United States since that time, and
- 3) I personally supervised the diamond drilling described herein, logged all drill cores and prepared the interpretation presented herein, and
- 4) I have never, do not, nor expect to hold any direct nor indirect interest in Global Metals Ltd., nor in the subject property, and
- 5) My sole remuneration for this work is the professional fee charged for it.

  
\_\_\_\_\_  
Ronald F. McIntyre, B.Sc.  
Geologist

September 20, 1995

**Bibliography**

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- 2) Armstrong, J.E.; G.S.C. Memoir 252, Fort St. James Map Area, Cassiar and Coast Districts, British Columbia, Kings Printer, 1949.
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- 4) B.C. Energy, Mines & Petroleum Resources Minfile Report # 093K005.
- 5) B.C. Energy, Mines & Petroleum Resources Annual Report, 1961, pp 118-126, "Jade in British Columbia."
- 6) B.C. Energy, Mines & Petroleum Resources Annual Reports 1968, 1969, 1970.
- 7) G.S.C. Paper 72 - 53, pp 44, 45, 48.
- 8) G.S.C. Map 631A (1941), G.S.C. Map 907A (1948), G.S.C. Map 1424A (1979).

# **Appendix I**

## **Drilling Logs**

DDH - 95 - 1      Location: ± 4.6m    Bearing 310°T From Sawn Jade Face;      Collared on Bedrock      Plunge 56° on Bearing 122°T  
 Core Size: AW (35 mm)

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	Core Recovery %
From	To							
0	0.56	0.56	Tremolite Zone	Milky grey-green with dark inclusions. Foliation 45-60° to core axis. Hard. Lower contact 1 cm talcy gouge.	Every 2-10 cm parallel to foliation	0-2.44 2.44-4.57 4.57-5.69	10 9 20	4 4 18
0.56	3.51	2.95	Altered greenstone & sediments	Chlorite green contorted and altered Cache Creek series. Mainly greenstone, 10 cm siliceous zone @ 2.44m. Minor carbonate. Lower 8-10 cm tremolite altered.	Variable, 10-90° to core axis. Spacing 2-30cm	5.69-7.92 7.92-9.04 9.04-10.31	=63 10 10	±30 9 8
3.51	5.69	2.18	Jade Zone	Semi-nephrite 3.51-3.81m foliated, grey-green, some softer zones. Nephrite 3.81-4.88m, green, milky, hard, little foliation. Top 15cm transitional. Nephrite 4.88-5.54m, dark inclusions, texture more marbly, colour grey-green. Tremolitic zone. 5.54-5.69m, milky, grey, foliated. Grades downward to talc-chlorite alteration.	Every 1-5cm parallel to foliation. Few Nil	10.31-11.33	8	7
5.69	7.24	1.55	Altered Sediments	Chloritic grey-green, badly broken in drilling with significant lost core. Lower section is talc rich, gougy, sheared.	Frequent, nearly perpendicular to core axis.			
7.24	8.84	1.60	Meta-Diabase Dike	Granular texture, medium grey, some quartz and carbonate enrichment. Upper and lower chill zones aphanitic. Altered.				
8.84	11.02	2.18	Altered Ultramafics	Mottled creamy tremolitic rock 8.84-9.25m. Mostly altered brecciated serpentinite 9.25-10.26m. Talc zone 10.26-10.67m with considerable lost core. Medium grey altered serpentine 10.67-11.02m.				
11.02	11.33	0.30	Serpentinite	Dark green to black, relatively unaltered.				
End of	Hole							
Box 1	0 - 5.99m	Box 2	5.99 - 11.33m					

DDH - 95 - 2

Location: 0.3m Bearing 293° from DDH 95-1

Logged By: R.F. McIntyre

Core Size: AW (35 mm)

Vertical Hole

Depth - in		meters		Lithology	Description	Fractures	Core Recovery		
From	To	Interval					Interval(m)	Loss(cm)	%
0	0.30	0.30	Overburden	Cased 0 - 0.3m	-	0-0.3	-	-	
0.30	1.02	0.71	Tremolite Zone	Mottled, milky greenish grey, foliated. Top 15cm more talc rich, remainder quite hard.	Top 30cm fractured	0.3-2.06	13		
1.02	4.32	3.30	Altered greenstones and sediments	Chloritic green-grey, contorted, some bedding visible, siliceous 2.90-3.20m and 3.81-4.14m. Some marble present. Lower 18cm heavily altered, talcy, soft, foliated ≈ 20° to core axis.	Mainly 30-45° to core axis every 15-50cm. Top 30cm and bottom 18cm broken up.	2.06-3.17	13	gain	
4.32	5.61	1.30	Jade Zone	Semi-nephrite, 4.32-4.57m, foliated, grey, irregular textures, some softer inclusions. Nephrite, 4.57-5.44m. Grey and green banded on ½-2cm intervals over most of the section. Some foliation 45° to core. Hard, tough, one single unbroken piece is 94cm long. Transition Zone, 5.44-5.54m. Talc rich, foliated, footwell 5.54-5.61m.	Few Nil	3.17-4.14 4.14-5.69	15 2	16 -	
5.61	6.43	0.81	Meta-Diabase Dike	Medium grey, granular center with fine grained margins. Some quartz and carbonate enrichment. Altered. Calcite veinlet @ 6.15m, 20° to core axis.	5-15cm, 20-70° to core axis	11.58-12.80	25	gain	
6.43	7.67	1.24	Altered Sediments	Chlorite grey-green, includes chlorite, tremolite and talc rich intervals. Possible vague bedding 50-60° to core axis.	Irregular 10-70° to core axis every 8-30cm	12.80-14.02 14.02-15.54	0 8	gain	
7.67	8.66	1.02	Altered Serpentine	Grey-green, often sheared/foliated. Some talc and gouge zones. Possible 8cm dike at 8.23m	Frequent, every 1-8cm. Mainly 60° to core axis.	15.54-18.82	30	gain	
8.66	24.84	16.15	Serpentinite	Dark green-black. Generally unaltered. Sheared zone, possibly minor fault @ 10.13m. More chlorite altered 18.82-24.84m. Sheared zone, possible minor fault 21.13-21.31m.		18.82-20.35	2		
End of	Hole					20.35-21.79 21.79-23.32 23.32-24.84	8 2 8	gain gain	
							Net loss 38cm over 24.84m - 1.5%		

Box 1 0-5.69m

Box 2 5.69-11.58m

Box 3 11.58-16.76m

Box 4 16.76-21.79m

Box 5 21.79-24.84m

DDH - 95 - 3 Location: 13.3m Bearing 310° From DDH-95-1  
 Core Size: AW (35 mm) Vertical Hole

Logged By: R.F. McIntyre

Depth - in		meters	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To	Interval					Loss(cm)	%
0	3.66	3.66	Overburden	Cased 0-3.7m				
3.66	7.65	4.29	Altered Sediments	Greenish-grey, texture almost chaotic. Variable alteration - some silification, minor carbonate. Vague bedding 50° to core axis; may be secondary. More granular 5.94-6.71m. Lower 60 cm increasingly altered, foliated 45° to core axis, soft.	Variable, usually parallel to foliation, interval ranges from broken up to 30cm	0-3.66 3.66-5.08	- 8	- 7
7.65	8.84	1.19	Tremolite-Jade Zone	Mottled, milky-grey green tremolite 7.65-8.03m. Milky grey-green, massive, tough jade 8.03-8.28m. Drill stuck in this section unable to break core off and some core was ground. Zone may exceed the 25cm width given here. Foliated tremolite-talc zone 8.28-8.84	Parallel to foliation. 50-80° to core axis every 5-20cm	5.08-8.18 8.18-9.30	36 10	gain
						Net loss ±25cm between 5.08-9.30 = 6%		
8.84	9.55	0.71	Altered Serpentine	Dark green, brecciated, talc enriched. Tremolitic 9.09-9.22m.	5-30cm, parallel foliation 60-70° to core axis			
9.55	11.43	1.88	Meta-Diabase Dike	Medium grey fine grained porphyry. Unaltered. Small, 1-2 mm plagioclase and biotite phenocrysts. Top contact displays distinct chill margin. Includes a xenolith of altered serpentine, as above 10.82-10.97m.	2 sets, nearly perpendicular, 60° to core axis and 20° to core axis.	9.30-10.82 10.82-14.17	5 10	3 gain
11.43	13.11	1.68	Altered Serpentine	Variable, dark-green and unaltered to grey, contorted, foliated and brecciated zones. Minor calcite near top.	Variable 2-38cm spacings	14.17-15.65	10	-
13.11	18.29	5.18	Serpentinite	Mainly dark green to black and relatively unaltered. Some softer, talc enriched zones. Unusual green alteration 16.46-16.61m. Minor altered zones and shears occasionally visible.	Generally 5-23cm spacings and 60-70° to core axis.	15.65-17.15 17.15-18.29	Nil 5	- 4

Box 1 0-9.30m    Box 2 9.30-13.13m    Box 3 13.13-18.29m

DDH - 95 - 4

Location: 0.7m Bearing 130° from DDH - 95 - 3

Plunge 55° on Bearing 130°T

Core Size: AW (35 mm)

Depth - in		meters				Core Recovery		
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
0	4.57	4.57	Overburden	Cased 0-4.6m	-	0-4.57	-	
4.57	4.72	0.15	Diorite Dike	Medium-grey porphyry. Same as Fraser's quartz - albite clinozoisite rock. No chill margin on bottom contact. Contact = 65° to core axis. Fine grained groundmass; phenocrysts to 4-5 mm.	One fracture, 15° to core axis at top.	4.57-5.05 5.05-7.70	8 50	16
4.72	6.05	1.32	Altered Greenstone	Grey-green. Alteration increases with depth. Texture contorted near top, granular near bottom. Top 75cm rubbly, broken in drilling	Frequent, 2-15cm, usually 60-70° to core axis. A few 0-20° to core axis.			
6.05	6.83	0.79	Tremolitic Zone	Highly variable tremolite-chlorite-talc zone. Bottom 15cm hard, nearly massive, speckled dark and mottled pale green-grey to darker grey-green.	Generally 15-18cm spacing, 60-70° to core axis.			
6.83	7.49	0.66	Talc Zone	Dark green, brecciated finely, white fracture filling. Lower 30cm broken in drilling.	Frequent 2-13cm 70-90° to core axis.			
7.49	7.90	0.41	Altered Sediments	Dark grey, graphitic, broken in drilling.	Some near parallel to core axis			
7.90	9.45	1.55	Meta-Diabase Dike	Medium grey, fine feldspar porphyry. Distinct chill margins top and bottom. Contacts 50° and 70° to core axis.	2-23cm @ 60-70° to core axis. A few 5-30° to core axis.			
9.45	10.36	0.91	Talc-Tremolite Zone	Top 60cm talcy, fissile; bottom 30cm harder, mottled, more tremolitic.	Broken up at top.			
10.36	13.11	2.74	Altered Meta-Sediments	Mixed rock types. Mostly meta-shale with intervals of quartzite 10.79-11.02m, 11.10-11.25m; chert 11.38-11.46m.	5-20cm intervals 60-80° to core axis	7.70-8.64	10	gain
						Net loss 40cm between 5.05-8.64 = 11%		
13.11	13.61	0.51	Altered Zone	Uncertain origin. Probable contorted chert, may be tremolitic, may be mixed chert and meta-quartzite		8.64-10.36 10.36-11.89	15 8	9 5
13.61	15.75	2.13	Altered Cherty Sediments	Dark green-black with chert and quartzite intervals. Chert 14.58-14.88m. Usually brecciated.	Few 10-50cm to core axis	11.89-13.41 13.41-14.63	- 10	- gain
15.75	17.07	1.32	Clay Altered Sediments	Grey to grey-buff, usually contorted. Alteration increases with depth.	Top 60cm broken	14.63-17.27	28	
17.07	17.91	1.32	Altered Serpentine	Top 15-20cm light coloured, talc-tremolite-chlorite. Remainder badly ground in drilling, dark green, asbestiform. Extensive core loss 17.27-17.91 due to fibrous cleavage.	Shearing = 30° to core axis	Net loss 18cm between 13.41 - 17.27m = 7%		
17.91	18.82	0.91	Serpentinite	Dark green. Center portion sheared. Includes fault zone at 18.59m cutting 30° to core axis.	Shearing 5-30° to core axis	17.27-18.82	38	24
End of Hole								
Box 1	0 - 10.06m	Box 2	10.06 - 15.29m	Box 3	15.29 - 18.82m			

DDH - 95 - 5 Location: 9.0m Bearing 060° From DDH-95-3 Collar is ± 3.0m N, and 1.0m uphill from old DDH-69-5 & 6  
 Core Size: AW (35 mm) Vertical Hole

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	Core Recovery %
From	To							
0	0.91	0.91	Overburden	Cased 0 - 0.9m	-	0-0.91	-	-
0.91	1.60	0.69	Chert	Medium-dark grey chert. Brecciated, vuggy.	5-10 cm spacings 45-60° to core axis	0.91-1.52 1.52-3.89 3.89-4.57	8 109 23	gain  gain
1.60	4.93	3.33	Meta-Diabase Dike	Fine-grained, medium-grey feldspar porphyry. Chill margins. Xenoliths of meta-sediments 3.00-3.25m, 3.84-4.04m. Upper contact ground off, lower contact 60° to core axis.	5-40cm spacing, 40-80° to core axis.	Net loss 79cm between 0.91-4.57m = 22% 4.57-6.10	5	-
4.93	8.61	3.68	Altered Meta-Sediments	Variable dark grey to pale greenish-grey. Fine grained, mainly shale, some quartzite with minor marble zones (often remobilized). Bedding 45° to core axis. Includes calcite-ankerite (?) vein 7.29-7.47m, very coarsely crystalline. Attitude uncertain.		6.10-7.01 7.01-8.53 8.53-10.36 10.36-12.50 12.50-15.54	5 5 8 50	gain  gain 24
8.61	9.14	0.53	Tremolite-Talc-Chlorite Zone	Mostly foliated with chlorite-talc. Solid, drilled mostly as a single piece 40cm plus long Light-grey to greenish-grey and more massive in center 8.74-8.94m.	2-40cm spacings parallel to bedding. Few parallel to foliation ±60° to core axis			
9.14	13.00	3.86	Serpentinite	Dark green, finely brecciated with white fillings. Some alteration and occasional small calcite-carbonate veins.	10-30cm spacings usually 60-80° to core axis.			
13.00	15.54	2.54	Serpentinite	Dark grey to black, unaltered. Minor brecciated zones and occasional white, non-calcareous veinlets. Core ground @ 10.97m.				
End of	Hole							

Box 1 0 - 7.01m    Box 2 7.01 - 12.80m    Box 3 12.80 - 15.54m



**DDH - 95 - 6**      Location: 20.3m Bearing 014°T From DDH - 95 - 5  
 Core Size: AW (35 mm)      Vertical Hole

<u>Depth - in</u>		<u>meters</u>				<u>Core Recovery</u>	
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm) %
0	1.83	1.83	Overburden	Cased 0 - 3.0m	-	0-3.76	-
1.83	3.48	1.65	Altered Sediments	Greenish-grey and contorted, very hard, silicified. Top 30cm rubbly near surface.	10-25cm spacings, generally 60-80° to core axis		
3.48	5.69	2.21	Chert	Light-medium grey, brecciated. Some green staining due to alteration.	Near top, rusty fractures 45° to core axis; lower are 60-80° to core axis	3.76-5.18 5.18-6.55	13 gain 40 gain
						6.55-8.38	35 -
5.69	7.90	2.21	Meta-Diabase Dike	Medium-grey fine-grained feldspar porphyry. Distinct chill margins, top 50° to core axis, bottom 60° to core axis.	Generally 8-20cm spacing, 60-80° to core axis. One fracture 15° to core axis at 6.22m.		
7.90	11.61	4.01	Chert	Green-grey, multiple brecciation. Later fractures filled with odd silvery-grey hard material which appears to be silicate, not sulphide; softer than surrounding chert, includes minor pyrite. Possible arsenopyrite.	Variable. Intact core to 90cm long, fractures variable, parallel to brecciation.	8.38- 11.43 11.43-12.60	30 40 gain
							Net loss 10cm between 8.38-12.60m = 2%
11.61	11.84	0.66	Altered Sediments	Greenish-grey, broken in drilling. Often foliated 40° to core axis.	Frequent, parallel foliation		
11.84	13.41	1.42	Semi-Nephrite-Tremolite Zone	Top 75cm grey-green, hard, tough semi-nephrite. Some foliation visible, occasional chloritic mottling. Some parts nearly massive. Lower section milky green, mottled, softer than above. Drilled as one 60cm core section. <u>Note:</u> 15cm discrepancy between measured length and drilling markers. Measured length 142cm.	Two perpendicular sets 40° and 20-30° to core axis.	12.60-14.12 14.12-15.42	5 gain 2 -
13.41 End of	15.42 Hole	2.01	Altered Serpentine	Chlorite green, often finely brecciated. Top 15 - 20cm is heavily altered talc-tremolite zone.	Few, 70-80° to core axis		

Box 1 0 - 6.91m      Box 2 6.91 - 12.60m      Box 3 12.60 - 15.42m

Depth - in		meters	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To	Interval					Loss(cm)	%
0	3.96	3.96	Overburden	Cased 0 - 4.5m.	-	0-4.52	48	gain
3.96	8.13	4.17	Diorite Porphyry Dike	Quartz-albite-clinzoisite rock. Medium grey, very fine groundmass with white and pink phenocrysts to 4-5 mm. Fine mica visible throughout. No upper contact; lower contact shows a little chilling, sits 70° to core axis.	Few. Often 20-30cm spacing. 60° to core axis	4.52-6.05 6.05-7.57	35 2	- gain
8.13	8.61	0.48	Talc Altered Zone	Dark olive green, brecciated and sheared at top. Grades downward to harder, more tremolitic rock steadily through the zone. Bottom is pale, chloritic grey-green.	Sheared, 70° to core axis at top, otherwise none	7.57-10.36 10.36-11.73 11.73-15.83	- 15 38	- gain -
8.61	9.27	0.74	Semi-Nephrite Tremolite Zone	Top 25cm foliated and contorted semi-nephrite, greyish green. Middle 30cm milky, mottled tremolite-talc rock; softer, more massive, little foliation. Bottom 18cm foliated, grey, talc-rich with 5-8cm semi-nephrite on the bottom.	Foliation 45-70° to core axis few fractures	15.83-17.53 17.53-20.12 20.12-21.95	30 8 25	gain - 14
(Loss at bottom)								
9.27	10.31	1.04	Altered Sediments	Grey-green, displays disturbed bedding, 40-50° to core axis. Increasingly siliceous with depth.	Foliation parallel to bedding. Few fractures.			
10.31	12.98	2.67	Chert	Grey-green, brecciated with silvery-grey fillings. Same as DDH-95-6. Pyrite present on some fractures.	Few fractures. Variable attitudes usually along brecciation.			
12.98	14.99	2.01	Calcareous Shale	Dark grey, fine grained with visible bedding 40-45° to core axis. Substantial remobilized marble. Foliation parallel to bedding.	Generally 8-20cm spacings on foliation.			
14.99	16.56	1.57	Chert	Grey, some green staining, some silvery brecciation filling. filling. filling. Some sections nearly	10-20cm spacings on brecciation.			
16.56	17.63	1.07	Altered Sediments	Colour medium grey to buff-grey green. Calcite as fracture fillings throughout.	10-20cm spacings parallel to foliation. Lower section has some 10° to core axis.			
17.63	17.91	0.28	Talc-Chlorite-Tremolite Zone	Talc rich, foliated, possibly sheared. Center 5cm is white, harder, tremolitic. Minor carbonate present. Foliation 50-60° to core axis, parallel to bedding on overlying sediments.				
17.91	20.14	2.24	Meta-Diabase Dike	Medium grey, fine feldspar porphyry. Chill margins top and bottom. Top contact 55° to core axis, not parallel to bedding in overlying unit. Strike differs by 40-60°.				
20.14	21.95	1.80	Serpentinite	Dark green-black. Some chloritic alteration, lightly brecciated.				
End	of Hole							

Box 1 0 - 9.70m    Box 2 9.70 - 15.32m    Box 3 15.32 - 19.43m    Box 4 19.43 - 21.95m

**DDH - 95 - 8**      Location: Same as 95 - 7; Plunge 60° on Bearing 107°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>	
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
0	4.27	4.27	Overburden	Cased to 4.3m.	-	0-4.27	-	-
4.27	5.79	1.52	Diorite Porphyry Dike	Quartz-albite-clinozoisite rock. Medium grey with phenocrysts to 4-5 mm. No chill margins. Fine mica visible throughout.	Every 10-25cm 40-50° to core axis.	4.27-5.79 5.79-7.57	8 25	5 14
5.79	7.16	1.37	Jade Zone	Top 40cm foliated and brecciated semi-nephrite. Middle 53cm more massive, grey-green with some mottling and foliation 30-60° to core axis. Bottom 43cm foliated greyish semi-nephrite.	15-32cm spacings parallel to foliation.	7.57-9.14 9.14-10.74	28 32	- gain
7.16	7.75	0.58	Altered Meta- Sediments	Top part broken in drilling, sheared. Mainly dark grey, fairly hard.	Shearing 80° to core axis	10.74-11.89	43	
7.75	9.70	1.96	Chert	Greenish-grey, brecciated with silvery-grey fracture fillings. Same as DDH-95-5 & 6. Some pyrite, some rusty stain on fracture surfaces.	8-50cm spacing 70-80° to core axis.			Loss at bottom.
9.70	10.46	0.76	Calcareous Shale	Dark grey to black, significant remobilized marble. Some brecciation. Bedding vague ± 70° to core axis.	5-15cm spacing, 50-70° to core axis.			
10.46	11.89	1.42	Chert	Mainly pale grey-white with grey partings and fracture fillings. No obvious pyrite, no green staining.	On partings every 15- 28cm, roughly 70° to core axis.			
End of Hole								

Box 1 0 - 9.75m    Box 2 9.75 - 11.89m

**DDH - 95 - 9**      Location: 2.7m Bearing 285°T From DDH-95 - 7. Plunge 50° on Bearing 282°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>	
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
0	4.88	4.88	Overburden	Cased to 4.9m.	-	0-5.79	-	-
4.88	15.09	10.21	Serpentinite	<i>Dark green-black, sometimes finely brecciated with white fillings. Hardness variable - some zones chlorite/talc rich but little different in appearance. Minor secondary calcite present, particularly in top half. Some white dolomite in veinlets.</i>	Fractures parallel to core axis in top 1.5m. Otherwise 15-50cm spacing, good core recovery, angles 30-80° to core axis.	5.79-7.57	32	19
						7.57-9.09	13	8
						9.09-12.19	8	2
						12.19-13.72	2	1.7
End of	Hole					13.72-15.09	5	4

Box 1 0 - 10.36m    Box 2 10.36 - 15.09m

**DDH - 95 - 10**

Location: 11.1m Bearing 058°T From DDH - 95 - 6

Core Size: AW (35 mm)

Vertical Hole

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To						Loss(cm)	%
0	3.05	3.05	Overburden	Cased in overburden.	-	0-4.88	-	-
3.05	4.19	1.14	Tremolite Zone	Milky greenish-grey, somewhat foliated throughout. Top 20cm calcareous. Mottled top 20cm and bottom 30cm softer; higher talc content.	Few 40-60° to core axis, one parallel to core at 3.51m.	4.88-6.58	18	10
4.19	5.31	1.12	Talc Zone	Dark green with white stockwork. Some harder intervals.	10-25cm at 70-80° to core axis, one parallel to core at 5.18m.	6.58-8.10	45	30
5.31	7.21	1.91	Altered Sediments (?)	Similar to above, very little relict texture. Harder. Dark grey-green. Minor asbestiform talc @ 6.63m. Original lithology uncertain. Some calcite present.	10-25cm at 70-80° to core axis, one parallel to core at 5.18m.	8.10-10.36	25	12
7.21	10.36	3.15	Fault Zone	Rocks are sheared, gougy, badly broken in drilling. Major gouge zone @ 8.53, 50° to core axis. Shearing parallel to core 9.0-9.5m (approximately).	Blocky, foliated fractures 5-10cm @ 45-60° to core axis.	10.36-11.89	5	3
10.36	11.15	0.79	Brecciated Serpentine	Dark green-black, non-calcareous. Broken up due to fault.	-	11.89-14.99	-	-
11.15	16.46	5.31	Serpentinite	Dark grey-green to black. Unaltered. More massive than serpentine seen in previous drill holes. Little or no core loss.	Blocky, foliated fractures 5-10cm @ 45-60° to core axis.	14.99-16.46	5	4
End of	Hole							

Box 1 0 - 8.92m    Box 2 8.92 - 14.40m    Box 3 14.40 - 16.46m

**DDH - 95 - 11**      Location: 0.4m Bearing 110°T From 95-10      Plunge 52° on Bearing 112°T  
 Core Size: AW (35 mm)

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	Core Recovery %
From	To							
0	2.59	2.59	Overburden	Cased 2.6m.	-	0-2.59	-	
2.59	3.96	1.37	Diorite Porphyry Dike	Quartz - albite clinozoisite rock. Grey porphyry with 4-5 mm phenocrysts. fine mica. No contacts visible.	Several 20-30° to core axis	2.59-4.11 4.11-6.10	20 53	13 27
3.96	8.18	±4.3	Talc Altered Zone	Extensive zone of alteration; varies in intensity. Original lithology uncertain; possibly meta-sediments. Includes: top 3.66 badly broken, rust on fractures; 5.8-6.1m hard zone, tremolitic blobs present; 6.45-6.81m less intense alteration; 7.72-7.92m harder, more tremolitic.	Broken parallel to foliation. Some fractures parallel to core axis. others 45-60°	6.10-8.84 8.84-11.07	85	Extensive core loss. 17
8.18	9.68	1.50	Jade Zone	8.18-8.46m transition zone, increasingly tremolitic. 8.46-8.86m blotchy, pale grey-green jade. Some fine foliation visible, otherwise uniform. Tremolitic, therefore somewhat softer than the underlying unit. 8.86-9.37m jade. Hard, some black inclusions. Milky green colour, little foliation except for fracture plane 10-15° to core axis. 9.37-9.68m jade. More grey, foliated than above.	Few 10-15° to core axis.	11.07-14.78 14.78-16.15	33	9 -
9.68	10.67	±0.9	Altered Sediments	Buff-grey, fine grained, carbonate-clay altered. Significant calcite content.	Badly broken.			
10.67	11.07	±0.4	Intense Alteration	Talc(?) carbonate altered rocks, probably sediments as foliation is parallel to bedding. Traces in above unit, 30-40° to core axis. Alteration increases with depth. Bottom may be ground off.	Few fractures, parallel to foliation 30-40° to core axis.			Overall loss 196cm = 12%
11.07	12.50	±1.5	Altered Sediments	Buff-grey, minor calcite, clay altered, often broken in drilling. Bedding = 45° to core axis.	Fracture parallel bedding 30-40° to core axis.			
12.50	12.83	0.33	Talc Zone	Generally pale greenish-white, contorted to reniform. Attitude uncertain. May be altered fault gouge at contact with underlying ultramafics.				
12.83	16.15	3.33	Serpentinite	Dark greyish-green. Some more chloritic intervals interspersed with grey-black, more massive zones. White fracture fillings show variable orientation but a persistent set = 30-60° to core axis is apparent.	5-30cm intervals on white partings.			

Box 1 0 - 8.84m    Box 2 8.84 - 14.78m    Box 3 14.78 - 16.15m

**DDH - 95 - 12**      Location: 2.6m    Bearing 292°T From 95-10      Plunge 51° on Bearing 305°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>		
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%	
0	1.52	1.52	Overburden	Cased to 1.5m.	-	0-1.52	-		
1.52	1.96	0.43	Diorite Porphyry Dike	Medium-grey porphyry, phenocrysts to 5 mm. Rusty fractures. Possibly a boulder.		1.52-2.79	10	8	
						2.79-3.78	18	18	
1.96	5.92	3.96	Meta-Diabase Dike	Fine grained feldspar porphyry, phenocrysts 1-2 mm. Attitude uncertain as both contacts are broken up in drilling. Some chilled pieces present top and bottom.	Fractured 3-60cm spacing, 30-60° to core axis	3.78-5.11	15	11.5	
						5.11-8.13	50	17	
						8.13-9.14	-	-	
5.92	7.09	0.13	Tremolite-Talc Zone	Creamy greenish grey, foliated. Broken on talc laminae about 45° to core axis. Fault zone 6.05-6.35m, gougy, sheared.	Foliation 30-60° to core axis	9.14-9.78	5	8	
7.09	9.78	2.69	Sheared, Altered Serpentinite	Dark green-black. Some talc and tremolite zones. Persistent shearing 5-30° to core axis.	Frequent, 10-30° to core axis				
End of		Hole							

Box 1 0 - 7.01m    Box 2 7.01 - 9.78m

**DDH - 95 - 13**

Location: 11.3m Bearing 292°T From 95-10

Core Size: AW (35 mm)

Vertical Hole

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Core Recovery	Loss(cm)	%
From	To								
0	1.17	1.17	Overburden	Cased 1.2m		0-1.17	-		
1.17	3.76	2.59	Diorite Porphyry Dike	Quartz - albite clinzoisite rock, grey with 5 mm phenocrysts, fine pyrite visible throughout. Bottom 30-40cm shows finer groundmass near contact. Bottom contact ½ cm mud on fracture 60° to core axis.	Infrequent, 60° to core axis. A few 5-15° to core axis.	1.17-2.39 2.39-3.81	18 33		
3.76	4.17	0.41	Chert	Light grey to white with brown laminae. Minor calcite veinlets parallel to core axis.	Every 5-8cm, 30° and 60° to core axis.	3.81-6.55	20		
4.17	4.90	0.74	Altered Greenstone	Pale chloritic green, finely contorted texture. Minor calcite veinlets.	Every 10-12cm, 30° & 70° to core axis.	6.55-8.18	10		Core ground @ 6.78m
4.90	5.72	0.79	Altered Sediments	Pale greyish-green. Some relict bedding 40° to core axis.	Frequent, 20 & 60° to core axis.	8.18-9.53 9.53-11.73	2		gain
5.72	6.25	0.53	Tremolite Zone	Top 8cm contorted, contains chloritic inclusions. Next 15-18cm foliated, pale greenish grey, softer, some fine mottling. Bottom 28-30cm hard, somewhat blotchy, little foliation, pale greenish-grey to light grey.	Fractures parallel to foliation 30° to core axis. Also perpendicular to foliation 30-40° to core axis.	11.73-13.26	2		gain Probable marking error.
6.25	6.55	0.30	Talc Zone	Soft, Brecciated, grey to greenish white.	-				
6.55	8.99	2.44	Altered Serpentinite	Dark green-black, intensely brecciated, talc and/or chlorite altered. 10cm tremolitic zone at 7.32m.	Every 8-25cm, mainly 40-50° to core axis.				
8.99	9.35	0.36	Serpentinite	Black, unaltered.	-				
9.35	9.83	0.48	Meta-Diabase Dike	Medium grey, very fine grained, 1-2 mm phenocrysts. Chilled margins. Badly broken.	Broken up in drilling.				
9.83	13.26	3.43	Serpentinite	Dark green-black, relatively unaltered, gougy zones at 11.38, 12.95m.	Frequent, 5-10cm intervals, 60-70° to core axis.				
End of	Hole								

Box 1 0 - 6.78m    Box 2 6.78 - 13.26m



DDH - 95 - 14 Location: 0.3m Bearing 290°T From DDH-95-13 Plunge 52° on Bearing 303°T  
 Core Size: AW (35 mm)

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
From	To							
0	1.83	1.83	Overburden	Cased 3.0m.	-	0-1.83	-	
1.83	5.99	4.17	Diorite Porphyry Dike	Medium grey, quartz - albite clinzoisite rock, phenocrysts to 5-6 mm. very fine pyrite visible throughout.	10-15cm spacing, 30° and 60-70° to core axis.	1.83-3.28 3.28-5.28	15 15	gain -
5.99	6.58	0.58	Semi-Nephrite	Light grey with a slight green tone. Very hard, chert-like except for fine foliation. Some talc alteration, top 5cm.	Frequent 2-10cm, breaks 70° to core axis.	5.28-5.94 5.94-7.62	8 -	11 -
6.58	7.62	0.99	Altered Sediments	Soft, nearly gougy. Badly broken in drilling. Variable texture. <u>Includes</u> : white quartz vein 6.78-7.06m with soft brown accessory mineral. Attitude unclear, possible 60° to core axis.	Badly broken up.	7.62-9.09 9.09-10.59	2 5	2 3
7.62	8.84	1.22	Extremely Altered Sediments	Probably mostly tremolite and talc but grainy or finely foliated throughout. Not as hard as unit below but cored perfectly. Bottom 5cm talc.	Fractures 15-25cm intervals, 30-60° to core axis.	10.59-12.73 12.73-15.14	8 5	gain
8.84	9.65	0.81	Jade Zone	Grey-green, hard, mostly somewhat foliated. Top 15cm and bottom 20cm semi-nephrite.	One, 5° to core axis at 8.84m. One 30° to core axis at 9.14m.			
9.65	10.90	1.24	Black Meta-sediments	Dark grey to black, strongly laminated 30-40° to core axis. Hard, silicified, non-calcareous.	Every ±40cm at 30° to core axis.			
10.90	12.55	1.65	Altered Meta-Sediments	Same unit, medium grey, still hard. Lower 30cm cherty. Some rock broken in drilling. Laminations 20-40° to core axis.	Mainly 30° to core axis, 5-8cm intervals.			
12.55	12.90	0.36	Jade ?	Grey, hard, foliated top 20cm. Seems to grade evenly into meta-sediments. Contact is intact. May be meta-quartzite.	Mainly 30° to core axis.			
12.90	13.28	0.38	Talc Zone	Gradational contact zone. Top is tremolitic, bottom more talc rich.	Some. One parallel core at 13.41m.			
13.28	15.14	1.85	Serpentinite	Top 30-35cm talc altered. Dark green-black, fine white fracture network. Little or no carbonate present.	Mostly 60° to core axis every 10-25cm.			
End of	Hole							

Box 1 0 - 6.86m    Box 2 6.86 - 11.89m    Box 3 11.89 - 15.14m

DDH - 95 - 15 Location: 0.6m Bearing 105°T From 95-6  
Core Size: AW (35 mm)

Plunge 52° on Bearing 105°T

From	Depth - in		Lithology	Description	Fractures	Interval(m)	Core Recovery	
	To	Interval					Loss(cm)	%
0	2.13	2.13	Overburden	Cased 2.1m.	-	0-2.13	-	-
2.13	2.54	0.41	Altered Sediments	Light greenish-grey. Relict bedding 60° to core axis	2-10cm, 70-80° to core axis.	2.13-4.83	5	gain
2.54	4.01	1.47	Chert	Colour variable, pale grey to brown. Silvery grey fracture fillings throughout.	13-25cm, 60-85° to core axis. One at 3.35m, 10° to core axis.	4.83-7.92	30	gain
4.01	5.66	1.65	Meta-Diabase Dike	Fine to very fine grained, grey, with 1-2 mm feldspar phenocrysts. Distinct chilled margins. Both contacts 80-85° to core axis.	Few, 60° to core axis.			
5.66	10.85	5.18	Chert	Same as above. Top 10-15cm brown stained, bottom 35-40cm often green stained. Usually breaks along laminated silvery fracture fillings.	Generally 60-70° to core axis. A few 30-45° to core axis.	7.92-9.75 9.75-12.40	38 30	- 11
10.85	11.20	0.36	Altered Sediments	Greenish-grey, relict bedding = 70° to core axis.	5-8cm, 50-70° to core axis.			
11.20	12.98	1.78	Altered Greenstones	Volcanic breccia, pale green to dark grey, silicified. Traces of calcite throughout. Bottom 28cm strongly altered, pale green-grey.	10-25cm, varied orientations.	12.40-13.49	8	gain
12.98	13.49	0.51	Jade Zone	Top 8cm talc-altered zone. Middle 38cm semi-nephrite, grey-green, has cherty inclusions, some altered mudstone. Bottom 5cm talc-altered zone.	Few, 60-80° to core axis.	13.49 -16.61	30	10
13.49	14.96	1.47	Altered Greenstones	Texture vague, colour buff-grey. Occasional minor calcite.	40-60° to core axis, 8-20cm spacing	16.61-18.14	-	-
14.96	15.49	± 0.53	Contact Zone	Heavily altered ultramafics. Badly broken in drilling. No clear orientation of contact.				
15.49	18.14	2.64	Serpentinite	Dark green-black. Some white veinlets, some alteration throughout. White talc vein at 15.83m.	8-25cm = 70° to core axis.			
End of	Hole							

Box 1 0 - 7.32m    Box 2 7.32 - 13.06m    Box 3 13.06 - 18.14m

**DDH - 95 - 16** Location: 17.5m Bearing 042°T From 95-10  
 Core Size: AW (35 mm) Vertical Hole

<u>Depth - in</u>		<u>meters</u>	<u>Lithology</u>	<u>Description</u>	<u>Fractures</u>	<u>Interval(m)</u>	<u>Core Recovery</u>	
<u>From</u>	<u>To</u>	<u>Interval</u>					<u>Loss(cm)</u>	<u>%</u>
0	1.52	1.52	Overburden	Cased 1.5m. Includes tremolite boulder +20cm wide. Possible few centimetres altered sediments.	-	0-1.93	-	-
						1.93-3.48	55	34
1.52	5.89	4.37	Diorite Porphyry Dike	Quartz - albite clinozoisite rock, medium grey, 5-8 mm phenocrysts. Chilling of ground mass visible for ≈ 45cm from each contact. Contact attitude uncertain; 2cm mud at bottom, broken up at top. Flecks of very fine, yellowish material throughout. Pyrite or phlogopite?	Two sets: 70-80° to core axis every 5-30cm and sub-parallel to core.	3.48-5.13	8	-
						5.13 -6.71	5	gain
5.89	11.38	5.49	Altered Sediments	Pale green-grey to dark grey, frequently laminated, some chert inclusions, a few marble beds, very heterogeneous. Bedding laminae vary; average 40-50° to core axis. Alteration increases over 50cm at bottom.	Generally 10-20cm spacing. Two sets 30° & 60° to core axis.	6.71-7.32	15	25
						7.32-7.92	15	25
						7.92-9.14	5	4
11.38	11.79	0.41	Talc Zone	Green to white, foliated and sheared, soft.	-	9.14-10.46	5	4
11.79	13.00	1.22	Altered Serpentinite	Dark green-black, talc altered, fine white brecciation with talc in fillings. Minor fault gouge at 12.24m.	Mainly 70-80° to core axis. 15-25cm spacing.	10.46 -11.02	-	-
						11.02-11.79	5	7
13.00	19.35	6.35	Serpentinite	Dark grey-green to black, less altered than above; a few softer and/or greener zones.	15-40cm spacing. Mainly 60° to core axis.	11.79-13.31	-	-
						13.31-16.31	-	-
End of	Hole					16.31-17.83	-	-
						17.83-19.35	13	8

Box 1 0 - 6.71m    Box 2 6.71 - 12.24m    Box 3 12.24 - 17.68m    Box 4 17.68 - 19.35m

DDH - 95 - 17

Location: 16.8m Bearing 324°T From 95-16

Core Size: AW (35 mm)

Vertical Hole

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To						Loss(cm)	%
0	4.88	4.88	Overburden	Cased 4.9m.	-	0-4.88	-	-
4.88	9.14	4.27	Serpentinite	Dark grey-green-black. Relatively unaltered, hard, cores well. Mud seams at 6.71m, 6.88m, 7.77m.	60-90° to core axis. 8-30cm intervals.	4.88-5.69	5	6
						5.69-6.71	5	5
9.14	10.67	1.52	Altered Serpentinite	Same colour, talc altered. Badly broken in drilling. Substantial core loss.	Frequent.	6.71-8.41	-	-
10.67	10.97	0.30	Talc Zone	Pale, milky green. Sheared and brecciated.	-	8.41-10.06	48	31
						10.06-10.82	15	20
10.97	12.50	1.52	Serpentinite	Dark green-black. Fairly hard. Some minor alteration throughout. 12.04-12.50m is contact metamorphosed zone at dike margin - pale green-grey and foliated 50° to core axis.	30-70 to core axis, 10-20cm intervals.	10.82-12.34	33	21
						12.34-13.77	18	12
12.50	15.42	2.92	Diorite Porphyry Dike	Medium grey with 4-8 mm phenocrysts. Top 30cm exhibits chilling. Top contact 55° to core axis. Bottom contact irregular, = 80° to core axis.	3 visible sets 70-80° to core axis, 30-40° to core axis and 5-15° to core axis.	13.77-17.22	15	4
15.42	17.42	2.01	Steatite	Waxy, green, nearly massive, soft soapstone. Harder interval 17.07-17.22m. Often broken in drilling.	-	17.22-18.59	8	6
17.42	19.96	2.54	Altered Serpentinite	Dark green-black with pale green-white talc alteration, decreasing in intensity with depth. Several white talc veinlets.	2-20cm spacing, 30-90° to core axis.	18.59-19.96	-	-
End of	Hole							

Box 1 0 - 10.67m

Box 2 10.6 - 16.00m

Box 3 16.00 - 19.96m

**DDH - 95 - 18**      Location: 12.9m      Bearing 078°T From 95-16  
 Core Size: AW (35 mm)      Vertical Hole

Depth - in		meters	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To	Interval					Loss(cm)	%
0	3.35	3.35	Overburden	Cased to 3.3m. Cored various boulders, including 18cm talc-tremolite rock at bedrock surface, other talc rich rock above.	-	0-3.35 3.35-3.66	- broken	- -
3.35	6.76	3.40	Diorite Porphyry Dike	Quartz - albite clinzoisite rock; medium grey with 5-8 mm feldspar phenocrysts. Bottom shows some chilling of groundmass over ± 25cm. Top is only rubble. A few calcite veinlets.	45-60° to core axis, 10-25cm intervals.	3.66-5.33	38	23
						5.33-8.08	15	6
						8.08-11.18	33	11
						11.18-12.62	2	gain
						12.62-14.14	2	-
6.76	7.32	0.56	Tremolite Rock	Pale, milky green with some speckling. Mostly hard and massive. Increasing foliation and impurities in lower 15cm.	-	14.14-15.54	5	gain
7.32	8.84	1.52	Tremolite Altered Sediments	Gradational from upper contact to 7.98m. Grey altered sediment 7.98-8.28m. Variously talc and tremolite altered to 8.84m.	Frequent 50-60° to core axis.	15.54-17.07	2	-
						17.07-19.05	13	gain
8.84	9.17	0.33	Tremolite Rock	Milky green, foliated. Some talc content but generally quite hard.	5-8cm intervals, 45-60° to core axis.			
9.17	9.37	0.20	Talc Zone	Green to white, brecciated. Top 5-8cm soft and gougy. May be movement on this contact.	Frequent.			
9.37	13.18	3.81	Altered Serpentinite	Dark green-black to dark grey-black. Alteration generally decreasing with depth. Talc fracture fillings common, especially in top 1.5m. Bottom of unit is arbitrary.	8-15cm intervals, mostly 60-70° to core axis.			
13.18 End of	19.05 Hole	5.87	Serpentinite	Continuation of above. Generally dark grey-black, fewer altered sections.	10-30cm intervals, mainly 50-80° to core axis.			

Box 1 0 - 8.28m      Box 2 8.28 - 14.05m      Box 3 14.05 - 19.05m

**DDH - 95 - 19**      Location: 0.6m Bearing 124°T From 95-18  
 Core Size: AW (35 mm)

Plunge 44° on Bearing 118°T

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	Core Recovery %
From	To							
0	4.88	4.88	Overburden	Cased to 4.1m. Boulder 4.11-4.72m mostly serpentine with top 15cm tremolite-talc rock. Below this quartz - albite clinozoisite rubble.	-	0-4.78 4.78-4.88	-	-
4.88	9.14	4.27	Altered Sediments	Highly variable, buff-green to purplish. Mostly hard, silicified. Minor marble bed 7.87-7.92m. Possible tremolitic alteration. 8.84-8.94m is softer than units above it.	Frequent, 60-80° to core axis.	4.88-8.13	224	69
9.14	11.33	2.18	Altered Greenstone	Grey-green, fine grained, nearly massive. Silicified. Bottom 15cm bedded, grades into unit below.	Every 10-35cm, 60-70° to core axis.	8.13-9.37	13	10
11.33	13.00	1.68	Tremolite-Talc Zone	Laminated rock, clearly altered bedded sediments is foliated, contorted, heavily altered to tremolite, talc and/or chlorite. Many dark inclusions and talcy partings.	Generally 15-20cm spacings, on foliation or talc partings.	9.37-11.63 11.63-12.55	2 2	- gain
13.00	14.05	1.04	Talc Altered Zone	Dark green to white, soft, sometimes sheared. Several mud seams present.	5-15cm spacings 50-60° to core axis.	12.55-14.07	-	-
14.05	18.08	4.04	Altered Serpentinite	Dark green to black. Some soft, talc altered sections near top. White talc on fractures, less frequent with depth.	Variable 60-80° to core axis near top. 30-40° near bottom. 5-20cm spacings.	14.07-15.65	2	-
18.08	18.52	0.43	Serpentinite	Dark grey, fairly massive, unaltered.	Few.	15.65-17.17 17.17-18.52	13 10	- gain
End of	Hole							

Box 1 0 - 11.79m    Box 2 11.79 - 17.32m    Box 3 17.32 - 18.52m

DDH - 95 - 20      Location: 2.7m    Bearing 300°T From 95-18  
 Core Size: AW (35 mm)

Plunge 45° on Bearing 320°T

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>	
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
0	2.44	2.44	Overburden	Cased to 2.44m.	-	0-2.44	-	-
2.44	5.44	3.00	Altered Serpentine	Dark green-black. Badly broken in drilling. 5cm talc-carbonite vein at 2.59m. Frequent mud seams. Talc and chlorite alteration, increased talc alteration below 4.57m.	Frequent	2.44-3.05	10	gain
						3.05-4.57	30	-
						4.57-5.59	10	gain
5.44	6.81	1.37	Talc Altered Zone	Generally soft, milky green, brecciated and sheared. Hard interval 5.66-5.82m probably tremolitic.	Frequent	5.59-6.81	30	
End of Hole						Net loss 40cm = 9%		

Box 1 0 - 6.81m

DDH - 95 - 21      Location: 30.5m Bearing 062°T From 95-18      Plunge 53° on Bearing 320°T  
 Core Size: AW (35 mm)

Depth - in		meters	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To	Interval					Loss(cm)	%
0	1.52	1.52	Overburden	Cased to 1.5m. Small albite-amphibole dike boulder.	-	0-1.52	-	-
1.52	5.79	4.27	Meta-Sandstone	Medium grey, some bedding 25-40° to core axis visible, particularly in top 60cm. Fine grained, mostly quartz with recrystallized calcite common in the more pelitic intervals. Unaltered. Dilute HCl produces olive-green stain.	15-25cm intervals, one set 60° to core axis. one set 30° to core axis.	1.52-3.51 3.51-5.33 5.33-6.86	5 25	- 14
5.79	7.62	1.83	Black Meta-Sediments	Hard, dark grey to black, very fine grained, massive. ± 5% remobilized marble in fracture networks and breccia infillings. Very fine pyrite present on fracture surfaces. Unaltered.	Few	6.86-8.33	2	gain
7.62	10.44	2.82	Limy Schist	Strongly foliated. Black graphitic zones, ≈ 20% grey marble, and grey siltstone jumbled together. Structure ≈ 40° to core axis appears to parallel bedding. Quite hard, probably silicified. Pyrite ≈ 1% throughout. Unaltered.	8-13cm intervals 30° and 60° to core axis. Not parallel to foliation.	8.33-10.16	25	
10.44	12.70	2.26	Cherty Sediments	Dark grey to black. ±1% secondary marble. Very fine grained, hard, usually cherty. Bedding ≈ 30-40° to core axis. No free graphite. Pyrite to several percent present throughout. Unaltered.	Few 30° & 60° to core axis.	10.16-12.22	2	gain
12.70	15.54	2.84	Meta-Quartzite	Dark grey, very fine grained, very hard. Small amounts of marble on fracture surfaces. Often finely brecciated. Minor pyrite visible throughout. Unaltered.	10-30cm spacing. 30° & 50° to core axis.	12.22-12.47 12.47-14.63 14.63-15.54	- 2 8	- gain -
End of	Hole			Similar to black sediments above.				

Box 1 0 - 7.21m      Box 2 7.21 - 12.80m      Box 3 12.80 - 15.54m



O'Ne-el Creek Jade Property - Global Metals Ltd.

June 29, 1995  
 Logged By: R.F. McIntyre

DDH - 95 - 22 Location: 3.0m Bearing 140°T From 95-21 Plunge 50° on Bearing 135°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>	<u>Lithology</u>	<u>Description</u>	<u>Fractures</u>	<u>Interval(m)</u>	<u>Core Recovery</u>	
<u>From</u>	<u>To</u>	<u>Interval</u>					<u>Loss(cm)</u>	<u>%</u>
0	0.61	0.61	Overburden	Cased 5.2m.	-	0-0.61	-	-
0.61	1.24	0.63	Talc-Clay Altered Rock	Buff, weathered, soft. Banding roughly parallel to bedding 30-40° to core axis. No carbonates.	-	0.61-2.29	±15	9
1.24	1.98	0.74	Altered Sediments	A buff-grey, becoming less altered with depth. Bedding 60° to core axis. No calcite.	-	2.29-5.79	269	77
1.98	7.01	5.03	Limy Schist	Same as in 95-21 but with all carbonate dissolved out. frequent boxwork, extensive core loss, very badly broken in drilling. Black laminae and silicic zones remain, though little or no free graphite is left.	Extensive	5.79-7.01	81	67

Abandoned hole due to poor recoveries and bad drilling conditions.

Box 1 0 - 7.01m

DDH - 95 - 23      Location: 0.6m    Bearing 130°T From 95-21      Plunge 56° on Bearing 140°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>	
<i>From</i>	<i>To</i>	<i>Interval</i>	<i>Lithology</i>	<i>Description</i>	<i>Fractures</i>	<i>Interval(m)</i>	<i>Loss(cm)</i>	<i>%</i>
0	1.07	1.07	Overburden	Cased ± 3m.	-	0-1.07	-	-
1.07	2.11	1.04	Meta-Sandstone	Medium grey. Fine grained. Hard, mostly quartz with minor marble. Upper 15-20cm slightly altered, buff-grey.	-	1.07-6.65	229	41
2.11	9.14	7.34	Limy Schist	Interlaminated black graphite zones, marble and silicic rock. Pyrite visible throughout. Structure ≈ 45° to core axis. Substantial dissolution of some sections. Very badly broken in drilling, very high core loss.	Extensive	6.65-9.14	1.57	63

Abandoned hole due to core loss and bad drilling conditions.

Box 1 0 - 9.14m

**DDH - 95 - 24**      Location: 21.2m    Bearing 007°T From 95-21    Plunge 54° on Bearing 125°T  
 Core Size: AW (35 mm)

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	Core Recovery
From	To							%
0	3.05	3.05	Overburden	Cased 3.0m. Chert rubble, plus 1 piece of oxidized dike rock.	-	0-1.52 1.52-2.79	+75 -	- -
3.05	8.46	5.41	Chert	Mainly medium grey, brecciated. Silicified graphitic laminae common in some sections. 4.90-5.26m is black, silicified chert breccia. Fractures often rusty - minor pyrite is visible associated with black zones, in lower portions.	Frequent, often broken in drilling 2-8", 30° & 70° to core axis.	2.79-4.27 4.27-5.64 5.64-7.16 7.16-9.45	102 +48 8 10	68 35 5 5
8.46	9.93	1.47	Fine Diorite Dike	Medium grey intrusive, fine grained, not porphyritic. Central portion visibly crystalline; each margin chilled over 25-35cm. Also, pale buff alteration zone 10-15cm wide on both contacts. Possibly a fine version of <u>albite-amphibole rock</u> .	Few, 15-25cm intervals, 70-80° to core axis.	9.45-11.99 11.99-14.17	23 15	9 7
9.93	13.56	3.63	Chert	Similar to above. Graphite zones more common. Pyrite common throughout.	Frequent, irregular, on laminae			
13.56	14.35	0.79	Chert Breccia	Grey chert with grey to white infillings. Center muddy. Represents old minor fault.	-	14.17-15.70 15.70-18.08	8 8	- gain
14.35	17.27	2.92	Chert	Grey, same as units above. Little pyrite.	10-20cm intervals, 30° & 60° to core axis.	18.08-19.71	56	34
17.27	17.86	0.58	Altered Cherty Sediments	Includes breccia, chert, buff siliceous sediments. Green stain in central 10-15cm.	Parallel to foliation 30° to core axis.	19.71-21.13	5	gain
17.86	18.16	0.30	Tremolitic Rock	White with fine black contorted laminae. Fairly hard.	-	21.13-22.50	15	4
18.16	18.47	0.30	Altered Sediments	Dark grey-black, contorted. Fairly hard.				

DDH-95-24 continued on next page-

18.47	22.99	4.52	Talc Altered Zone	Contorted texture continues; colour now white to light green to grey. Sometimes finely brecciated. Soft. Zones 18.90-19.30m, 22.02-22.68m are very soft soapstone. Remainder contains tremolite.	Variable. Few in hard cores; soft areas sometimes broken in drilling; some core loss.	22.50-24.03	-	-
22.99	23.39	0.41	Black Cherty Sediments	Hard, somewhat laminated. No talc or tremolite.	30° to core axis.	24.03-25.50	-	-
23.39	23.67	0.28	Aplite (?) Dike	Pale greenish-grey, very fine grained. Origin uncertain.	-	25.50 -26.82	15	gain
23.67	24.84	1.17	Black Cherty Sediments	Hard, somewhat foliated, black, siliceous.	Few, 30° to core axis.	26.82 - 28.50	-	-
24.84	30.96	6.12	Chert Breccia	Progresses from black breccia at top to grey brecciated chert at bottom. Zones with some silty original material display foliation.	Mainly 10-25cm. variable attitudes.	28.50-30.18	10	6
End of	Hole					30.18-30.96	8	-

Box 1 0-7.01m    Box 2 7.01-12.45m    Box 3 12.45-17.86m    Box 4 17.86-23.32m    Box 5 23.32-29.03m    Box 6 29.03-30.96m

DDH - 95 - 25      Location: 22.3m Bearing 274°T From 95-3      Plunge 60° on Bearing 116°T  
 Core Size: AW (35 mm)

Depth - in		meters	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To	Interval					Loss(cm)	%
0	4.57	4.57	Overburden	Cased 4.6m	-	0-4.57	-	-
4.57	9.50	4.93	Serpentinite	Dark green to black, somewhat chlorite - talc altered. Some fibrous zones.	Frequent. 1-60cm, 30 & 60° to core axis.	4.57-5.89 5.89-7.42 7.42-9.68	20 5 75	15 3 32
9.50	18.03	8.53	Altered Serpentinite	Highly variable. Includes short sections of unaltered rock, tremolitic rock and talc-rich rock. Soft sections often badly broken in drilling. Lower 45cm shows contact alteration from the adjacent dike. Zoning typically 45-60° to core axis. Particularly sheared and gougy 11.99-12.70m, probable fault zone. This unit may represent a valley-trending fault separating the jade bearing sediments from the upthrown serpentines to the northwest.	Frequent, parallel to zoning.	9.68- 11.07 11.07-12.95 12.95-16.10 16.10-17.73 17.73-19.00 19.00-20.52	20 18 13 35 18 2	gain - 4 22 14 gain
18.03	21.18	3.15	Diorite Porphyry Dike	Medium grey, feldspar phenocrysts to 5-8 cm. Quartz - albite clinozoisite rock. Chill zoning near margins. Upper contact 80° to core axis; lower contact 50° to core axis.	10-30cm spacings, mainly 60-70° to core axis.	20.52-22.05 22.05-23.57 23.57-26.62	- - 2	- - -
21.18	21.89	0.71	Altered Rock	Origin unclear. Could be sedimentary or very old dike. Center shows crystalline texture, probable secondary. Margins aphanitic.	Several = 10° to core axis.	26.62-29.16	-	-
21.89	26.70	4.80	Altered Serpentinite	Varies grey to dark green-black. Several highly talc-altered, sheared zones. Lower contact black, massive, adjacent to dike. Unit includes 18cm meta-diabase dike 25.65-25.83m with talc-altered rock on both sides.	Variable, 10-15cm spacing.			
26.70	28.35	1.65	Meta-Diabase Dike	Medium grey, very fine grained. Feldspar phenocrysts 2-4 mm. Distinct chill margins. Upper contact altered, lower contact 75° to core axis.	13-25cm spacing 40 & 80° to core axis.	29.16-30.68	-	-
28.35	30.68	2.34	Serpentinite	Dark grey-green to black. Relatively unaltered except near dike.	Frequent Irregular			
End of	Hole							

Box 1 0 - 10.52m    Box 2 10.52 - 16.10m    Box 3 16.10 - 21.84m    Box 4 21.84 - 27.20    Box 5 27.20 - 30.68m

DDH - 95 - 26 Location: 0.9m Bearing 295°T From 95-25  
 Core Size: AW (35 mm)

Plunge 46° on Bearing 296°T

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>	
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
0	3.96	3.96	Overburden	Cased 4.6m.	-	0-4.72	-	-
3.96	4.57	0.61	Altered Greenstone	Possibly a boulder. Buff-green with no original textures remaining. Origin questionable.	-	4.72-7.21	8	-
4.57	6.71	2.13	Greenstone	Dark greenish-grey, some apparently original textures remaining. Top 45cm broken in drilling. Minor calcite on fractures.	Few, irregular, ≈30-40° to core axis.			
6.71	7.32	0.61	Calcareous Bed	Fairly soft, dark grey, medium-fine grained texture. Approximately 10% carbonate. Contact ≈ 30° to core axis. Sandstone?	25-30° to core axis.	7.21-10.26 10.26-13.03	18 18	- gain
7.32	11.84	4.52	Greenstone	Generally brownish-grey, sometimes altered to green-grey. Textures variable.	Few. Variable attitude			
11.84	12.90	1.07	Limy Sandstone	Fine grained, medium grey. Soft, high carbonate content. Both contacts at calcite veinlets, angle uncertain.	Broken, parallel to core axis. Also 60° & 30° to core axis.	13.03-15.04	-	-
12.90	15.04	2.13	Greenstone	Massive, dark grey-green. White calcite veinlets up to 1cm, common throughout. Otherwise calcite on fracture surfaces only. Top 30cm is green altered greenstone breccia, near 2cm calcite veinlet.	Few. Mainly on calcite veinlets, 60° to core axis.			
End of	Hole							

Box 1 0 - 9.96m Box 2 9.96 - 15.04m

**DDH - 95 - 27** Location: 26.7m Bearing 268°T From 95-25 Plunge 45° on Bearing 330°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>	Lithology	Description	Fractures	Interval(m)	<u>Core Recovery</u>	
From	To	Interval					Loss(cm)	%
0	12.34	12.34	Overburden	Thick overburden. Cased 9.8m and hole open for several feet below. Assorted boulders to 12.34m, mud, etc.	-	0-12.80	-	-
						12.80-14.70	23	8
12.34	15.54	2.90	Meta-Diabase Dike	Medium grey, very fine grained. Feldspar phenocrysts to 2-4 mm. Evidence of chilling near both contacts. Lower 0.9m altered greenish grey. Calcite common on fractures.	Every 8cm Variable attitudes	15.70-17.55	18	10
						17.55-19.48	35	18
15.54	16.15	0.61	Fault Braccia	Olive green altered fault breccia. Some core loss.				
16.15	20.35	4.19	Altered Volcanics ?	Unusual rock, altered olive green in places, otherwise brown-grey. Some turquoise staining. No reactive carbonates. Includes several brittle, greasy-lustered zones, look like sphalerite. Also, brittle black zones not graphitic. Both brittle rocks have semi-conchoidal fracture habit. Extensive core loss makes measurements unreliable. Some sections show lighter coloured mottling - apparently secondary crystal aggregate.		19.48-20.35	48	11
						20.35-21.18	13	15
						21.18-21.89	25	36
20.35	21.89	1.55	Altered Sediments ?	Origin unknown. Steel blue-green to black, contorted. Displays soft foliation of black, bladed crystals, and white, soft contorted material.	Abandoned hole. Broke drill due to difficult drilling conditions.			
End of	Hole							

Box 1 0 - 17.07m Box 2 17.07 - 21.89m

DDH - 95 - 28 Location: 27.4m Bearing 205°T From 95-26 Plunge 50° on Bearing 150°T  
 Core Size: AW (35 mm)

<u>Depth - in</u>		<u>meters</u>					<u>Core Recovery</u>	
From	To	Interval	Lithology	Description	Fractures	Interval(m)	Loss(cm)	%
0	0.61	0.61	Overburden	Cased ± 0.3m.	-	0-1.75		
0.61	1.83	1.22	Oxidized Serpentine	Olive green to grey-green. Visible relict crystalline texture in places	Common, 60-70° to core axis.	1.75-2.97		
1.83	5.74	3.91	Altered Serpentine	Dark grey-green, some talc on fractures. Visible crystalline texture common. Some sections appear clay altered. Minor breccia zones 4.09m, 5.33m. Black, coarsely crystalline. Sections 4.27-4.57m contains some magnetite. Two white quartz veins at 5.49m, 5.54m.	Some brecciation	2.97-7.01 7.01-8.48 8.48-10.97 10.97-11.58		
5.74	12.50	6.76	Quartz-Carbonate Altered Serpentine	Transitional zone. Increasing content of quartz-carbonate blebs replacing serpentine. Blebs are small, generally 1-5 mm, ovoid, with vague radiating texture and "salt & pepper" appearance. Fine magnetite present throughout. Some talc on partings, some fine quartz veinlets.	Few, 70° to core axis	11.58-14.02 14.02-16.92 16.92-17.37 17.37-21.64		
12.50	21.49	8.99	Quartz-Carbonate Talc Rock	Upper contact arbitrary - alteration increases in intensity with depth. Talc content increases as well. Colour varies from speckled grey to buff-green. All original texture is gone. Many fracture fillings and fracture controlled alteration zones, including talc, dolomite and quartz. Lower 2.74 is a mish-mash of variously altered rock. Some magnetite.	-			
21.49	21.64	0.15	Meta-Diabase Dike	Very fine grained porphyry; dark phenocrysts Platy, possibly biotite, thickness << 1 mm. Otherwise aphanitic, greenish-grey.	-			
	End of	Hole						

Box 1 0 - 5.77m    Box 2 5.77 - 11.33m    Box 3 11.33 - 16.92m    Box 4 16.92 - 21.64m



**DDH - 95 - 29** Location: 0.6m Bearing 330°T From 95-28 Plunge 60° on Bearing 330°T  
 Core Size: AW (35 mm)

Depth - in		Interval	Lithology	Description	Fractures	Interval(m)	Core Recovery	
From	To						Loss(cm)	%
0	0.30	0.30	Overburden	Cased 0.3m.	-	0-0.30	-	-
0.30	0.61	0.30	Oxidized Serpentinite	Serpentinite discoloured olive green.		0.30-1.52 1.52-3.23	- -	- -
0.61	11.56	10.95	Quartz-Carbonate Altered Serpentinite	Dark grey-green to black. Fine blebs of quartz-carbonate visible from top of hole. Frequency fairly constant through intervals, no obvious increase. Lower half has green talc on fracture surfaces. Gouge zones at 2.74m, 5.18m. Veining with offset visible 1.5 - 2.5m, parallel to core axis. Some magnetite present throughout.		3.23-4.75 4.75-7.62 7.62-9.09 9.09-10.57	13 45 - 5	gain 12 - 3
11.56	12.40	0.84	Contorted Zone	Altered Ultramafics are sheared and contorted, heavily altered. Bottom is fault gouge at 12.29-12.40m. Mariposite stain below 11.89m.		10.57-12.04 12.04-13.31	8 28	5 10
12.40	18.95	6.55	Quartz-Carbonate Altered Serpentinite	Same as upper section. Quartz-carbonate alteration fairly constant. Section from 14.17 - 15.85m is dark grey, granular texture. Partings frequently coated with softer, epidote-green mineral. - Probably a serpentine in pure form. Many small veinlets.		13.31-14.63 14.63-15.85 15.85-17.30	15cm gain - 28	- - 19
18.95	21.03	2.08	Granular Ultramafic	Dark grey-black. Some pistachio-green fracture fillings. Mostly fine to medium grained, granular. Some magnetite present. Appears to contain fine quartz-carbonate blebs as in above unit.		17.30-18.29 18.29-19.81 19.81-21.03	10 8 8	gain - -
End of Hole								

Box 1 0 - 5.66m    Box 2 5.66 - 11.71m    Box 3 11.71 - 17.30m    Box 4 17.30 - 21.03m

## **Appendix II**

### **Detailed Cost Statement**

**DETAILED EXPLORATION COST STATEMENT****WAGES****A) Geologists & Engineers**

George Mason:

Air photograph and satellite remote sensing survey,  
December 1, 1994 - January 31, 1995  
Preparation for field program.

20 office days @ \$465/day \$9,120.00

Ronald F. McIntyre:

Site reconnaissance trip  
April 10-12, 1995

3 field days @ \$400 1,200.00  
Expenses billed 39.39

Program preparation  
March 7 - June 3, 1995

8 office days @ \$400 3,200.00

Diamond drilling supervision  
June 4 - July 5, 1995

32 days @ \$400 12,800.00  
Expenses billed 625.67

Interpretation and report  
July 4 - September 20, 1995

8 office days @ \$400 3,200.0

John F. McIntyre

Program Supervision and Report  
May 1 - September 20, 1995

2 office days @ \$600 1,200.00

**\$31,385.06**

**B) Crew****Cook**

Jason Sally

June 3 - July 4, 1995

31 days @ \$4,000/month \$ 4,142.00

**Labourers**

Malcolm McCauley

April 9 - 12, 1995

4 days @ \$150

600

Labourers' Expense

60.00

Ray Leroux

June 4 - July 5, 1995

30.5 days @ \$150

4,575.00

July 21-27, 1995

7 days @ \$150

1,050.00

J.F. Alarie

June 4 - July 5, 1995

13.5 days @ \$150

2,025.00

David May

June 21 - 27, 1995

7 days @ \$150

1,050.00

Alex Sheveshevsky

June 21 - 27, 1995

1 day @ \$150

150.00

**Sub-Total****\$13,652.00****Total Wages****\$45,037.06****EXPENSES****A) Diamond Drilling**

Neills Drilling Ltd., 500 m @ \$59.00/m

\$29,800.00

Assorted Expenses

2,065.00**Sub-Total****\$31,565.00****B) Transportation**

Pacific Western Helicopters

April 11, June 5, 12, 28, July 21, 27, 12.4 hours @ \$680.00/hour

Total Billed, Hourly plus Fuel + Taxes

9,772.13

Airline, Vancouver - Prince George, April 10, 1995

210.22

Vehicle Rentals - 4x4 trucks and crew van

1,900.00

A.T.V. &amp; Trailer Rental

661.20

Hotels

1,079.22

Restaurant Meals

3,465.59

Freight

64.15

Miscellaneous Travel Expenses

592.61

17,745.12

**C) Camp** Custom Camp Rental, Maxroi Management Inc.

Preparation Charges		6,660.30
Rental	3 months @ \$3,219.36	9,658.08
	1 month @ \$4,255.62	4,255.62
Food		<u>4,729.30</u>
	Sut-total	25,303.30

Note: Total man-days in camp estimated 275-300, June & July/95.

**D) Equipment & Supplies**

Building Supplies		4,958.08
Electrical Equipment		353.55
Tools		801.27
Fuel		2,518.61
Miscellaneous		<u>273.06</u>
	Sub-total	8,905.37

**E) Communication**

Radiotelephone Rental		603.43
B.C. Tel charges		<u>957.96</u>
	Sub-total	1,561.39

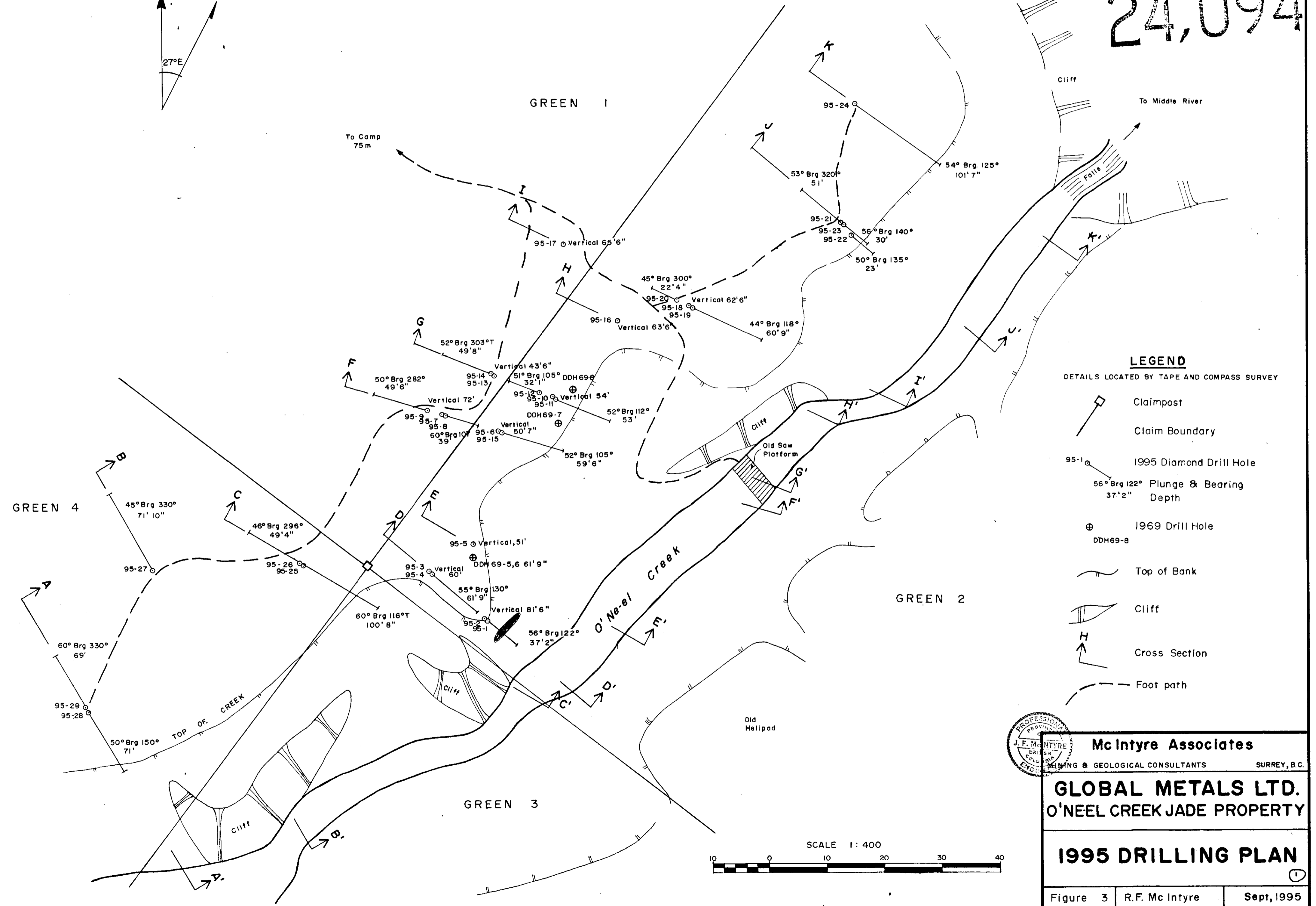
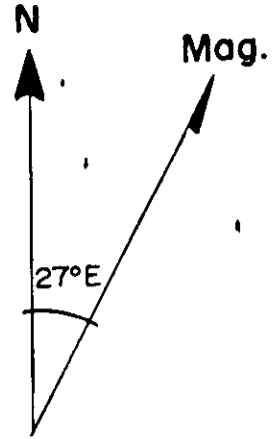
**F) Other Expenses**

Storage Locker, Fort St. James		385.20
Report Costs - Drafting, typing, copies (estimated)		<u>1,400.00</u>
	Sub-total	1,785.20

Total Expenses	86,865.38
Total Wages	<u>45,037.06</u>

**Total Exploration Costs 131,902.44**

24,094



**LEGEND**

DETAILS LOCATED BY TAPE AND COMPASS SURVEY

- Claimpost
- Claim Boundary
- 1995 Diamond Drill Hole
- 1969 Drill Hole  
DDH69-8
- Top of Bank
- Cliff
- Cross Section
- Foot path

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MINING & GEOLOGICAL CONSULTANTS SURREY, B.C.

**GLOBAL METALS LTD.**  
O'NEEL CREEK JADE PROPERTY

**1995 DRILLING PLAN**

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**Table of Lithologies**

Petrology after J.R. Fraser, 1972.

Intrusives

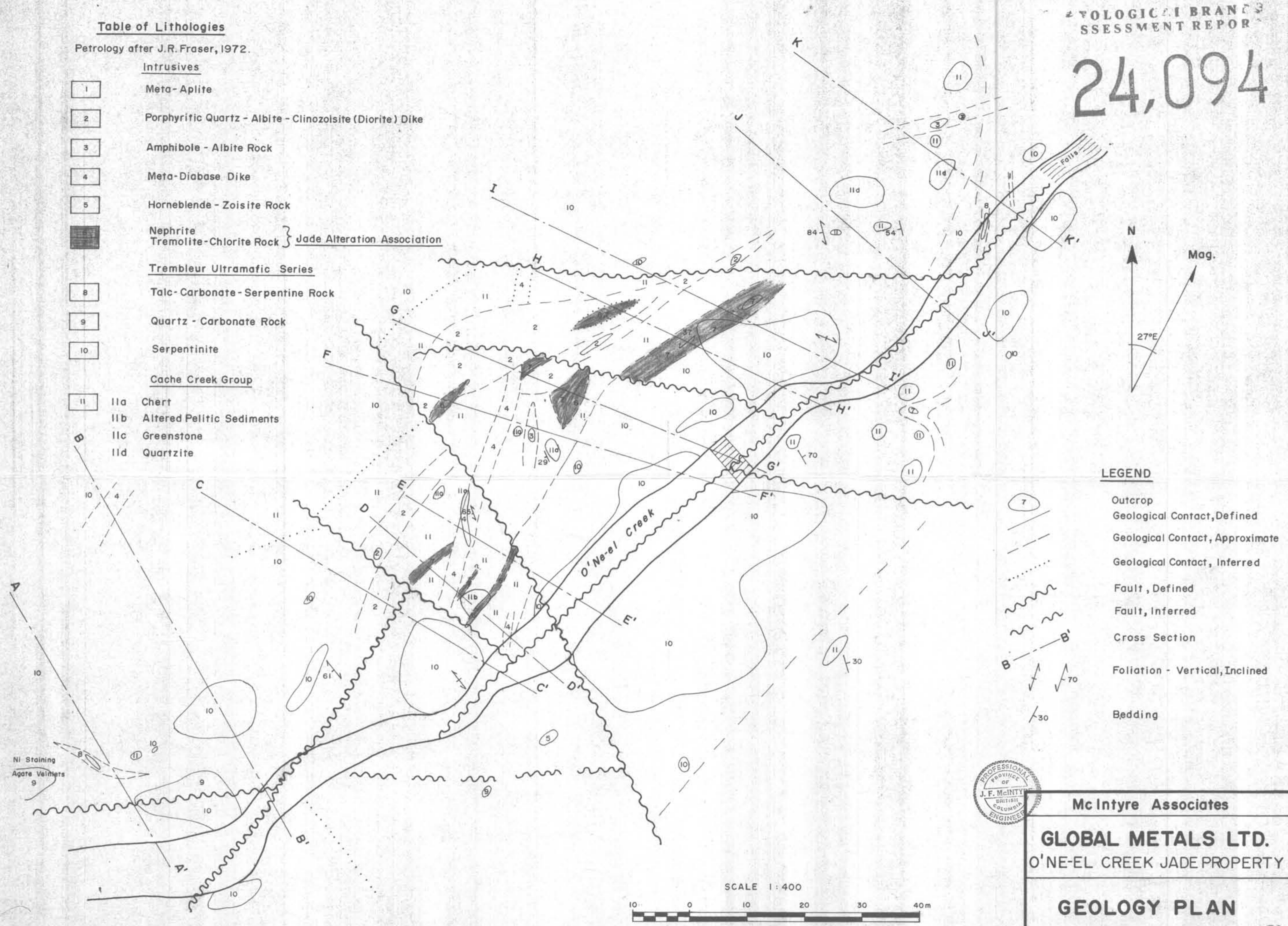
- 1 Meta-Aplite
- 2 Porphyritic Quartz - Albite - Clinzoisite (Diorite) Dike
- 3 Amphibole - Albite Rock
- 4 Meta-Diabase Dike
- 5 Hornblende - Zoisite Rock
- Nephrite  
Tremolite-Chlorite Rock } Jade Alteration Association

Trembleur Ultramafic Series

- 8 Talc - Carbonate - Serpentine Rock
- 9 Quartz - Carbonate Rock
- 10 Serpentinite

Cache Creek Group

- 11 11a Chert
- 11 11b Altered Pelitic Sediments
- 11 11c Greenstone
- 11 11d Quartzite



**LEGEND**

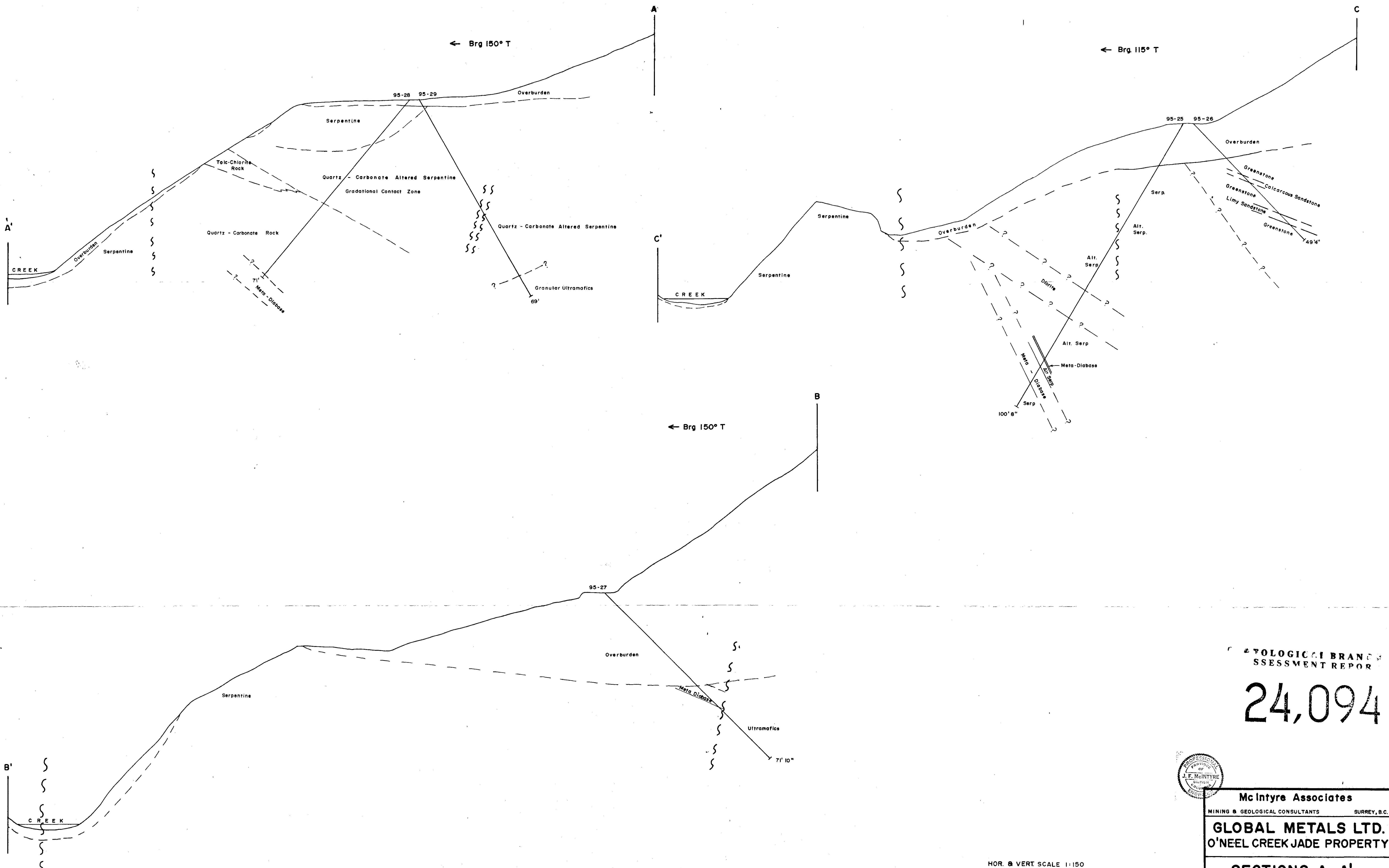
- (7) Outcrop
- Geological Contact, Defined
- - - Geological Contact, Approximate
- ... Geological Contact, Inferred
- Fault, Defined
- - - Fault, Inferred
- Cross Section
- ↗ Foliation - Vertical, Inclin
- ↘ Bedding



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**GEOLOGY PLAN**

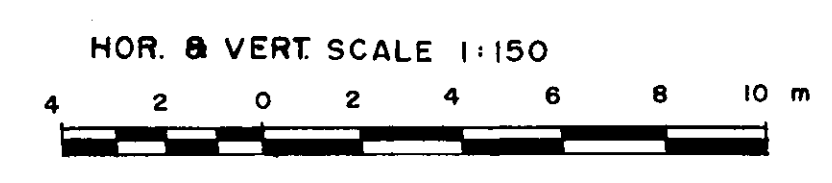


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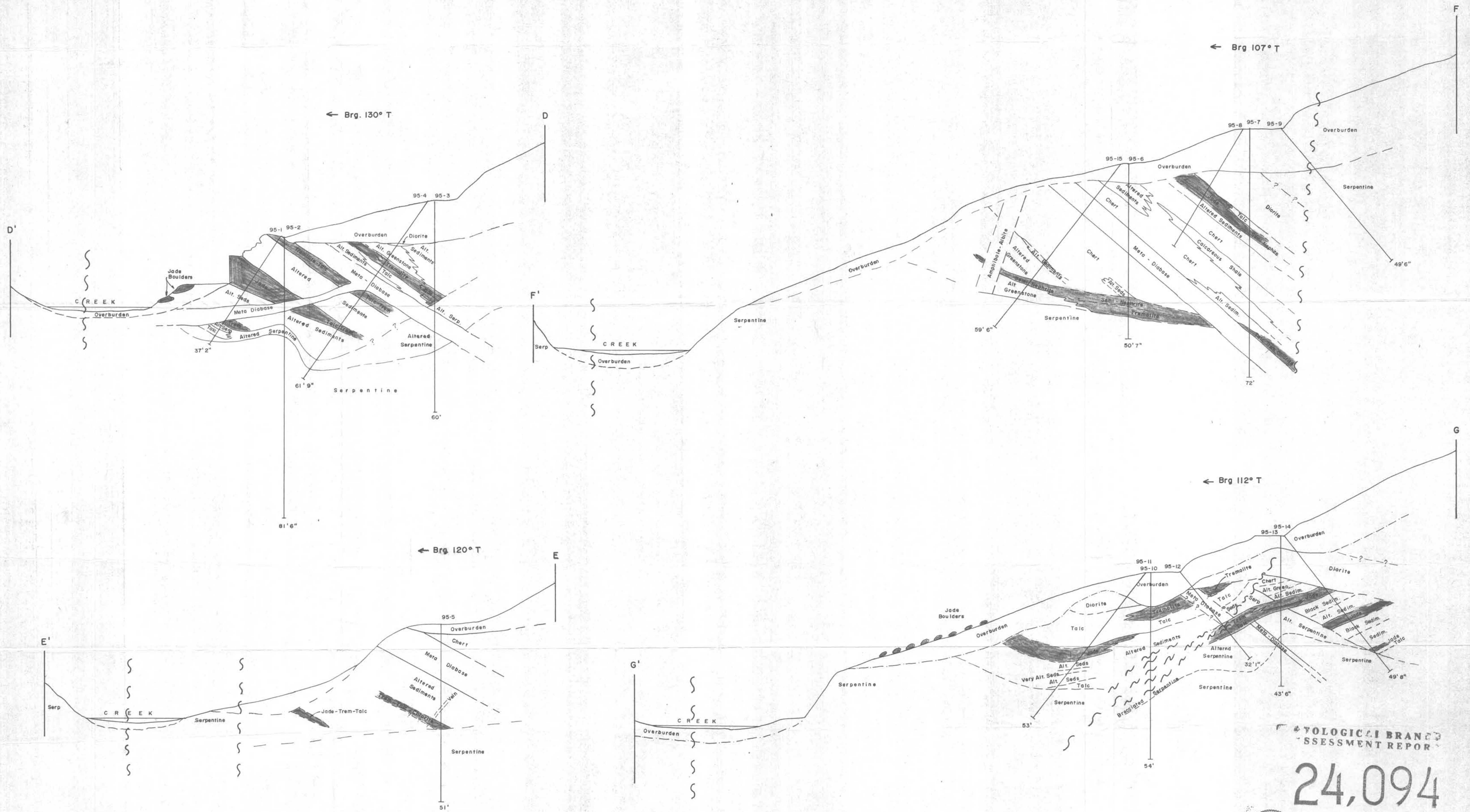
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**SECTIONS A-A'  
B-B' & C-C'**

Figure 5a R.F. McIntyre Sept. 1995





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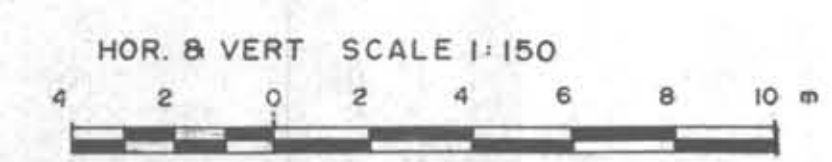
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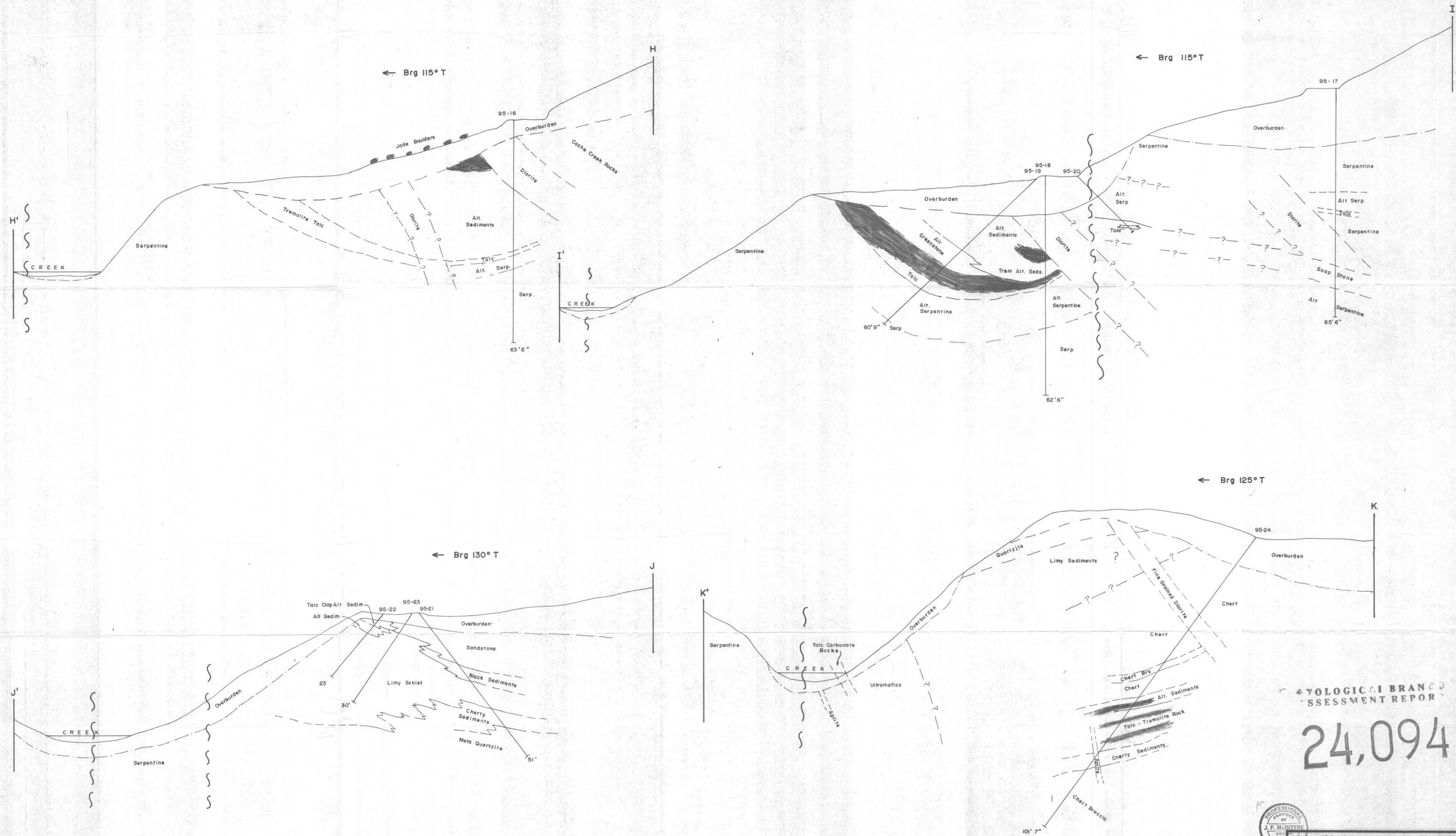


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**SECTION D'-D'**  
**E'-E', F'-F' & G'-G'**

Figure 5b R.F. McIntyre Sept. 1995





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SECTIONS H-I  
I-I', J-J' & K-K' (S)

Figure 5c R.F. McIntyre Sept, 1995

