Soil Geochemical & Diamond Drilling Assessment Report on the YN Claims

Omineca Mining Division
NTS 94F/7

Metall Mining Corp. G. S. Wells
Vancouver, B.C. May, 1994

Soil Geochemical and Diamond Drilling Assessment Report

YN Claims

NTS 94F/11

Omineca Mining Division

Latitude: 57° 35′ N Longitude 125° 12′ W

Owners:

Ecstall Mining Corporation
Metall Mining Corporation

Operator:

Metall Mining Corporation

YN94A Group	YN94B Group
YN 1	YN 3
YN 2	YN 5
YN 4	YN 6
YN 5	Yuen 1
Noel 1	Yuen 2
Noel 3	Yuen 3
	Yuen 4

G. S. Wells
Metall Mining Corporation

May, 1994
Vancouver, B.C.

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1. INTRODUCTION

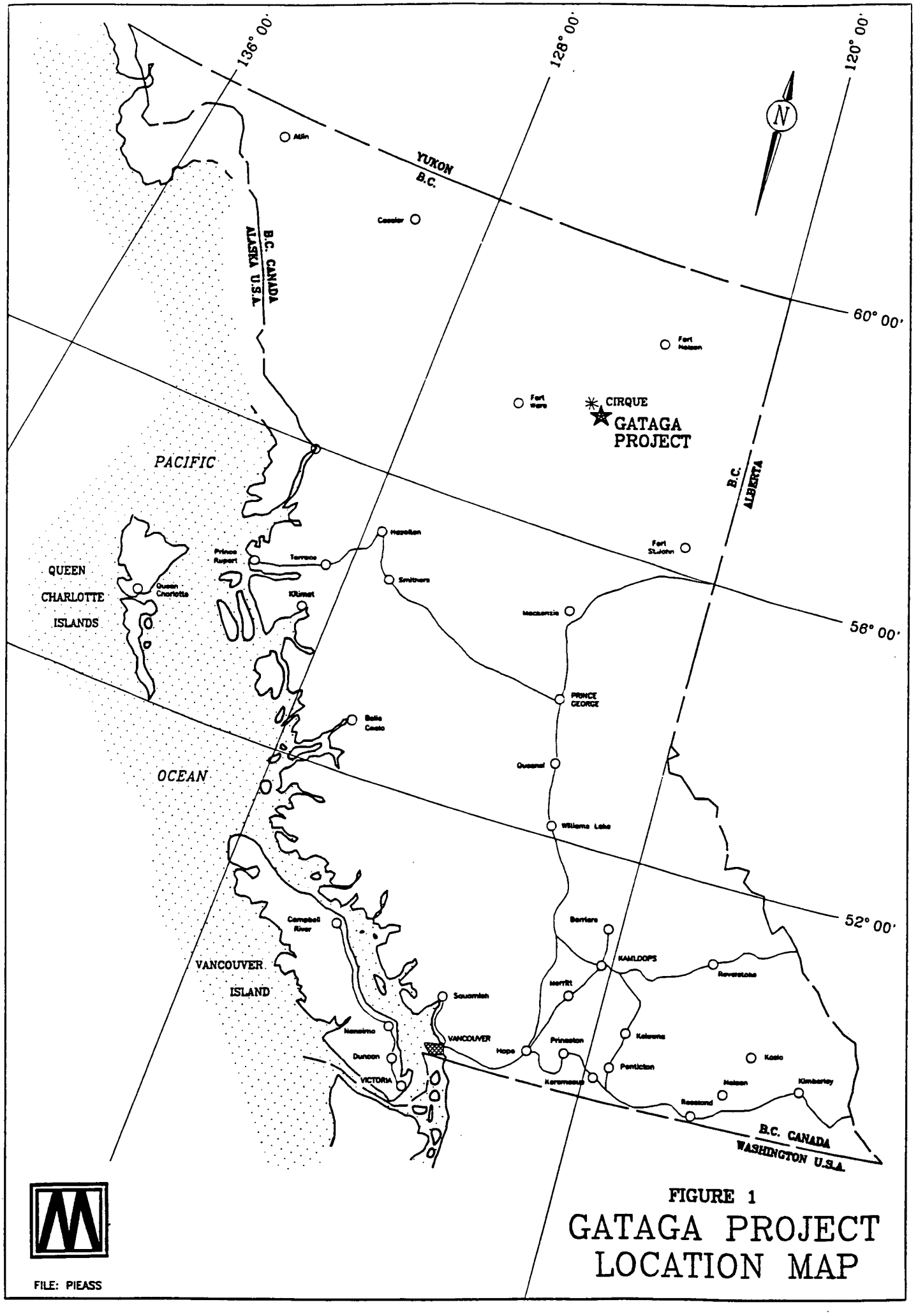
Metall Mining Corporation (formerly Minnova Inc.) acquired an option on the Yuen and Noel claims from Ecstall Mining Corporation in June, 1992. An additional six claims, totalling 87 units were staked in May and July, 1992 to consolidate the ground position in the area. The claim group which is located immediately northwest of the Stronsay Pb-Zn deposit was acquired to assess its potential for hosting a SEDEX-style Ba-Pb-Zn massive sulphide deposit. This report describes the results of soil geochemical surveys and a five hole, 643.1 m diamond drilling program carried out on the YN94A and YN94B claim groups during the period June 16 to July 20, 1993.

a. Location, Access and Physiography

The YN claims are located in the western ranges of the Rocky Mountains, 250 km northwest of MacKenzie, B.C. (Figure 1). Fort Ware, a small native community and Fletcher Challenge's Finbow logging camp are located on the Finlay River, 30 km southwest and 35 km south of the claims respectively.

Access to the area is improving due to logging and mining activity. The nearest road is the Stronsay mine road which follows the Paul River valley located 15 km southeast of the YN claims. During the current exploration program, the property was accessed using a Pacific Western Bell 206B helicopter based at the Finbow logging camp.

Topographic relief on the YN claims is moderate to steep with elevations ranging between 1400 and 2000 meters ASL. Over half of the area is above treeline which occurs at an elevation of approximately 1700 m ASL. The alpine area is covered with grassy slopes and talus debris. Creek valleys and treed slopes are covered with a mixed forest of pine, balsam and spruce.



FILE: PIEASS

FIGURE 1

GATAGA PROJECT LOCATION MAP

b. Mineral Rights

The claims have been divided into two groups - YN94A group and the YN94B group (Figure 2). The status of these claims is as follows:

Claim	Title Number	# of Units	Month of Record
1. YN94A Group			
YN 1	309110	9	May
YN 2	309111	20	May
YN 4	309113	9	May
YN 5	309114	20	May
Noel 1	240794	2	June
Noel 3	240796	1	June
	Total	61	
2. YN94B Group			
YN 3	309112	20	May
YN 5	309114	20	May
YN 6	311790	9	July
Yuen 1	240798	4	June
Yuen 2	240799	4	June
Yuen 3	240800	1	June
Yuen 4	240801	8	June
	Total	66	

c. Previous Work

The ground presently covered by the YN94A and B claim groups was initially staked by Rio Canex in 1978 following a regional exploration program and subsequent to the discovery of Pb-Zn-Ba mineralization on the Cirque claims by Cyprus Anvil and Hudson Bay Oil and Gas. During the period 1978 to 1982, geological, soil geochemical (Pb-Zn-Ag) and geophysical (HLEM) surveys were carried out over the claim group. Several zones of anomalous Pb values were outlined and several bedded or blebby barite occurrences were discovered. No drilling or trenching has been done to test these features. Since 1982 there has been little or no work done on the claim group.

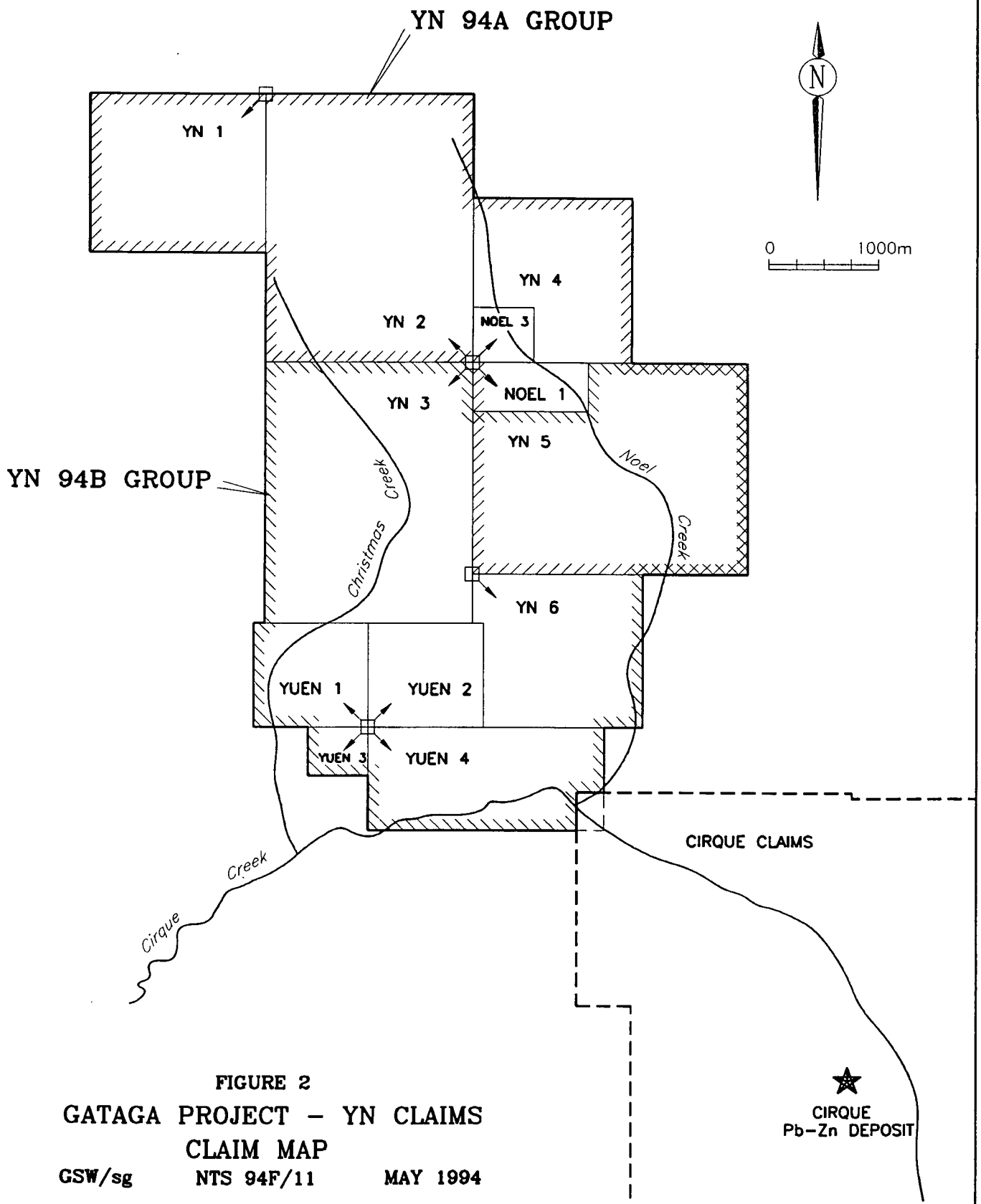


FIGURE 2

GATAGA PROJECT – YN CLAIMS
CLAIM MAP

GSW/sg **NTS 94F/11** **MAY 1994**

FILE: YNCLM

The most recent government mapping in the area is D.A. MacIntyre's (1980) 1:125,000 scale map which covers the area between Driftpile Creek and Akie River.

2. GEOLOGY

a. Regional

The YN claims occur on the northeastern margin of the Kechika Trough which is the southeastern extension of the Selwyn Basin - a 1200 km belt of sediments which formed off the western edge of ancestral North America. The Kechika Trough is a 180 km long, northwesterly trending belt of Early Cambrian to Triassic sediments which occur in a number of southwest dipping thrust fault slices. A detailed review of the stratigraphy and descriptions of the various formations is given by MacIntyre (1992).

Exploration activity in the area has concentrated on stratiform barite - sulphide showings which are hosted in Devonian shales. Notable occurrences in the belt include Driftpile, Mt. Alcock, Elf and Cirque. The most developed prospect is the Cirque deposit which contains an estimated 30 m Tonnes @ 8.1% Zn and 2.2% Pb.

b. Local

The YN claims have been mapped at a 1:10000 scale by J. Thompson (1980) and R.C. Carne (1982) and detailed descriptions of the units are given in their reports. In 1992 and 1993, Metall did detailed mapping in the vicinity and along strike of known barite occurrences. A generalized view of the geology and a stratigraphic column are presented in Figures 3 and 4. The claim block is underlain by two parallel, northwesterly trending, southwesterly dipping panels of recessive weathering, Devonian shales which are overlain by brownish orange weathering Silurian to Ordovician siltstones, shales, cherts and limestones. A bedded and blebby

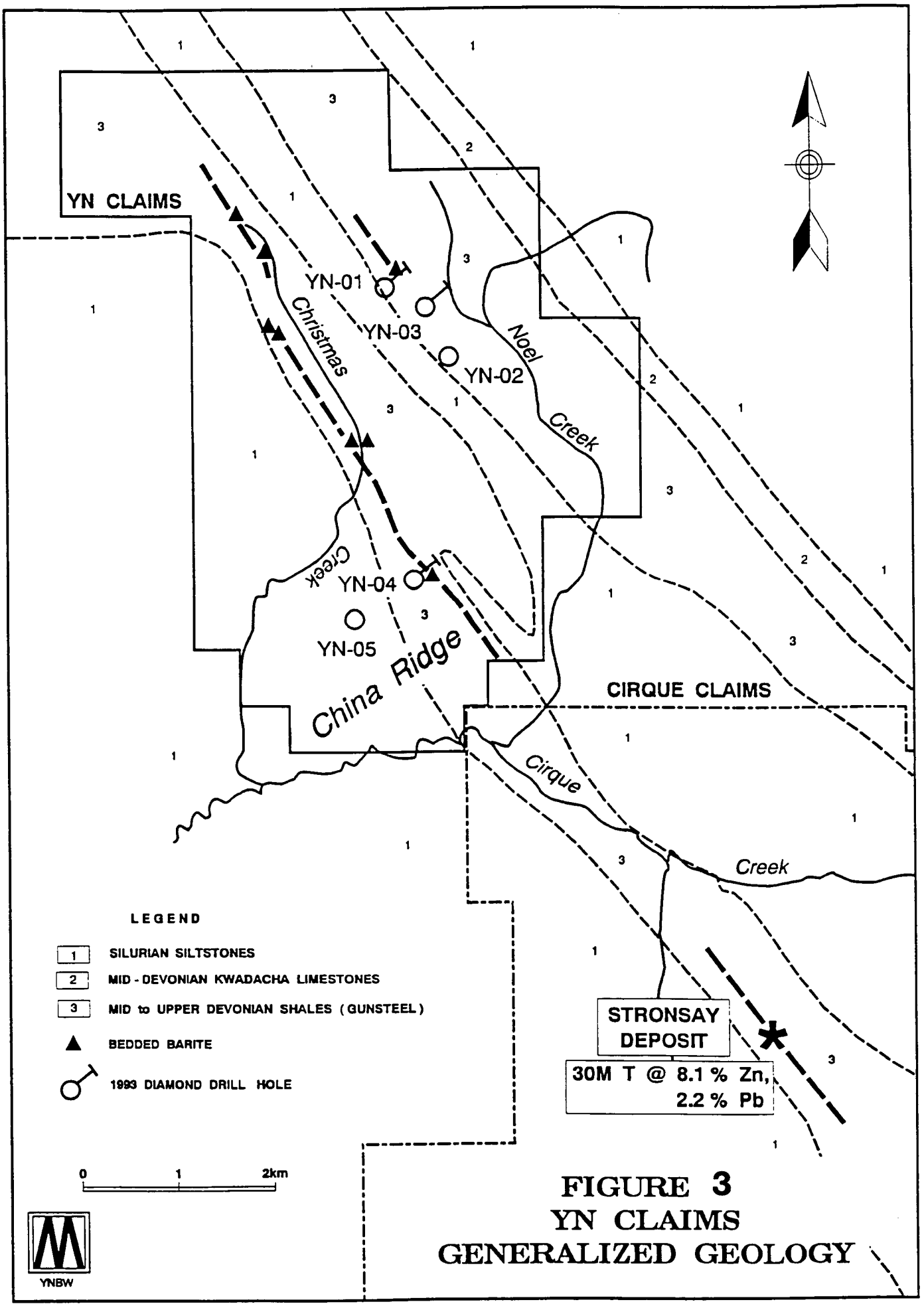
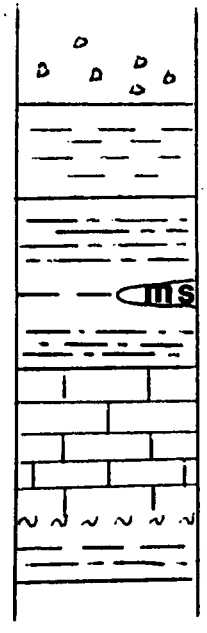


FIGURE 3
YN CLAIMS
GENERALIZED GEOLOGY

FIGURE 4 : GENERALIZED STRATIGRAPHY – SOUTH GATAGA AREA

(after MacIntyre 1992)



AGE	GROUP	FORMATION	ROCK TYPES
U Devonian, Mississippian	Earn	Warneford	chert pebble conglomerate
		Akie	siltstone
Mid – Upper Devonian	Earn	Gunsteel	shale,bedded – nodular barite,mass sulphides
Lower – Mid Devonian	Road River	Kwadacha	fossiliferous limestones
Silurian	Road River		shales,siltstones, cherts

barite horizon is exposed over a 7.5 km strike length in the Christmas Creek and China Ridge areas. This zone is interpreted as the strike extension of the Cirque deposit located six kilometers to the southwest. Numerous rusty seeps and gossans which occur in this panel are associated with pyritic Devonian shales.

Outcrop exposure on the southeastern part of China Ridge is poor but examination of those outcrops present suggests that the area is underlain by gently (20°) southwesterly dipping Silurian siltstones, cherts and limestones rather than Devonian shales.

The Noel Creek watershed is separated from the Christmas Creek watershed by a ridge of Silurian siltstones which have been thrust over the Devonian shales and limestones. A blebby carbonate and barite horizon which occurs near the headwaters of Noel Creek has been traced over a strike length of 250 meters. Detailed mapping in the vicinity of this horizon has shown that it is underlain by a sequence of well-bedded siliceous shales and finely bedded pyritic shales. The entire sequence is folded into an overturned anticline.

3. SOIL GEOCHEMISTRY

a. Survey Objectives and Sampling Procedures

Multi-element soil geochemical surveys were continued in the Noel Creek and China Ridge areas to assess the extent of anomalies outlined in the 1992 program (Wells, 1992). Sampling was also carried out along the trend of the Christmas Creek barite horizon in an attempt to locate areas of base metal enrichment.

Soil samples were collected from the B soil horizon at 25 meter intervals on 200 m spaced, flagged lines. The B horizon is usually well developed and varies in colour from grey to brownish grey. Sample depths range between 5 and 20 cm below the surface. Samples varying in size between 300 and 500 grams were placed in Kraft paper bags and labelled with sample locations. The filled bags were dried in the field and sent to IPL Labs in Vancouver for

analysis. Each sample was analyzed for Cu, Pb, Zn, Ag, Cd, Fe, Mn and Ba using an ICP technique. Laboratory procedures for sample preparation and analysis are included in Appendix I.

Analytical certificates are included in Appendix II and the data is plotted at a 1:5000 scale on Figures 5a through d. Statistical data for soil sampling on the YN and AKIE claim groups is presented in Table 1. Frequency histograms were generated for each element to determine the type of population distribution (normal or log normal). Anomalous values are those greater than mean plus two standard deviations for normal populations or geometric mean plus two standard deviations for log normal populations.

b. Results

i. Noel Creek

A total of 93 soil samples were taken in the Noel Creek area. Lines 6950S, 7350S and 7550S were extended to assess the downslope extent of anomalies outlined in 1992 and lines 7950S and 8150S were sampled to determine the strike extent of these same anomalies.

Anomalies outlined in 1992 have no downslope extent and are only weakly apparent along strike to the southeast. A weak Cu-Cd anomaly with isolated Pb and Zn highs occurs over a 200 meter width at the eastern end of line 8150S. This anomaly is similar in character to those tested in 1993. One and two sample Ag anomalies (1.3 to 2.2 ppm) occur near the western edge of lines 7750S, 7950S and 8150S.

ii. XMAS93 Grid

The XMAS93 grid covered an unexplored 1.6 km long strike projection of the Christmas Creek barite horizon. This area is predominantly tree-covered and inspection of creek valleys cutting the slope suggests that there is locally abundant talus debris.

Table 1 : YN and AKIE SOIL SAMPLES – STATISTICAL DATA

ELEMENT	UNITS	N	MINIMUM	MAXIMUM	DISTRIBUTION	MEAN	STANDARD DEVIATION	ANOMALOUS VALUES
Ag	ppm	681	0.05	4.2	normal	0.41	0.38	1.17
Ba	ppm	686	296	23406	log normal	2270	1.78	7211
Cd	ppm	687	0.05	38	normal	0.39	0.78	1.95
Cu	ppm	694	3	217	log normal	19.5	1.82	65
Fe	%	692	0.26	30.08	normal	2.21	1.25	4.71
Mn	ppm	689	6	8193	log normal	119	3	1071
Pb	ppm	690	1	382	log normal	24.7	2.12	110.6
Zn	ppm	686	14	16101	log normal	135.2	2.04	561

Consequently the soil samples may not be a true reflection of the underlying bedrock.

Metal values of soil samples from this grid are generally low. A one to two sample wide Ag anomaly is present near Christmas Creek. High Ba values (8044 - 9696 ppm) correspond to the projected trace of the barite horizon but only local Cd highs are associated with this zone. Isolated Pb, Zn, Cu and Mn anomalies are present on the grid but do not appear to be associated with the Ba-Cd anomaly.

iii. China Ridge

Soil sampling on China Ridge was done on lines to the northwest and southeast of the 1992 coverage to assess the extent of the anomalies defined last year (Wells, 1992). A total of 259 samples were collected.

The area of anomalous soil geochemistry defined in 1992 has been extended onto adjacent lines. It now covers an area of 1.4 km by 0.8 km. Barium, cadmium, manganese and silver are anomalous throughout this zone, lead values are locally anomalous (>111 ppm) and a 1 km long zinc anomaly (values up to 1099 ppm) occurs at the southwest edge of the anomaly.

Outcrop exposure in the area of anomalous geochemistry is poor but it appears that the area is underlain by Silurian siltstones, cherts and limestones rather than the Devonian shales which host the Pb-Zn mineralization. The calcareous nature of the underlying bedrock may have caused the higher levels of metals in the soil samples.

4. DIAMOND DRILLING

a. Results

Five diamond drill holes totalling 643.1 meters tested soil geochemical anomalies and barite horizons in the Noel Creek and

China Ridge areas. Drill hole data and significant results are presented in Table 2 and complete diamond drill logs are included in Appendix III. Drill hole locations are shown on Figures 3 and 6. All core is stored on Noel Creek (Figure 6).

Holes YN-93-01 to YN-93-03 incl. were drilled in the Noel Creek area to test soil geochemical and geological targets. Two holes were completed and one was abandoned due to poor ground conditions caused by the siliceous and graphitic ribbon cherts. Both YN-93-01 and YN-93-03 intersected a pyritic shale unit which stratigraphically overlies the ribbon chert sequence. Hole YN-93-01 also intersected a blebby barite/carbonate unit within the pyritic shale unit. The stratigraphic sequence intersected in these two holes is identical to that seen at Cirque. Analytical results from these two holes indicate that the pyritic shales and upper, pyritic section of the ribbon cherts are enriched in zinc (up to 1940 ppm) and Pb (103 ppm). This explains the low level soil geochemical anomalies seen in the Noel Creek watershed.

Hole YN-93-04 tested the down-dip and strike extent of the China Ridge barite horizon which is interpreted as correlating with the Cirque deposit. The hole collared in calcareous Road River shales which locally have 1-2% pyrite nodules. At 102.4 meters, the hole intersected a fault zone which repeats the Road River sequence. The barite horizon and host Gunsteel shale sequence was not intersected in this hole.

Hole YN-93-05 was drilled to test multi-element soil anomalies associated with Silurian cherts and limestones which occur on the southwestern end of China Ridge. The hole collared in black cherts which have anomalous Pb values (118 ppm). These are interpreted as causing the widespread soil anomalies. The hole was abandoned prior to intersecting the limestone contact due to poor ground conditions.

HOLE #	LOCATION	COLLAR DIP	COLLAR AZIMUTH	FINAL DEPTH	RESULTS/COMMENTS
a. Noel Creek					
YN-93-01	6950 S; 175 E	-65	056	143 m	32.5 - 36.3 : blebby carbonate,barite horizon; 107 ppm Zn, 0.28% Ba over 3.8m 62.55 - 69.6 : 3 - 5% py in cherts, siliceous shales; 1093 ppm Zn, 5.5 ppm Cd over 7.05m 109.7 - 143.0 : pyritic shales
YN-93-02	7750 S; 207 E	-65	056	27.1 m	hole abandoned due to poor ground conditions
YN-93-02B	7750 S; 207 E	-80	070	39.3 m	hole abandoned due to poor ground conditions
YN-93-03	7350 S; 275 E	-67	043	181.1 m	14.45 - 42.3 : cherts, siliceous shales; anomalous Zn, Cd : 1455 ppm Zn, 5.5 ppm Cd 42.3 - 59.0 : pyritic shales, 5% py : 208 ppm Zn 159.9 - 181.1 : pyritic shales, 5 - 7% py : 259 ppm Zn
b. China Ridge					
YN-93-04	5000 N; 400 E	-64	050	205.5 m	6.1 - 205.5 : calcareous Road River shales,siltstones; no significant assays 102.4 - 103.75 : fault - cuts off down-dip extent of China Ridge barite horizon
YN-93-05	5000 N; 350 W	-65	230	21 m	hole abandoned due to poor ground conditions
YN-93-05B	5000 N; 350 W	-85	230	26.1 m	hole abandoned due to poor ground conditions
			TOTAL	643.1 m	5 holes

TABLE 2 : SUMMARY OF THE 1993 DIAMOND DRILL PROGRAM - GATAGA PROJECT

b. Assays and Lithogeochemistry

Lithogeochemical samples were collected regularly every 20-30 m down the hole to detect wide zones of metal enrichment. Samples were analyzed for Al_2O_3, Ba, CaO, Fe_2O_3, K_2O, MgO, MnO_2, Na_2O, P_2O_5, SiO_2, Sr, TiO_2, LOI, S, Cu, Pb, Zn, Ag, Au As, Cd and Sb by standard ICP techniques. Geochemical samples were taken from mineralized zones and analyzed for Cu, Pb, Zn, Ag, Ba and Cd. All ICP and geochem. samples were analyzed at Min-En Labs, North Vancouver. Sample preparation procedures and analytical techniques are described in Appendix I and analytical certificates are included in Appendix II.

Lithogeochemical sampling did not detect any areas of wide spread metal enrichment. Single samples from holes YN-3 and YN-5 did show weak lead enrichment (103 ppm and 119 ppm respectively). Geochemical sampling of mineralized sections shows zinc enrichment up to 1940 ppm within the pyritic shales. The Pb-Zn enrichment that was identified explains the surface geochemical anomalies as referred to in section a.

5. CONCLUSIONS AND RECOMMENDATIONS

Additional soil sampling on the Noel Creek grid indicated that the soil anomalies defined in 1992 do not extend along strike. Detailed geological mapping defined a sequence of siliceous shales and cherts which are overlain by pyritic and siliceous shales and a blebby barite and carbonate horizon. This stratigraphic sequence is similar to that seen at the Cirque deposit and consequently three drill holes (YN-01 to YN-03) tested the soil anomalies associated with this favourable stratigraphy. Chert and pyritic shales which are locally enriched in zinc (up to 1940 ppm) and Pb (up to 103 ppm) were intersected. Surface sampling of this unit also indicated that it has anomalous zinc and copper values. The metal content of these shales is sufficient to cause the soil anomalies in the Noel creek watershed. No economic mineralization

appears to be associated with them and consequently no further work is warranted in this area.

A drill hole testing the barite horizon exposed on the eastern edge of China Ridge (YN-4) intersected a sequence of calcareous Road River shales. Faulting repeated this sequence and cuts off the downdip extent of the barite horizon.

Soil sampling in 1993 along the trend of the Christmas Creek barite horizon failed to identify areas of metal enrichment. To date, a 7.5 km strike length of the Christmas Creek barite horizon has been explored by soil surveys, surface sampling and one diamond drill hole. No extensive zones of metal enrichment have been defined and the drill hole suggests that there are structural complications. Further work in this area is not warranted.

Soil sampling on the western part of China Ridge has outlined a large area (1.4 km by 0.8 km) of anomalous geochemistry (Ba, Cd, Mn, Ag, Pb, Zn). The area is below the treeline and outcrop exposure is very poor. Mapping and sampling of the outcrops present indicate that the area is underlain by Silurian cherts, limestones and calcareous shales which are locally enriched in Ag, Cd and Pb. One drill hole was allotted to test a part of the anomaly but it was abandoned just below the collar due to very poor ground conditions. The elevated metal contents in the soils may be a reflection of the calcareous nature of the underlying bedrock. In addition, the rocks are older than those which host the barite-sphalerite-galena mineralization in the Gataga area. Consequently further work on China Ridge and on the YN claims is not recommended.

6. COST STATEMENTS

YN92A GROUP - SUMMARY OF EXPENSES

DRILLING

a. Contractor Costs

-Britton Bros. Diamond Drilling Ltd.

mob/demob (prorated)	$2,100.00	
YN-01	$9,241.66	
YN-02	$5,694.18	
YN-03	$11,780.55	
		$28,816.39

b. Helicopter Support

-Pacific Western Helicopters

39.9 hours @ $800/hour	$31,920.00

c. Salaries

Gary Wells	8 days @ $350/day	$2,800.00	
John James	6 days @ $155/day	$930.00	
Devin Denboer	2 days @ $130/day	$260.00	
Paul Nye	2 days @ $110/day	$220.00	
			$4210.00

d. Accommodation (including pilot)

-Finbow Logging Camp

29 man days @ $85/day	$2,465.00

e. Analyses

Lithos	11 samples @ $24.75/sample	$272.25	
Assays	21 samples @ $24.50/sample	$514.50	
Shipping	(prorated)	$49.23	
			$835.98

YN92A Group Drilling Costs	$68,247.37

YN92A GROUP - SUMMARY OF EXPENSES

GEOCHEMISTRY

a. Salaries

Devin Denboer	6 days @ $130/day	$780.00	
Paul Nye	6 days @ $110/day	$660.00	
			$1440.00

b. Helicopter Support

Pacific Western Helicopters

5 hours @ $800/hour		$4000.00

c. Accommodation (including pilot)

Finbow logging camp

18 man days @ $85/man/day		$1530.00

d. Analyses

93 samples @ $6/sample	$558.00	
shipping (prorated)	$88.11	

e. Transportation

Truck rental (prorated)	$500.00	
Aircraft (prorated)	$887.50	
		$1387.5

f. Report Preparation

Gary Wells	3 days @ $350/day	$1050.00	
S. Gokool	2 days @ $150/day	$300.00	
Computer/plotting		$200.00	
			$1550.00

Total Geochemistry	$10,553.61

YN92B GROUP - SUMMARY OF EXPENSES

DRILLING

a. Contractor Costs

-Britton Bros. Diamond Drilling Ltd.

mob/demob (prorated)	$1,400.00	
YN-04	$13,960.74	
YN-05	$4,265.97	
		$19,626.71

b. Helicopter Support

-Pacific Western Helicopters

39.6 hours @ $800/hour		$31,680.00

c. Salaries

Gary Wells	4 days @ $350/day	$1,400.00	
John James	6 days @ $155/day	$930.00	
Devin Denboer	6 days @ $130/day	$780.00	
			$3110.00

d. Accommodation (including pilot)

-Finbow Logging Camp

23 man days @ $85/day		$1,955.00

e. Analyses

Lithos	16 samples @ $24.75/sample	$396.00	
Assays	4 samples @ $24.50/sample	$98.00	
Shipping	(prorated)	$30.77	
			$524.77

YN92A Group Drilling Costs	$56,896.48

YN92B GROUP - SUMMARY OF EXPENSES

GEOCHEMISTRY

a. Salaries

John James	3 days @ $155/day	$465.00	
Devin Denboer	8 days @ $130/day	$1040.00	
Paul Nye	9 days @ $110/day	$990.00	
			$2495.00

b. Helicopter Support

Pacific Western Helicopters

8.7 hours @ $800/hour	$6960.00

c. Accommodation (including pilot)

Finbow logging camp

29 man days @ $85/man/day	$2465.00

d. Analyses

403 samples @ $6/sample	$2418.00	
shipping (prorated)	$215.37	

e. Transportation

Truck rental (prorated)	$500.00	
Aircraft (prorated)	$887.50	
		$1387.5

f. Report Preparation

Gary Wells	3 days @ $350/day	$1050.00	
S. Gokool	2 days @ $150/day	$300.00	
Computer/plotting		$200.00	
			$1550.00

Total Geochemistry	$17,490.87

7. REFERENCES

1. Carne, R.C., 1982: 1982 Field Program - Sikanni Project - Pie, Yule and Sic claims, N.E. B.C. Internal report for Riocanex.

2. MacIntyre, D.G., 1980: Geological Compilation and Mineral Occurrence Map Driftpile Creek - Akie River. B.C.M.E.M.P.R. prelim. map 38.

3. MacIntyre, D.G., 1992: Geological setting and genesis of sedimentary exhalative barite and barite-sulphide deposits, Gataga district, northeastern British Columbia. Exploration and Mining Geology Vol. 1, pp 1-20.

4. Thompson, J.F.H., 1980: Geology maps of the PIE and YULE claims in Riocanex report on B.C. Sikanni project 1980 by G.D. Hodgson.

5. Wells, G.S., 1992: Soil Geochemical Assessment Report - YN claims, NTS 94F/11.

8. STATEMENT OF QUALIFICATIONS

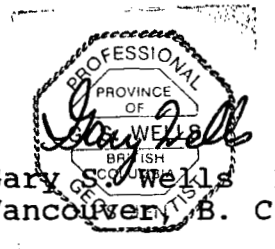
I, Gary S. Wells, hereby certify that:

1. I hold an Honours Bachelor of Science degree in combined geology and chemistry (1975) from Carleton University, Ottawa, Ontario and a Ph.D degree in geology (1980) from Queen's University, Kingston, Ontario.

2. I am an associate member of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.

3. I have practised by profession in exploration continuously since graduation in 1980.

4. I am registered as a professional geoscientist by the Association of Professional Engineers and Geoscientists of British Columbia.



Date: May 31, 1994

Gary S. Wells P.Geo
Vancouver, B. C.

Appendix I

Sample Preparation and Analytical Procedures

iPL
INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Method of sample preparation for Soil or Silt

(a) Water content in sample is removed by convection in a low temperature dryer (T < 60 Degrees C.).

(b) Dried samples are passed through an 80 mesh sieve. The minus 80 mesh fraction is transferred to a new bag for subsequent analyses. The plus 80 mesh fraction is discarded unless otherwise instructed.

(c) If an insufficient amount of sample is less than 80 Mesh, the entire sample is passed through a 35 Mesh screen. The -35 Fraction is then pulverized and used as the portion for analyses.

QUALITY CONTROL

Cross contamination is minimized by constant cleaning of preparation equipment with high velocity compressed air. Ring pulverizers are cleaned with a quartz sand charge.

iPL
INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Method of ICP Multi-element Analyses

(a) 0.50 grams of sample is digested with diluted aqua regia solution by heating in a hot water bath for 90 minutes, then cooled, bulked up to a fixed volume with demineralized water, and thoroughly mixed.

(b) The specific elements are determined using an Inductively Coupled Argon Plasma spectrophotometer. All elements are corrected for inter-element interference. All data are subsequently stored onto computer diskette.

* Aqua regia leaching is partial for Al, Ba, Ca, Cr, K, La, Mg, Na, Sc, Sn, Sr, Th, Ti, W and Zr.

QUALITY CONTROL

The machine is first calibrated using six known standards and a blank. The test samples are then run in batches.

A sample batch consists of 38 or less samples. Two tubes are placed before a set. These are an Inhouse standard and an acid blank, which are both digested with the samples. A known standard with characteristics best matching the samples is chosen and placed after every fifteenth sample. After every 38th sample (not including standards), two samples, chosen at random, are reweighed and analysed. At the end of a batch, the standard and blank used at the beginning is rerun. The readings for these knowns are compared with the pre-rack knowns to detect any calibration drift.

MINERAL
• ENVIRONMENTAL
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 986-4624
FAX (604) 980-9621

SMITHERS LAB.:
3178 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR WHOLE ROCK ANALYSIS

SiO_2, TiO_2, Al_2O_3, MnO_2, MgO, Fe_2O_3, CaO, Na_2O, K_2O, P_2O_5, Ba, & Sr

Samples are dried @ 95°C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to - 15 mesh. The whole samples is then riffled on a Jones Riffle down to a statistically representative 300 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized on a ring pulverizer to 95% - 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are weighed and fused at 1000°C with lithium metaborate prior to being dissolved in nitric acid. The resulting solutions are analyzed by ICP. The CANMET standards are employed as check standards with each set of 24 samples. Reports are formatted and printed using a laser printer.

MINERAL
• ENVIRONMENTS
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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705 WEST 15TH STREET
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SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR 31 ELEMENT TRACE ICP

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu,
Fe, K, Li, Mg, Mn, Mo, Na, Ni P, Pb, Sb,
Sr, Th, Ti, V, Zn Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrell Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a laser printer.

MINERAL
•ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

ANALYTICAL PRECEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR WET GOLD GEOCHEMICAL ANALYSIS

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized on a ring mill pulverizer.

5.00 grams of sample is weighed into porcelain crucibles and cindered @ 800 C for 3 hours. Samples are then transferred to beakers and digested using aqua regia, diluted to volume and mixed.

Further oxidation and treatment of 75% of the above solution is then extracted for gold by Methyl Iso-butyl Ketone.

The MIBK solutions are analyzed on an atomic absorption spectrometer using a suitable standard set.

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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR GEOCHEM Ag, Cu, Pb, Zn

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, using the following procedures.

After drying the samples at 65 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by AA.

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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR BARIUM GEOCHEM

Ba PPM

Samples are dried @ 95°C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to - 15 mesh. The whole samples is then riffled on a Jones Riffle down to a statistically representative 300 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized on a ring pulverizer to 95% - 120 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are weighed into nickel crucibles and fused with NaOH and Na2CO3 at 650°C. After leaching overnight the samples are filtered, washed and the residues are dissolved with hydrochloric acid. The resulting solutions are analyzed by ICP. The CANMET standards are employed as check standards with each set of 24 samples. Reports are formatted and printed using a laser printer.

APPENDIX II

Analytical Certificates
(Soils and Diamond Drilling)

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia St
Vancouver, BC
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

CERTIFICATE OF ANALYSIS
iPL 93F2601

Client: Metall Mining Inc.
Project: 677 149 Soil

iPL: 93F2601 M

Out: Jun 29, 1993
In: Jun 26, 1993

Section 1 of 1
Certified BC Assayer: David Chiu

Sample Name			Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CR54+00N	11+25W	$	0.3	16	31	205	0.9	430	423	2.16
CR54+00N	11+50W	$	0.4	24	27	234	1.2	400	380	2.05
CR54+00N	11+75W	$	0.4	22	24	238	4.1	750	3223	2.05
CR54+00N	12+00W	$	<0.1	15	23	168	0.4	692	109	1.83
CR54+00N	12+25W	$	0.1	21	33	168	0.6	428	272	2.17
CR54+00N	12+50W	$	0.9	39	35	161	1.0	232	408	2.39
CR54+00N	12+75W	$	1.2	47	40	234	1.4	269	431	2.55
CR54+00N	13+00W	$	0.4	36	38	179	1.2	359	387	2.43
CR54+00N	13+25W	$	0.3	16	21	114	0.4	346	243	1.85
CR54+00N	13+50W	$	0.4	24	31	138	0.8	598	315	2.21
CR54+00N	13+75W	$	0.3	26	24	126	0.4	415	354	1.99
CR54+00N	14+00W	$	0.3	19	23	138	0.5	391	334	2.00
CR54+00N	14+25W	$	0.2	15	13	85	0.4	354	342	1.35
CR54+00N	14+50W	$	0.4	18	20	102	0.2	246	290	1.56
CR54+00N	14+75W	$	0.7	25	23	810	5.4	630	739	2.55
CR56+00N	0+00W	$	0.4	21	21	72	<0.1	258	24	2.26
CR56+00N	0+25W	$	0.2	7	28	103	0.1	214	104	1.77
CR56+00N	0+50W	$	0.2	9	9	75	0.3	1369	93	1.08
CR56+00N	0+75W	$	0.7	14	14	98	0.4	658	116	1.19
CR56+00N	1+00W	$	0.4	21	33	173	0.8	274	437	2.01
CR56+00N	1+25W	$	0.2	15	24	164	0.8	341	319	1.55
CR56+00N	1+50W	$	0.2	18	27	248	2.0	489	508	1.75
CR56+00N	1+75W	$	0.4	25	26	289	2.7	670	186	1.88
CR56+00N	2+00W	$	0.2	21	22	209	1.2	1218	260	1.90
CR56+00N	2+25W	$	0.5	26	31	372	2.0	583	213	1.86
CR56+00N	2+50W	$	0.4	35	23	382	2.4	2114	217	2.78
CR56+00N	2+75W	$	0.1	6	13	77	<0.1	821	29	0.67
CR56+00N	3+00W	$	<0.1	14	20	179	0.3	597	180	1.80
CR56+00N	3+25W	$	0.3	22	26	292	1.2	746	375	2.27
CR56+00N	3+50W	$	0.7	22	22	274	1.3	1005	283	1.55
CR56+00N	3+75W	$	0.4	16	38	224	1.1	836	265	1.45
CR56+00N	4+00W	$	0.7	18	41	526	3.5	632	614	1.51
CR56+00N	4+25W	$	1.5	43	55	954	6.5	879	452	2.07
CR56+00N	4+50W	$	0.3	18	35	430	2.3	715	242	1.41
CR56+00N	4+75W	$	1.0	68	19	899	18.7	1697	734	0.84
CR56+00N	5+00W	$	0.1	13	46	264	1.8	1021	342	1.36
CR56+00N	5+25W	$	0.6	32	55	897	6.3	775	556	1.69
CR56+00N	5+50W	$	0.6	20	65	1013	4.5	625	284	2.29
CR56+00N	5+75W	$	0.7	16	91	670	3.4	669	440	2.19
CR56+00N	6+00W	$	0.5	15	54	438	3.6	748	638	1.37
CR56+00N	6+25W	$	0.4	16	77	462	3.1	880	428	1.83
CR56+00N	6+50W	$	0.9	22	47	462	5.8	1360	1379	1.65
CR56+00N	6+75W	$	0.1	2	7	27	<0.1	192	13	0.16
CR56+00N	7+00W	$	0.2	7	6	96	0.1	277	18	0.58
CR56+00N	7+25W	$	0.2	14	36	277	0.5	675	41	1.39
CR56+00N	7+50W	$	0.3	10	37	206	0.1	712	37	1.31
CR56+00N	7+75W	$	0.7	24	59	929	4.7	772	271	1.89
CR56+00N	8+00W	$	0.5	22	123	467	6.7	881	724	0.98
CR56+00N	8+25W	$	<0.1	14	65	334	0.7	605	95	1.90
CR56+00N	8+50W	$	0.3	32	31	464	2.2	846	252	2.35
CR56+00N	8+75W	$	<0.1	22	31	260	0.7	579	396	2.92
CR56+00N	9+00W	$	0.1	40	37	315	0.9	408	354	3.75
CR56+00N	9+25W	$	<0.1	29	45	346	0.3	504	115	3.51
CR56+00N	9+50W	$	0.1	31	35	325	0.5	481	123	3.74
CR56+00N	9+75W	$	0.5	28	26	262	0.9	299	336	2.30
CR56+00N	10+00W	$	<0.1	9	13	106	0.3	778	106	1.12
CR69+50S	4+25E	$	1.3	66	140	452	2.7	60	8011	8.92
CR69+50S	4+50E	$	1.2	28	71	76	<0.1	246	34	4.09
CR69+50S	5+50E	$	<0.1	104	40	709	<0.1	524	96	12.25
CR69+50S	5+75E	$	0.4	30	22	97	0.1	299	93	2.96
CR69+50S	6+00E	$	<0.1	15	21	89	<0.1	303	22	3.26
CR69+50S	6+25E	$	0.2	32	29	106	<0.1	369	39	3.02
CR69+50S	6+50E	$	0.2	20	28	163	0.1	147	46	1.95
CR69+50S	6+75E	$	1.2	55	39	691	<0.1	298	95	4.56
CR69+50S	7+00E	$	0.8	9	<2	75	<0.1	96	19	0.76
CR69+50S	7+25E	$	0.7	50	52	192	<0.1	87	157	5.83
CR73+50S	5+25E	$	0.1	15	21	126	0.3	257	557	1.12
CR73+50S	5+50E	$	0.2	10	7	78	<0.1	212	19	0.76
CR73+50S	5+75E	$	<0.1	10	<2	83	<0.1	119	16	0.80
CR73+50S	6+00E	$	0.6	32	8	278	<0.1	157	49	2.37
CR73+50S	6+25E	$	0.3	18	4	128	0.1	145	36	1.50
Min Limit			0.1	1	2	1	0.1	2	1	0.01
Max Reported*			99.9	20000	20000	20000	99.9	9999	9999	99.99
Method			ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

INTERNATIONAL PLASMA LABORATORY LTD.

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CERTIFICATE OF ANALYSIS
iPL 93F2601

Client: Metall Mining Inc.
Project: 677 149 Soil

iPL: 93F2601 M
Out: Jun 29, 1993
In: Jun 26, 1993

Section 1 of 1
Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CR44+00N	0+00E	0.4	31	27	83	0.7	203	312	1.89
CR44+00N	0+25E	0.3	29	29	148	0.9	402	349	2.17
CR44+00N	0+50E	0.2	23	17	142	1.3	218	232	1.72
CR44+00N	0+75E	0.8	39	34	252	1.6	588	324	2.39
CR44+00N	1+00E	0.3	31	25	292	2.1	1160	370	2.49
CR44+00N	1+25E	0.3	25	28	344	2.7	741	249	2.69
CR44+00N	1+50E	0.3	19	37	207	1.3	844	405	2.02
CR44+00N	1+75E	1.0	27	26	123	1.7	1096	1282	2.22
CR44+00N	2+00E	1.6	35	40	188	0.7	396	835	3.35
CR44+00N	2+25E	0.6	21	26	592	2.9	1403	455	2.55
CR44+00N	2+50E	0.4	28	29	344	2.2	1091	363	2.36
CR44+00N	2+75E	1.0	48	49	407	2.4	878	611	3.08
CR44+00N	3+00E	0.3	22	22	265	1.3	1214	242	2.07
CR44+00N	3+25E	1.0	35	42	488	2.3	1138	490	2.80
CR44+00N	3+50E	<0.1	42	53	516	0.4	1164	547	4.03
CR44+00N	3+75E	0.2	28	32	298	0.5	1616	131	2.55
CR44+00N	4+00E	0.1	44	68	392	<0.1	2094	1387	4.16
CR46+00N	0+25E	0.4	36	37	216	1.2	786	295	3.27
CR46+00N	0+50E	0.3	65	41	780	5.9	1229	561	4.02
CR46+00N	0+75E	0.5	34	30	261	2.0	1301	307	2.83
CR46+00N	1+00E	0.4	27	22	254	1.2	527	324	2.41
CR46+00N	1+25E	1.0	43	40	604	2.6	2735	237	3.47
CR46+00N	1+50E	1.9	125	67	449	0.6	1467	538	4.27
CR46+00N	1+75E	1.9	76	76	382	2.3	768	828	3.76
CR46+00N	2+00E	1.3	47	45	379	2.6	1022	433	2.98
CR46+00N	2+25E	0.8	33	86	417	2.3	667	531	2.64
CR46+00N	2+50E	0.2	21	28	186	2.3	1098	2167	2.31
CR46+00N	2+75E	0.1	40	25	468	5.1	1885	1150	2.42
CR46+00N	3+00E	0.2	3	39	46	0.6	506	28	1.30
CR46+00N	3+25E	0.1	6	43	74	0.7	630	50	1.30
CR46+00N	3+50E	0.6	29	60	106	0.8	1156	984	2.73
CR46+00N	3+75E	0.4	27	38	234	1.4	563	341	2.09
CR46+00N	4+00E	1.2	35	28	87	0.4	347	393	2.60
CR54+00N	0+00E	0.1	8	12	91	0.2	154	23	0.92
CR54+00N	0+25W	<0.1	12	9	122	0.1	132	119	1.22
CR54+00N	0+50W	<0.1	6	11	99	0.5	524	154	0.81
CR54+00N	0+75W	<0.1	4	3	60	<0.1	136	33	0.52
CR54+00N	1+00W	<0.1	4	<2	55	<0.1	330	20	0.49
CR54+00N	1+25W	0.1	11	11	146	0.3	469	208	1.23
CR54+00N	1+50W	0.4	20	50	239	2.1	1088	1117	2.44
CR54+00N	1+75W	0.5	20	34	204	1.3	672	842	2.16
CR54+00N	2+00W	0.1	18	20	193	0.3	697	90	2.27
CR54+00N	2+25W	0.5	32	24	424	3.3	1478	253	2.78
CR54+00N	2+50W	0.3	29	41	419	3.2	1043	375	1.45
CR54+00N	2+75W	0.6	29	21	275	1.8	787	251	2.26
CR54+00N	3+00W	0.9	37	32	463	2.8	781	339	2.88
CR54+00N	3+25W	0.4	17	26	192	0.4	836	113	1.73
CR54+00N	3+50W	0.3	13	22	109	0.6	880	20	0.80
CR54+00N	3+75W	0.3	13	23	151	0.4	682	26	0.87
CR54+00N	4+00W	0.4	21	23	238	2.2	1106	109	1.11
CR54+00N	4+25W	0.3	14	42	299	1.0	816	253	1.37
CR54+00N	4+50W	0.9	22	41	354	1.5	1157	242	1.86
CR54+00N	4+75W	0.3	18	48	411	2.6	734	278	1.55
CR54+00N	5+00W	0.6	17	39	334	3.5	813	812	1.43
CR54+00N	5+25W	0.7	16	52	651	4.7	841	646	1.70
CR54+00N	5+50W	0.9	18	148	902	9.4	1362	1115	2.14
CR54+00N	5+75W	0.6	8	205	263	2.5	457	1305	3.53
CR54+00N	6+00W	1.7	22	99	979	5.0	656	623	2.15
CR54+00N	6+25W	0.3	13	101	535	6.0	505	224	2.04
CR54+00N	6+50W	0.2	8	35	260	1.3	628	216	1.21
CR54+00N	6+75W	0.5	18	66	427	5.5	821	446	0.91
CR54+00N	7+00W	0.7	21	86	810	6.4	358	381	1.35
CR54+00N	7+25W	0.7	21	85	1046	6.5	570	402	1.55
CR54+00N	7+50W	0.5	6	14	68	0.9	1193	19	0.38
CR54+00N	7+75W	0.6	15	28	122	0.8	952	863	1.40
CR54+00N	8+00W	0.4	11	22	116	0.4	1143	70	0.99
CR54+00N	8+25W	0.7	19	28	153	0.7	780	190	1.60
CR54+00N	8+50W	0.2	13	26	206	0.6	970	279	2.02
CR54+00N	8+75W	0.2	17	32	145	0.6	756	335	2.04
CR54+00N	9+00W	<0.1	7	22	163	0.2	493	162	1.62
CR54+00N	9+25W	<0.1	24	36	353	1.3	1255	327	3.42
CR54+00N	9+50W	0.8	33	74	119	0.9	391	850	2.96
CR54+00N	9+75W	0.6	24	71	166	1.2	360	859	2.57
CR54+00N	10+00W	0.3	24	40	107	0.8	792	865	3.02
CR54+00N	10+25W	0.2	19	27	170	0.6	376	252	2.04
CR54+00N	10+50W	0.1	11	15	156	0.4	460	183	1.36
CR54+00N	10+75W	0.3	18	16	197	0.6	667	134	1.53
CR54+00N	11+00W	<0.1	10	15	94	0.3	404	94	1.23
Min Limit		0.1	1	2	1	0.1	2	1	0.01
Max Reported*		99.9	20000	20000	20000	99.9	9999	9999	99.99
Method		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

INTERNATIONAL PLASMA LABORATORY LTD.

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CERTIFICATE OF ANALYSIS
iPL 93F2601

Client: Metall Mining Inc. | iPL: 93F2601 M | Out: Jun 30, 1993 | Page 3 of 4 | Section 1 of 1
Project: 677 149 Soil | In: Jun 26, 1993 | Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CR54+00N	11+25W	0.3	16	38	270	0.5	2139	413	2.32
CR54+00N	11+50W	0.4	24	36	258	0.7	1628	384	2.25
CR54+00N	11+75W	0.4	22	32	254	3.9	1976	3460	2.21
CR54+00N	12+00W	<0.1	14	34	177	0.2	2105	117	1.92
CR54+00N	12+25W	0.1	19	42	172	0.1	1427	263	2.22
CR54+00N	12+50W	0.9	36	47	151	0.5	1212	376	2.41
CR54+00N	12+75W	1.2	43	50	218	0.9	1323	398	2.61
CR54+00N	13+00W	0.4	34	47	170	0.7	1567	366	2.52
CR54+00N	13+25W	0.3	15	31	119	<0.1	1569	239	2.07
CR54+00N	13+50W	0.4	22	40	137	0.2	1911	293	2.33
CR54+00N	13+75W	0.3	19	33	116	0.1	1649	327	2.10
CR54+00N	14+00W	0.2	18	40	152	<0.1	1708	326	2.21
CR54+00N	14+25W	0.3	14	27	95	<0.1	1362	318	1.66
CR54+00N	14+50W	0.4	16	32	104	<0.1	1493	279	1.95
CR54+00N	14+75W	0.7	23	33	711	4.2	2084	674	2.56
CR56+00N	0+00W	0.4	21	32	76	<0.1	2062	46	2.61
CR56+00N	0+25W	0.2	7	40	112	<0.1	1840	101	1.81
CR56+00N	0+50W	0.2	10	28	84	<0.1	6675	105	1.51
CR56+00N	0+75W	0.7	12	29	112	<0.1	2459	122	1.40
CR56+00N	1+00W	0.4	20	42	168	0.4	1813	411	2.03
CR56+00N	1+25W	0.2	14	37	168	0.5	1720	313	1.69
CR56+00N	1+50W	0.3	16	38	241	1.4	1671	483	1.78
CR56+00N	1+75W	0.3	23	37	274	1.9	2570	177	1.90
CR56+00N	2+00W	0.2	20	31	214	0.9	5846	258	1.99
CR56+00N	2+25W	0.5	24	39	334	1.4	3592	201	1.85
CR56+00N	2+50W	0.4	31	33	341	1.8	2.6%	194	2.54
CR56+00N	2+75W	<0.1	6	21	89	<0.1	3709	44	0.84
CR56+00N	3+00W	<0.1	13	30	180	<0.1	6425	174	1.87
CR56+00N	3+25W	0.3	21	35	288	0.9	9921	361	2.33
CR56+00N	3+50W	0.7	23	31	323	1.1	6955	290	1.69
CR56+00N	3+75W	0.3	15	46	263	0.5	2737	251	1.55
CR56+00N	4+00W	0.7	18	50	533	3.0	2201	591	1.53
CR56+00N	4+25W	1.5	44	65	971	6.0	2836	460	2.18
CR56+00N	4+50W	0.3	17	43	471	2.0	2660	252	1.52
CR56+00N	4+75W	1.0	61	21	836	16.5	2066	667	0.86
CR56+00N	5+00W	<0.1	13	53	364	1.3	3883	360	1.53
CR56+00N	5+25W	0.5	32	63	1055	6.1	3594	578	1.91
CR56+00N	5+50W	0.5	20	72	1026	3.8	6186	284	2.32
CR56+00N	5+75W	0.7	16	100	767	3.1	6856	448	2.34
CR56+00N	6+00W	0.4	15	58	453	3.2	4560	581	1.38
CR56+00N	6+25W	0.3	18	81	621	2.6	2773	418	1.94
CR56+00N	6+50W	0.9	21	49	564	5.0	2436	1222	1.67
CR56+00N	6+75W	0.1	3	17	37	<0.1	1665	32	0.29
CR56+00N	7+00W	0.2	7	12	98	<0.1	1771	24	0.61
CR56+00N	7+25W	0.2	13	44	264	0.1	2539	62	1.48
CR56+00N	7+50W	0.3	11	47	222	<0.1	3059	62	1.41
CR56+00N	7+75W	0.7	22	67	875	4.2	4829	266	1.88
CR56+00N	8+00W	0.4	20	123	512	6.2	3929	691	1.05
CR56+00N	8+25W	<0.1	13	67	354	0.7	4193	96	1.86
CR56+00N	8+50W	0.3	31	37	440	2.0	4447	246	2.37
CR56+00N	8+75W	<0.1	19	38	236	0.5	2842	339	2.75
CR56+00N	9+00W	0.1	36	44	286	0.6	2607	318	3.66
CR56+00N	9+25W	<0.1	25	48	305	<0.1	2450	104	3.24
CR56+00N	9+50W	<0.1	28	42	293	<0.1	2223	115	3.61
CR56+00N	9+75W	0.5	26	33	244	0.4	1706	320	2.34
CR56+00N	10+00W	<0.1	9	29	125	<0.1	1848	118	1.30
CR69+50S	4+25E	1.4	58	136	447	2.9	1966	7467	8.49
CR69+50S	4+50E	1.2	25	75	69	0.1	1818	45	3.93
CR69+50S	5+50E	<0.1	98	51	699	<0.1	6331	98	11.67
CR69+50S	5+75E	0.4	28	32	90	<0.1	4741	90	2.87
CR69+50S	6+00E	<0.1	14	37	85	<0.1	5886	29	3.25
CR69+50S	6+25E	0.2	28	40	96	<0.1	4819	41	2.95
CR69+50S	6+50E	0.3	19	42	153	<0.1	2350	65	2.04
CR69+50S	6+75E	1.2	50	44	633	<0.1	2305	98	4.63
CR69+50S	7+00E	0.8	10	15	65	<0.1	1613	31	0.83
CR69+50S	7+25E	0.7	46	63	180	<0.1	2546	162	5.64
CR73+50S	5+25E	0.1	15	33	116	<0.1	3198	411	1.31
CR73+50S	5+50E	0.2	10	19	72	<0.1	3041	30	0.95
CR73+50S	5+75E	<0.1	11	11	81	<0.1	1463	24	0.98
CR73+50S	6+00E	0.7	31	21	257	<0.1	2064	53	2.44
CR73+50S	6+25E	0.3	17	21	122	<0.1	2159	53	1.72
Min Limit		0.1	1	2	1	0.1	2	1	0.01
Max Reported*		99.9	20000	20000	20000	99.9	9999	9999	99.99
Method		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 93F2601

Client: Metall Mining Inc.
Project: 677 149 Soil

iPL: 93F2601 M
Out: Jun 30, 1993
In: Jun 26, 1993

Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CR44+00N	0+00E	0.5	29	36	71	0.5	1309	284	1.89
CR44+00N	0+25E	0.3	27	35	132	0.6	2544	315	2.15
CR44+00N	0+50E	0.2	22	23	137	0.8	1195	215	1.78
CR44+00N	0+75E	0.8	36	41	234	1.2	7358	299	2.36
CR44+00N	1+00E	0.3	28	31	271	1.5	7478	325	2.41
CR44+00N	1+25E	0.3	24	35	312	2.1	7224	230	2.70
CR44+00N	1+50E	0.3	19	48	202	0.7	6877	387	2.24
CR44+00N	1+75E	0.9	26	37	121	1.2	4346	1172	2.50
CR44+00N	2+00E	1.6	31	48	176	0.5	3961	791	3.41
CR44+00N	2+25E	0.6	20	41	614	2.3	6580	422	2.53
CR44+00N	2+50E	0.4	26	41	323	1.8	5088	336	2.34
CR44+00N	2+75E	1.0	43	57	359	1.8	5322	553	2.95
CR44+00N	3+00E	0.3	20	31	298	0.9	3987	241	2.16
CR44+00N	3+25E	1.0	32	46	477	1.8	4628	443	2.67
CR44+00N	3+50E	<0.1	37	55	475	0.9	3646	491	3.80
CR44+00N	3+75E	<0.1	26	43	273	0.1	4653	139	2.55
CR44+00N	4+00E	<0.1	37	68	335	0.4	5494	1151	3.71
CR46+00N	0+25E	0.4	32	45	190	0.8	1.2%	256	2.97
CR46+00N	0+50E	0.3	59	53	702	5.9	2.4%	505	3.65
CR46+00N	0+75E	0.5	30	41	237	1.5	7146	268	2.65
CR46+00N	1+00E	0.2	24	35	229	0.8	6835	287	2.31
CR46+00N	1+25E	1.0	39	47	555	2.1	2.8%	218	3.17
CR46+00N	1+50E	1.9	110	73	400	1.1	6025	492	3.96
CR46+00N	1+75E	1.9	71	82	352	1.8	4885	777	3.66
CR46+00N	2+00E	1.2	41	53	335	2.0	8509	387	2.79
CR46+00N	2+25E	0.8	29	89	386	1.7	3841	490	2.59
CR46+00N	2+50E	0.2	19	33	172	1.8	7224	1982	2.47
CR46+00N	2+75E	0.1	35	32	427	4.1	1.3%	1044	2.56
CR46+00N	3+00E	0.2	4	52	51	<0.1	5096	51	1.85
CR46+00N	3+25E	0.1	6	57	76	0.4	4331	57	1.49
CR46+00N	3+50E	0.6	27	69	104	0.3	3613	925	2.84
CR46+00N	3+75E	0.4	26	51	218	0.7	2551	323	2.15
CR46+00N	4+00E	1.0	28	39	73	<0.1	1732	367	2.48
CR54+00N	0+00E	<0.1	8	23	82	<0.1	1506	43	1.03
CR54+00N	0+25W	0.1	9	20	106	<0.1	941	110	1.26
CR54+00N	0+50W	<0.1	6	25	110	<0.1	1425	136	0.96
CR54+00N	0+75W	<0.1	4	16	65	<0.1	998	45	0.71
CR54+00N	1+00W	<0.1	4	15	60	<0.1	1263	38	0.74
CR54+00N	1+25W	<0.1	10	34	156	0.3	1990	203	1.37
CR54+00N	1+50W	0.4	17	54	249	1.4	3704	972	2.35
CR54+00N	1+75W	0.4	18	41	205	0.8	3180	789	2.20
CR54+00N	2+00W	<0.1	15	33	185	0.1	7889	90	2.17
CR54+00N	2+25W	0.5	29	32	393	2.6	1.6%	226	2.58
CR54+00N	2+50W	0.3	27	48	410	2.9	2666	353	1.49
CR54+00N	2+75W	0.6	26	34	258	1.2	5815	221	2.22
CR54+00N	3+00W	0.9	34	45	435	2.1	9527	315	2.76
CR54+00N	3+25W	0.3	16	41	216	0.2	4215	125	1.83
CR54+00N	3+50W	0.3	12	30	113	<0.1	3089	44	0.99
CR54+00N	3+75W	0.4	12	36	149	0.1	2129	42	0.98
CR54+00N	4+00W	0.5	19	35	262	1.4	3714	113	1.14
CR54+00N	4+25W	0.3	13	48	334	0.6	2375	238	1.36
CR54+00N	4+50W	0.9	20	47	362	1.3	2782	232	1.78
CR54+00N	4+75W	0.3	17	53	419	2.1	2616	255	1.51
CR54+00N	5+00W	0.6	17	50	387	3.1	2208	807	1.57
CR54+00N	5+25W	0.7	14	57	636	3.9	2816	589	1.62
CR54+00N	5+50W	0.9	18	149	889	8.5	4554	1053	2.08
CR54+00N	5+75W	0.5	7	211	311	2.5	1631	1289	3.45
CR54+00N	6+00W	1.6	20	99	987	4.4	2014	601	2.09
CR54+00N	6+25W	0.3	12	101	644	5.3	1729	222	2.02
CR54+00N	6+50W	<0.1	8	44	385	0.9	2054	213	1.29
CR54+00N	6+75W	0.5	18	76	476	5.0	1969	462	1.06
CR54+00N	7+00W	0.7	21	93	794	5.9	1729	374	1.38
CR54+00N	7+25W	0.7	23	94	1099	6.2	2158	409	1.64
CR54+00N	7+50W	0.5	7	29	91	0.3	3767	35	0.56
CR54+00N	7+75W	0.6	16	40	143	0.3	5517	843	1.52
CR54+00N	8+00W	0.4	9	34	148	0.1	4301	80	1.03
CR54+00N	8+25W	0.7	18	36	161	0.2	3343	190	1.68
CR54+00N	8+50W	0.2	13	36	220	0.2	3570	278	2.09
CR54+00N	8+75W	0.2	17	42	144	0.3	3383	316	2.07
CR54+00N	9+00W	<0.1	7	32	185	0.1	4068	164	1.68
CR54+00N	9+25W	<0.1	23	42	349	1.0	5297	305	3.22
CR54+00N	9+50W	0.8	29	44	79	<0.1	1904	422	2.54
CR54+00N	9+75W	0.6	23	68	159	0.9	2535	797	2.48
CR54+00N	10+00W	0.4	24	51	106	0.3	3159	802	3.01
CR54+00N	10+25W	0.1	17	30	167	0.1	1820	242	2.12
CR54+00N	10+50W	0.1	10	24	160	0.2	1546	174	1.46
CR54+00N	10+75W	0.3	18	25	212	0.2	1688	135	1.70
CR54+00N	11+00W	<0.1	9	27	111	<0.1	1701	103	1.39
Min Limit		0.1	1	2	1	0.1	2	1	0.01
Max Reported*		99.9	20000	20000	20000	99.9	9999	9999	99.99
Method		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 93G0513

Client: Metall Mining Inc. | iPL: 93G0513 M | Out: Jul 08, 1993 | Page 5 of 5 | Section 1 of 1
Project: 677 189 Soil | In: Jul 05, 1993 | Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
XML78+00N	0+25W	0.4	19	37	108	<0.1	4358	49	1.91
XML78+00N	0+50W	0.5	18	40	180	<0.1	3702	48	2.00
XML78+00N	0+75W	0.5	23	43	297	1.2	4745	227	2.09
XML78+00N	1+00W	0.5	29	40	227	0.6	1873	291	2.26
XML78+00N	1+25W	1.6	100	58	1435	2.4	8392	162	4.06
XML78+00N	1+50W	0.2	27	38	191	<0.1	3157	361	2.33
XML78+00N	1+75W	1.0	135	99	154	0.5	567	28	4.38
XML78+00N	2+00W	0.4	18	89	83	<0.1	2821	40	2.51
XML78+00N	2+25W	0.2	20	60	77	<0.1	3548	41	2.36
XML78+00N	2+50W	<0.1	14	42	115	<0.1	1915	184	1.87
XML78+00N	2+75W	0.2	14	27	118	<0.1	1634	80	1.52
XML78+00N	3+00W	0.2	19	32	140	<0.1	2423	222	1.96
XML78+00N	3+25W	0.3	23	33	231	0.4	2409	703	2.13
XML78+00N	3+50W	0.4	30	32	202	1.0	2160	207	2.01
XML78+00N	3+75W	<0.1	15	20	69	0.6	1789	256	1.57
XML78+00N	4+00W	0.2	22	30	72	0.3	1078	413	1.69
XML80+00N	0+00W	0.5	30	43	260	0.8	2283	283	2.38
XML80+00N	0+25W	<0.1	11	16	63	<0.1	2962	32	0.98
XML80+00N	0+50W	0.4	24	41	103	<0.1	3678	154	5.81
XML80+00N	0+75W	0.9	28	41	159	<0.1	8085	52	2.69
XML80+00N	1+00W	0.4	13	34	233	0.3	1819	237	2.10
XML80+00N	1+25W	0.6	11	35	128	1.4	6665	137	2.20
XML80+00N	1+50W	1.5	51	30	149	<0.1	4483	30	4.33
XML80+00N	1+75W	0.3	16	31	275	2.5	4127	245	2.31
XML80+00N	2+00W	1.5	34	32	1681	6.3	4239	62	3.72
XML80+00N	2+25W	0.7	27	56	69	<0.1	847	31	3.13
XML80+00N	2+50W	0.5	30	84	129	<0.1	2572	83	3.30
XML80+00N	2+75W	0.4	11	25	79	<0.1	1883	59	1.02
XML80+00N	3+00W	0.2	21	39	191	<0.1	1164	150	2.61
XML80+00N	3+25W	0.1	17	37	137	<0.1	1252	186	2.30
XML80+00N	3+50W	<0.1	8	37	117	<0.1	872	172	1.44
XML80+00N	3+75W	0.1	13	26	97	0.5	1535	426	1.33
XML80+00N	4+00W	0.1	14	32	117	<0.1	1482	138	1.69

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %

Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS

iPL 93G0513

Client: Metall Mining Inc. | iPL: 93G0513 M | Out: Jul 08, 1993 | Page 3 of 5 | Section 1 of 1
Project: 677 189 Soil | In: Jul 05, 1993 | Certified BC Assayer: David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
N L79+50S 2+75E	<0.1	18	31	134	0.2	1721	66	1.47
N L79+50S 3+00E	0.5	41	55	190	<0.1	2731	82	2.04
N L79+50S 3+50E	1.0	81	195	249	0.6	3700	67	3.99
N L79+50S 4+00E	1.1	34	60	377	<0.1	2928	80	2.54
N L79+50S 4+25E	0.6	64	52	1121	0.8	4286	84	3.30
N L79+50S 4+75E	0.2	33	60	222	<0.1	4199	40	2.97
N L79+50S 5+00E	<0.1	16	34	92	<0.1	3056	68	1.71
N L79+50S 5+25E	0.1	15	49	107	<0.1	3795	39	2.12
N L79+50S 5+50E	<0.1	28	55	172	<0.1	3498	36	2.47
N L79+50S 5+75E	0.1	52	56	198	<0.1	4100	228	5.49
N L79+50S 6+00E	<0.1	44	39	103	<0.1	3538	142	3.25
N L79+50S 6+50E	<0.1	118	23	261	<0.1	2313	110	4.55
N L79+50S 6+75E	2.2	153	32	402	<0.1	2679	405	6.20
N L79+50S 7+00E	1.7	14	13	70	<0.1	1752	53	1.21
N L79+50S 7+25E	0.2	28	20	74	<0.1	1929	34	1.81
N L79+50S 7+50E	0.3	11	17	80	<0.1	2034	41	1.00
N L79+50S 7+75E	<0.1	5	8	28	<0.1	1333	23	0.41
N L79+50S 8+00E	<0.1	13	15	100	<0.1	1579	33	1.16
N L79+50S 8+25E	<0.1	16	27	126	<0.1	1707	52	1.58
N L79+50S 8+50E	<0.1	24	26	183	1.3	2625	212	1.68
N L79+50S 8+75E	0.3	26	19	286	1.4	1258	226	1.70
N L81+50S 0+00E	<0.1	22	26	203	0.1	1055	628	2.40
N L81+50S 0+25E	<0.1	18	27	202	<0.1	1324	237	3.03
N L81+50S 0+50E	<0.1	15	22	139	<0.1	1123	117	1.96
N L81+50S 0+75E	<0.1	27	23	207	<0.1	1206	166	2.67
N L81+50S 1+00E	<0.1	17	23	161	<0.1	1121	754	2.13
N L81+50S 1+25E	0.8	40	31	324	0.4	1111	294	2.84
N L81+50S 1+50E	0.8	75	73	1052	10.1	2786	368	3.09
N L81+50S 1+75E	0.8	52	50	926	3.4	2397	192	3.01
N L81+50S 2+00E	0.5	41	46	455	2.8	1673	133	2.17
N L81+50S 2+25E	<0.1	23	34	225	<0.1	2023	51	1.48
N L81+50S 2+50E	4.1	213	54	742	2.8	2008	57	3.59
N L81+50S 2+75E	0.8	59	103	255	1.3	2248	68	2.13
N L81+50S 3+00E	<0.1	40	46	132	0.5	1411	39	1.15
N L81+50S 3+25E	4.1	136	162	354	2.1	4122	40	2.41
N L81+50S 3+50E	0.3	29	42	257	<0.1	2636	69	1.73
N L81+50S 4+50E	1.0	32	39	330	0.3	2784	43	2.04
N L81+50S 4+75E	1.1	38	25	465	0.1	3473	43	2.78
N L81+50S 5+00E	0.3	54	142	678	0.3	3003	64	2.98

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
N L81+50S 5+25E	0.9	84	438	1896	19.0	4648	517	4.34
N L81+50S 5+50E	0.8	24	27	99	<0.1	2372	28	2.30
N L81+50S 5+75E	0.9	21	21	87	<0.1	2218	53	1.63
N L81+50S 6+00E	0.5	33	15	166	<0.1	1717	79	2.04
N L81+50S 6+25E	0.8	34	32	87	<0.1	3518	23	2.19
N L81+50S 6+50E	0.9	78	28	199	<0.1	2807	39	3.44
N L81+50S 6+75E	0.6	30	28	92	<0.1	2729	22	1.74
N L81+50S 7+00E	0.1	30	21	113	0.4	2692	67	2.09
N L81+50S 7+25E	0.8	40	30	125	<0.1	2696	114	2.61
N L81+50S 7+50E	1.8	21	20	167	0.9	2615	49	1.43
N L81+50S 7+75E	1.2	22	22	194	0.2	2361	36	1.34
N L81+50S 8+00E	0.1	38	42	210	<0.1	3242	288	3.43
XML74+00N 0+00W	2.0	108	29	386	3.1	740	211	7.05
XML74+00N 0+25W	1.3	94	27	141	1.6	463	197	6.90
XML74+00N 0+50W	0.2	49	32	90	<0.1	2965	44	2.63
XML74+00N 1+00W	<0.1	13	23	292	0.1	1564	100	1.48
XML74+00N 1+25W	<0.1	13	27	201	0.1	1532	328	1.49
XML74+00N 1+50W	<0.1	9	21	140	<0.1	1590	121	1.16
XML74+00N 2+25W	<0.1	24	29	341	2.3	1760	420	2.22
XML74+00N 2+50W	<0.1	20	34	224	1.5	3975	510	2.52
XML74+00N 2+75W	<0.1	17	29	157	<0.1	7115	113	1.80
XML74+00N 3+00W	<0.1	12	36	108	<0.1	1606	49	1.14
XML74+00N 3+25W	<0.1	16	27	198	<0.1	1213	119	1.65
XML74+00N 3+50W	0.5	26	38	1421	6.6	2442	405	2.05
XML76+00N 0+25W	0.4	25	33	210	0.8	2269	235	2.04
XML76+00N 0+50W	1.5	34	27	143	0.4	1170	87	3.62
XML76+00N 0+75W	3.0	107	25	83	1.9	493	21	4.00
XML76+00N 1+00W	0.4	18	27	157	0.3	2116	107	1.92
XML76+00N 1+25W	0.2	18	27	169	0.6	1545	178	1.77
XML76+00N 1+50W	0.1	21	37	224	<0.1	3452	58	2.13
XML76+00N 1+75W	0.1	15	51	135	<0.1	3606	40	1.72
XML76+00N 2+00W	0.4	23	36	248	0.1	6081	228	2.03
XML76+00N 2+25W	0.5	89	41	415	1.3	8044	58	2.57
XML76+00N 2+50W	0.4	17	62	159	<0.1	3985	70	1.73
XML76+00N 2+75W	0.6	26	37	149	0.2	1927	538	3.27
XML76+00N 3+00W	<0.1	14	30	126	<0.1	970	121	1.65
XML76+00N 3+25W	<0.1	10	31	146	<0.1	1320	492	2.01
XML76+00N 3+50W	<0.1	18	29	74	0.3	1055	348	3.29
XML78+00N 0+00W	6.6	57	52	215	<0.1	794	135	6.37

	Ag	Cu	Pb	Zn	Cd	Ba	Mn	Fe
Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 93G0513

Client: Metall Mining Inc.
Project: 677 189 Soil

iPL: 93G0513 M
Out: Jul 08, 1993
In: Jul 05, 1993

Certified BC Assayer: David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CRL48+00N 0+00E	<0.1	30	51	219	<0.1	2770	304	3.28
CRL48+00N 0+25E	<0.1	29	42	168	<0.1	2618	164	3.04
CRL48+00N 0+50E	0.1	15	32	133	<0.1	2717	104	3.06
CRL48+00N 0+75E	<0.1	27	27	239	<0.1	1.8%	30	2.58
CRL48+00N 1+00E	<0.1	19	34	111	<0.1	1804	122	2.55
CRL48+00N 1+25E	<0.1	34	79	59	<0.1	1732	339	4.49
CRL48+00N 1+50E	<0.1	45	71	513	<0.1	1124	94	3.01
CRL48+00N 1+75E	0.8	14	13	154	<0.1	668	82	1.08
CRL48+00N 2+00E	0.3	23	44	181	<0.1	4192	94	2.91
CRL48+00N 2+25E	<0.1	43	31	89	<0.1	6788	71	4.34
CRL48+00N 2+50E	0.1	35	29	67	<0.1	1939	82	4.58
CRL48+00N 2+75E	0.1	26	46	95	<0.1	2048	78	2.57
CRL48+00N 3+00E	0.2	22	36	79	<0.1	2267	96	2.40
CRL48+00N 3+25E	0.5	28	53	79	<0.1	3451	154	3.51
CRL48+00N 3+50E	<0.1	28	24	79	<0.1	1679	164	2.41
CRL48+00N 3+75E	0.1	18	28	75	<0.1	2011	326	1.89
CRL48+00N 4+00E	<0.1	16	30	62	<0.1	2040	104	1.55
CRL50+00N 0+00E	1.6	28	63	307	0.3	1569	1710	4.08
CRL50+00N 0+25E	0.1	15	47	271	0.6	1534	388	2.24
CRL50+00N 0+50E	0.3	13	63	195	0.1	1551	428	2.04
CRL50+00N 0+75E	<0.1	36	62	451	<0.1	1824	202	4.05
CRL50+00N 1+00E	0.1	14	39	293	0.3	4846	609	2.25
CRL50+00N 1+25E	2.7	46	106	717	7.2	1.4%	792	3.19
CRL50+00N 1+50E	1.0	42	56	465	3.7	6085	306	3.46
CRL50+00N 1+75E	1.2	30	124	720	3.1	7811	1571	4.47
CRL50+00N 2+00E	<0.1	29	36	223	0.4	5891	163	3.59
CRL50+00N 2+25E	0.9	31	51	296	1.7	5501	476	2.68
CRL50+00N 2+50E	<0.1	20	37	122	<0.1	3573	131	1.99
CRL50+00N 2+75E	0.5	28	48	108	<0.1	4954	98	2.85
CRL50+00N 3+00E	0.2	21	38	182	<0.1	2646	257	2.00
CRL50+00N 3+25E	1.2	27	75	116	<0.1	3617	499	2.85
CRL50+00N 3+50E	0.8	23	52	89	<0.1	4337	504	2.82
CRL50+00N 3+75E	1.1	21	66	109	<0.1	5002	493	2.54
CRL50+00N 4+00E	0.6	28	82	129	0.2	8435	563	2.97
CRL52+00N 0+00E	<0.1	10	29	137	<0.1	2303	104	1.67
CRL52+00N 0+25E	<0.1	7	21	132	<0.1	1803	107	1.30
CRL52+00N 0+50E	<0.1	8	22	117	<0.1	1708	54	1.16
CRL52+00N 0+75E	<0.1	13	40	149	<0.1	2479	96	1.95
CRL52+00N 1+00E	<0.1	10	26	539	3.2	1705	1070	2.60

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CRL52+00N 1+25E	0.2	28	24	255	1.1	4999	392	3.41
CRL52+00N 1+50E	<0.1	19	29	326	<0.1	8513	191	2.90
CRL52+00N 1+75E	0.2	25	30	157	0.7	7363	130	2.82
CRL52+00N 2+00E	0.9	45	23	93	<0.1	3602	96	4.17
CRL52+00N 2+25E	0.5	30	27	88	<0.1	4686	89	3.84
CRL52+00N 2+50E	<0.1	13	29	128	<0.1	2801	139	1.45
CRL52+00N 2+75E	0.5	26	38	109	<0.1	3620	348	2.61
CRL52+00N 3+00E	0.8	38	43	171	0.6	3813	457	2.85
CRL52+00N 3+25E	0.5	22	34	78	<0.1	2523	614	2.11
CRL52+00N 3+50E	<0.1	25	34	401	0.6	2293	95	1.91
CRL52+00N 3+75E	<0.1	22	30	280	0.8	2541	206	1.80
CRL52+00N 4+00E	<0.1	15	25	222	0.2	2965	293	1.90
N L73+50S 6+00E	0.3	38	24	284	<0.1	2372	58	2.79
N L73+50S 6+25E	0.2	21	14	127	<0.1	2377	55	1.82
N L73+50S 6+50E	0.2	18	17	176	<0.1	2251	66	1.88
N L73+50S 6+75E	0.7	40	53	270	<0.1	2317	39	11.65
N L73+50S 7+00E	0.2	21	55	176	<0.1	4012	35	3.35
N L73+50S 7+25E	0.2	28	21	214	<0.1	2730	49	2.51
N L73+50S 7+50E	0.6	28	35	430	1.2	3199	351	5.04
N L75+50S 5+25E	1.3	12	28	48	<0.1	3985	20	1.58
N L75+50S 5+50E	0.7	28	36	84	<0.1	2752	25	3.91
N L75+50S 5+75E	1.5	21	43	62	<0.1	3833	31	2.37
N L75+50S 6+00E	1.2	45	38	150	<0.1	2868	51	4.27
N L75+50S 6+25E	0.2	18	15	69	<0.1	2406	23	1.16
N L75+50S 6+50E	1.4	78	51	402	0.7	2524	248	5.29
N L75+50S 6+75E	0.7	28	34	167	<0.1	2498	48	2.60
N L75+50S 7+25E	0.4	35	25	187	<0.1	2426	42	2.78
N L75+50S 7+50E	0.5	28	31	152	<0.1	3537	44	3.09
N L75+50S 7+75E	0.3	34	26	221	<0.1	2574	82	3.10
N L79+50S 0+00E	<0.1	17	22	114	<0.1	1031	210	2.77
N L79+50S 0+25E	<0.1	22	30	123	<0.1	951	211	2.97
N L79+50S 0+75E	0.6	44	34	126	<0.1	1412	350	2.25
N L79+50S 1+00E	<0.1	21	22	119	<0.1	1117	158	1.99
N L79+50S 1+25E	<0.1	25	29	110	<0.1	1030	244	2.47
N L79+50S 1+50E	<0.1	26	25	91	<0.1	870	149	2.57
N L79+50S 1+75E	0.7	29	47	260	1.2	837	295	1.85
N L79+50S 2+00E	<0.1	21	31	144	<0.1	1076	172	1.88
N L79+50S 2+25E	0.2	23	36	156	<0.1	2049	130	2.01
N L79+50S 2+50E	1.5	24	82	68	1.0	3801	35	2.10

	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 93G0602

Client: Metall Mining Inc. | iPL: 93G0602 M | Out: Jul 08, 1993 | Page 1 of 5 | Section 1 of 1
Project: 677 193 Soil | In: Jul 06, 1993 | Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
CL 42+00N	0+00E	1.4	31	79	834	7.0	2333	557	2.74
CL 42+00N	0+25E	0.4	23	31	302	0.4	3190	93	2.65
CL 42+00N	0+50E	0.9	33	50	206	0.9	6694	461	2.49
CL 42+00N	0+75E	0.5	30	36	380	1.7	3096	175	2.04
CL 42+00N	1+00E	1.2	28	45	354	1.6	5760	463	2.50
CL 42+00N	1+25E	0.5	37	35	327	0.8	5485	269	3.13
CL 42+00N	1+50E	0.7	21	49	285	1.1	3840	882	2.94
CL 42+00N	1+75E	0.5	13	43	379	2.4	3780	1254	2.62
CL 42+00N	2+00E	0.3	37	18	392	4.7	1612	337	1.86
CL 42+00N	2+25E	0.3	19	33	344	1.4	3238	273	2.27
CL 42+00N	2+50E	0.4	23	37	207	<0.1	3064	133	2.75
CL 42+00N	2+75E	0.5	30	31	256	0.1	4146	289	3.42
CL 42+00N	3+00E	0.6	20	37	131	<0.1	2059	60	1.66
CL 42+00N	3+25E	0.3	20	37	206	0.1	2559	90	2.31
CL 42+00N	3+50E	0.3	21	37	211	<0.1	2604	113	2.39
CL 42+00N	3+75E	0.3	22	31	244	<0.1	1997	80	2.18
CL 42+00N	4+00E	0.6	23	36	92	0.1	1995	34	3.33
CL 44+00N	0+25W	0.9	37	39	110	0.3	2279	263	2.32
CL 44+00N	0+50W	0.8	34	49	179	0.9	8730	384	2.99
CL 44+00N	0+75W	0.9	32	49	173	1.0	5236	420	2.56
CL 44+00N	1+00W	1.5	45	63	286	1.8	4497	559	2.52
CL 44+00N	1+25W	1.5	26	61	214	0.2	1542	609	2.85
CL 44+00N	1+50W	1.5	53	56	596	2.4	2128	630	2.58
CL 44+00N	1+75W	1.6	33	51	319	0.7	1817	528	2.76
CL 44+00N	2+00W	0.2	45	127	159	<0.1	1366	298	4.83
CL 44+00N	2+25W	0.4	55	67	168	<0.1	2539	619	3.54
CL 44+00N	2+50W	0.7	34	44	97	0.2	1998	1018	2.48
CL 44+00N	2+75W	1.1	33	46	91	<0.1	2183	680	2.68
CL 44+00N	3+00W	1.2	27	66	173	0.5	1798	1035	2.41
CL 44+00N	3+25W	0.9	31	73	264	2.9	2281	1536	3.38
CL 44+00N	3+50W	0.6	34	54	134	1.0	2067	1050	2.72
CL 44+00N	3+75W	0.9	27	48	111	0.9	1606	1003	2.47
CL 44+00N	4+00W	0.2	26	46	113	0.2	1965	870	2.46
CL 44+00N	4+25W	0.3	36	49	60	<0.1	1534	187	3.26
CL 44+00N	4+50W	0.6	37	40	67	0.2	2133	202	2.74
CL 44+00N	4+75W	0.2	30	30	109	<0.1	1033	61	2.19
CL 44+00N	5+00W	<0.1	23	18	138	0.1	604	30	1.41
CL 44+00N	5+25W	<0.1	24	28	90	<0.1	885	86	2.27
CL 44+00N	5+50W	<0.1	34	27	101	<0.1	840	82	2.61
CL 44+00N	5+75W	2.8	44	62	52	0.1	1445	362	3.06
CL 44+00N	6+00W	1.1	37	59	35	<0.1	1488	644	3.47
CL 44+00N	6+25W	0.8	32	58	42	<0.1	1654	749	4.08
CL 44+00N	6+50W	0.5	28	45	32	<0.1	1455	572	3.77
CL 44+00N	6+75W	0.5	39	48	105	<0.1	2290	426	3.43
CL 44+00N	7+00W	0.7	22	31	263	2.6	1694	1008	1.77
CL 44+00N	7+25W	0.5	22	34	172	0.2	2672	287	2.14
CL 44+00N	7+50W	0.7	29	38	172	0.3	1374	236	2.25
Pie CL 98+00N	1+25W	0.4	34	34	203	1.0	1416	139	1.80
Pie CL 98+00N	1+50W	0.3	22	27	249	0.4	1032	99	1.92
Pie CL 98+00N	1+75W	0.4	23	25	171	0.8	1034	105	1.54
Pie CL 98+00N	2+00W	0.2	20	36	159	<0.1	1252	59	1.72
Pie CL 98+00N	2+25W	0.1	13	30	114	<0.1	1307	53	1.37
Pie CL 98+00N	2+50W	0.6	19	25	178	<0.1	2749	47	1.67
Pie CL 98+00N	2+75W	0.3	11	18	62	<0.1	1259	42	0.99
Pie CL 98+00N	3+00W	0.1	12	19	74	<0.1	1677	52	1.03
Pie CL 98+00N	3+25W	0.3	14	25	92	<0.1	1738	68	1.38
Pie CL 98+00N	3+50W	0.2	16	28	131	<0.1	1994	67	1.51
Pie CL 98+00N	3+75W	0.2	20	35	167	<0.1	2585	48	2.01
Pie CL 98+00N	4+00W	0.6	26	39	207	<0.1	3122	43	2.47
Pie CL 98+00N	4+25W	0.5	23	35	266	<0.1	2755	341	4.18
Pie CL 98+00N	4+50W	0.9	54	33	288	<0.1	3704	85	4.40
Pie CL 98+00N	4+75W	0.8	24	28	73	<0.1	3084	91	1.86
Pie CL 98+00N	5+00W	0.6	26	26	108	<0.1	2721	53	1.54
Pie CL 98+00N	5+25W	0.6	30	35	109	<0.1	3983	40	3.00
Pie CL 98+00N	5+50W	0.3	24	33	109	<0.1	4157	58	1.85
Pie CL 98+00N	5+75W	0.1	16	20	56	<0.1	3407	49	0.98
Pie CL 98+00N	6+00W	0.5	18	33	75	<0.1	4014	51	1.69
Pie CL100+00N	0+75W	0.4	20	55	277	<0.1	862	69	2.36
Pie CL100+00N	1+25W	0.5	20	38	130	0.6	942	89	1.91
Pie CL100+00N	1+50W	0.6	18	40	126	<0.1	1298	88	1.83
Pie CL100+00N	1+75W	0.6	16	47	108	<0.1	1076	71	1.70
Pie CL100+00N	2+00W	0.3	14	42	125	0.1	1244	164	1.89
Pie CL100+00N	2+25W	0.4	22	31	170	<0.1	3989	30	2.74
Pie CL100+00N	2+50W	0.4	21	25	167	2.3	2548	68	1.82
Pie CL100+00N	2+75W	0.5	24	35	289	<0.1	3137	48	2.37
Pie CL100+00N	3+00W	0.7	23	34	230	<0.1	2100	97	2.64
Pie CL100+00N	3+25W	0.6	21	39	160	<0.1	2263	62	2.40
Pie CL100+00N	3+50W	0.5	24	40	202	<0.1	2612	69	2.42
Min Limit		0.1	1	2	1	0.1	2	1	0.01
Max Reported*		99.9	20000	20000	20000	99.9	9999	9999	99.99
Method		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 93G1301

Client: Metall Mining Inc. | iPL: 93G1301 M | Out: Jul 15, 1993 | Page 5 of 6 | Section 1 of 1
Project: 677 231 Soil | In: Jul 13, 1993 | Certified BC Assayer: David Chiu

Sample Name				Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
XM	L66+00N	3+50W	S	<0.1	17	36	123	<0.1	6156	34	1.69
XM	L66+00N	3+75W	S	1.1	22	41	177	<0.1	2544	43	2.72
XM	L66+00N	4+00W	S	0.4	25	35	101	0.6	4824	34	2.97
XM	L66+00N	4+25W	S	<0.1	36	20	96	<0.1	2765	81	1.14
XM	L66+00N	4+50W	S	<0.1	15	21	152	<0.1	1097	81	1.28
XM	L66+00N	4+75W	S	<0.1	16	26	150	<0.1	2183	49	1.33
XM	L66+00N	5+00W	S	<0.1	18	26	129	<0.1	1931	64	1.49
XM	L68+00N	0+50W	S	2.1	75	34	233	1.2	2614	170	5.06
XM	L68+00N	0+75W	S	1.3	63	47	172	1.2	3526	57	3.97
XM	L68+00N	1+00W	S	0.5	59	40	134	<0.1	4744	41	4.26
XM	L68+00N	1+25W	S	0.5	20	39	34	<0.1	8813	14	1.30
XM	L68+00N	1+50W	S	0.1	30	39	19	<0.1	9691	12	0.83
XM	L68+00N	1+75W	S	<0.1	10	47	23	<0.1	4665	12	0.98
XM	L68+00N	2+00W	S	0.7	24	107	262	<0.1	617	16	4.36
XM	L68+00N	2+25W	S	<0.1	23	38	169	<0.1	4268	42	1.63
XM	L68+00N	2+50W	S	<0.1	18	33	107	<0.1	3289	60	1.63
XM	L68+00N	2+75W	S	<0.1	19	43	407	<0.1	3493	89	2.27
XM	L68+00N	3+00W	S	<0.1	18	32	229	<0.1	1289	68	1.85
XM	L68+00N	3+25W	S	<0.1	14	28	147	<0.1	1010	70	1.47
XM	L68+00N	3+50W	S	<0.1	10	21	78	<0.1	998	51	1.04
XM	L68+00N	3+75W	S	<0.1	7	21	58	<0.1	1061	35	0.71
XM	L68+00N	4+00W	S	<0.1	6	24	45	<0.1	1222	37	0.79
XM	L68+00N	4+25W	S	<0.1	5	24	55	<0.1	1297	31	0.44
XM	L68+00N	4+50W	S	<0.1	4	24	28	<0.1	1126	30	0.31
XM	L68+00N	4+75W	S	0.4	6	24	181	<0.1	2106	82	0.83
XM	L68+00N	5+00W	S	<0.1	12	36	138	<0.1	1244	63	1.41
XM	L70+00N	0+25W	S	0.6	26	94	721	3.6	3447	200	1.57
XM	L70+00N	0+50W	S	1.4	24	53	146	<0.1	5347	44	3.19
XM	L70+00N	0+75W	S	0.3	43	30	206	<0.1	2262	47	3.67
XM	L70+00N	1+00W	S	0.1	11	31	71	<0.1	9696	21	1.13
XM	L70+00N	1+25W	S	0.4	10	35	39	<0.1	8381	16	0.96
XM	L70+00N	1+50W	S	0.1	8	38	79	<0.1	3151	28	1.12
XM	L70+00N	1+75W	S	<0.1	7	31	62	<0.1	2985	27	0.88
XM	L70+00N	2+00W	S	0.3	15	73	156	0.3	8096	28	1.89
XM	L70+00N	2+25W	S	0.1	18	43	367	0.8	3214	159	3.06
XM	L70+00N	2+50W	S	<0.1	18	36	277	<0.1	2045	78	2.70
XM	L70+00N	2+75W	S	0.4	31	42	486	2.7	1909	356	2.82
XM	L70+00N	3+00W	S	0.1	26	37	395	2.2	1646	385	1.91
XM	L70+00N	3+25W	S	<0.1	16	39	250	0.1	1739	93	1.81
XM	L70+00N	3+50W	S	0.1	18	38	126	<0.1	2829	90	2.47
XM	L70+00N	3+75W	S	0.1	11	36	106	<0.1	1789	94	1.95
XM	L70+00N	4+00W	S	0.2	15	49	183	<0.1	1972	189	2.77
XM	L70+00N	4+25W	S	<0.1	16	45	198	<0.1	2084	539	2.71
XM	L70+00N	4+50W	S	0.2	16	51	162	<0.1	5073	214	2.69
XM	L70+00N	4+75W	S	0.2	24	59	173	<0.1	5689	283	3.79
XM	L70+00N	5+00W	S	0.9	20	49	114	<0.1	3671	477	6.50
XM	L72+00N	0+00E	S	0.6	29	69	210	<0.1	5304	47	2.85
XM	L72+00N	0+25E	S	0.7	16	40	62	<0.1	5979	39	1.59
XM	L72+00N	0+50E	S	1.9	56	33	269	1.8	4205	175	4.07
XM	L72+00N	0+25W	S	17.2	26	50	106	<0.1	4057	40	2.68
XM	L72+00N	0+50W	S	0.2	31	43	116	<0.1	3351	40	2.68
XM	L72+00N	0+75W	S	0.1	34	46	86	<0.1	2549	89	3.02
XM	L72+00N	1+00W	S	0.6	35	50	182	<0.1	1870	69	2.66
XM	L72+00N	1+25W	S	0.3	8	27	114	<0.1	2953	41	1.08
XM	L72+00N	1+50W	S	0.1	15	29	278	<0.1	1548	55	1.93
XM	L72+00N	1+75W	S	0.9	43	30	3321	6.4	1494	3688	9.70
XM	L72+00N	2+00W	S	0.1	15	113	189	0.1	2615	939	1.95
XM	L72+00N	2+25W	S	0.3	25	42	138	0.2	6564	176	2.96
XM	L72+00N	2+50W	S	0.2	25	51	155	0.2	4075	277	3.35
XM	L72+00N	2+75W	S	0.1	5	23	28	<0.1	2079	19	0.57
XM	L72+00N	3+00W	S	<0.1	13	43	118	<0.1	1135	182	1.84
XM	L72+00N	3+25W	S	<0.1	13	38	122	<0.1	975	80	1.71
XM	L72+00N	3+50W	S	0.1	14	42	133	<0.1	992	264	2.09
XM	L72+00N	3+75W	S	0.2	15	50	119	<0.1	973	286	3.06
XM	L72+00N	4+00W	S	0.2	10	34	95	<0.1	1038	57	1.36
XM	L72+00N	4+25W	S	<0.1	14	34	133	<0.1	1743	113	2.07
XM	L72+00N	4+50W	S	<0.1	15	33	160	0.1	2064	73	1.78
XM	L72+00N	4+75W	S	0.1	7	28	131	0.4	2339	153	1.33
XM	L72+00N	5+00W	S	<0.1	11	39	126	0.4	1950	277	1.81
XM	L74+00N	3+75W	S	0.4	13	29	152	<0.1	1272	121	1.85
XM	L74+00N	4+00W	S	0.1	17	34	122	<0.1	1187	96	1.74
XM	L74+00N	4+25W	S	1.1	34	38	543	4.7	2130	667	2.67
XM	L74+00N	4+50W	S	1.0	35	49	31	0.9	2162	790	3.24
XM	L74+00N	4+75W	S	0.1	14	43	229	0.7	1140	439	1.99
XM	L74+00N	5+00W	S	0.3	22	45	333	1.2	1221	379	2.15
Min Limit				0.1	1	2	1	0.1	2	1	0.01
Max Reported*				99.9	20000	20000	20000	99.9	9999	9999	99.99
Method				ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS

iPL 93G1301

Client: Metall Mining Inc. | iPL: 93G1301 M | Out: Jul 15, 1993 | Page 3 of 6 | Section 1 of 1
Project: 677 231 Soil | In: Jul 13, 1993 | Certified BC Assayer: David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
Pie D L21+00N 0+50E	0.5	30	37	242	0.4	7158	108	2.54
Pie D L21+00N 0+75E	0.5	31	49	189	0.3	6615	100	2.69
Pie D L21+00N 1+00E	0.2	18	42	91	<0.1	6525	61	1.61
Pie D L21+00N 1+50E	0.2	44	22	337	2.0	5114	223	4.76
Pie D L21+00N 1+75E	0.7	65	41	401	1.4	6751	566	5.21
Pie D L21+00N 2+00E	0.2	48	33	262	<0.1	6165	370	4.60
Pie D L21+00N 2+25E	0.1	50	39	312	<0.1	4623	350	4.91
Pie D L21+00N 2+50E	<0.1	28	40	179	<0.1	3801	685	3.23
Pie D L21+00N 2+75E	<0.1	35	36	279	<0.1	3062	193	3.66
Pie D L21+00N 3+00E	<0.1	31	35	249	0.5	4208	224	3.20
Pie D L22+00N 0+00E	1.1	25	113	123	<0.1	4442	27	2.26
Pie D L22+00N 0+25E	0.4	17	43	87	<0.1	5667	27	1.56
Pie D L22+00N 0+50E	0.1	32	37	220	0.5	5644	184	3.44
Pie D L22+00N 0+75E	<0.1	24	37	130	<0.1	5524	133	2.97
Pie D L22+00N 1+00E	<0.1	48	82	401	1.6	6928	166	5.44
Pie D L22+00N 1+25E	0.1	46	40	269	<0.1	6032	627	5.90
Pie D L22+00N 1+50E	<0.1	26	39	180	<0.1	3730	133	3.13
Pie D L22+00N 1+75E	<0.1	40	59	480	<0.1	3694	1425	5.70
Pie D L22+00N 2+00E	<0.1	18	33	146	<0.1	2032	95	2.20
Pie D L22+00N 2+25E	<0.1	47	42	275	<0.1	3431	334	4.65
Pie D L22+00N 2+50E	0.9	56	52	399	<0.1	3915	350	4.94
Pie D L22+00N 2+75E	0.4	12	49	70	<0.1	3453	21	1.38
Pie D L22+00N 3+00E	<0.1	8	21	46	<0.1	4283	17	0.80
Pie D L22+00N 3+25E	<0.1	6	23	62	<0.1	3824	20	0.74
Pie D L22+00N 3+50E	0.3	18	28	135	<0.1	2377	78	1.90
Pie D L22+00N 3+75E	0.9	11	28	126	<0.1	1866	91	2.50
Pie D L22+00N 4+00E	<0.1	24	31	236	<0.1	2618	52	2.08
Pie D L24+00N 0+50E	0.2	20	37	147	0.2	7229	64	1.53
Pie D L24+00N 0+75E	0.1	17	34	109	<0.1	4844	81	1.49
Pie D L24+00N 1+00E	0.3	21	36	189	<0.1	2591	65	2.40
Pie D L24+00N 1+25E	0.2	7	24	47	<0.1	3706	36	0.96
Pie D L24+00N 1+50E	<0.1	42	43	305	<0.1	6848	232	3.61
Pie D L24+00N 1+75E	<0.1	28	41	176	<0.1	5767	149	3.09
Pie D L24+00N 2+00E	<0.1	8	24	60	<0.1	3416	37	1.01
Pie D L24+00N 2+25E	0.1	19	31	180	<0.1	4286	81	2.10
Pie D L24+00N 2+50E	0.1	34	38	229	<0.1	2884	640	5.21
Pie D L24+00N 2+75E	0.1	15	32	142	<0.1	1800	49	1.68
Pie D L24+00N 3+00E	0.4	20	35	190	<0.1	2788	51	1.79
Pie D L24+00N 3+25E	0.1	10	33	123	<0.1	5962	21	1.10

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
Pie D L24+00N 3+50E	0.3	19	38	221	<0.1	2828	60	2.01
Pie D L24+00N 3+75E	0.2	16	24	231	<0.1	3471	43	1.57
Pie D L24+00N 4+00E	<0.1	23	27	396	0.2	3365	73	3.02
CR L42+00N 0+25W	0.2	90	48	240	1.2	1583	153	2.41
CR L42+00N 0+50W	0.6	46	38	247	1.5	1720	245	2.58
CR L42+00N 0+75W	0.8	99	53	274	1.4	1609	209	3.08
CR L42+00N 1+00W	<0.1	26	32	187	0.5	2261	94	2.24
CR L42+00N 1+25W	0.9	41	61	234	1.2	7626	457	2.75
CR L42+00N 1+50W	0.6	30	39	279	1.8	2302	235	2.53
CR L42+00N 1+75W	0.4	30	32	194	1.1	2295	234	2.34
CR L42+00N 2+00W	0.8	38	50	156	1.9	3335	900	2.69
CR L42+00N 2+25W	1.9	83	100	489	3.2	4833	316	4.06
CR L42+00N 2+50W	0.7	45	67	359	0.8	8822	239	3.60
CR L42+00N 2+75W	<0.1	16	36	112	0.2	3038	167	2.16
CR L42+00N 3+00W	0.6	37	37	388	2.2	1.4%	181	2.36
CR L42+00N 3+25W	0.5	33	38	317	2.1	1.8%	175	2.62
CR L42+00N 3+50W	1.1	36	32	423	2.6	3.6%	145	2.59
CR L42+00N 3+75W	0.8	38	29	275	1.4	1.7%	134	2.60
CR L42+00N 4+00W	0.6	37	37	319	1.2	6899	192	2.80
CR L42+00N 4+25W	1.3	37	47	308	1.7	2695	488	2.81
CR L42+00N 4+50W	0.9	32	43	207	1.0	4031	253	2.62
CR L42+00N 4+75W	0.4	30	41	139	0.7	1267	530	2.20
CR L42+00N 5+00W	0.5	23	41	219	1.0	1518	433	2.51
CR L42+00N 5+25W	0.9	36	46	123	0.5	1722	354	2.56
CR L42+00N 5+50W	<0.1	15	35	220	0.3	1626	180	1.93
CR L42+00N 5+75W	0.8	30	56	187	0.5	1820	454	2.84
CR L42+00N 6+00W	1.1	39	51	85	0.2	1820	256	2.55
CR L42+00N 6+25W	0.9	29	42	116	<0.1	1566	337	2.48
CR L42+00N 6+50W	0.2	17	46	140	0.5	2309	282	2.23
CR L42+00N 6+75W	0.8	51	44	699	7.2	2074	590	2.14
XM L66+00N 1+00W	1.0	76	37	231	1.6	3330	148	4.83
XM L66+00N 1+25W	0.4	13	23	38	<0.1	3727	28	0.78
XM L66+00N 1+50W	0.7	26	37	59	<0.1	2358	29	2.59
XM L66+00N 1+75W	<0.1	20	32	67	<0.1	2748	38	1.87
XM L66+00N 2+25W	0.6	15	34	81	<0.1	2941	50	1.35
XM L66+00N 2+50W	0.1	11	56	115	<0.1	7444	17	1.65
XM L66+00N 2+75W	<0.1	3	50	51	<0.1	7123	16	0.49
XM L66+00N 3+00W	<0.1	13	25	69	<0.1	5637	37	1.01
XM L66+00N 3+25W	<0.1	16	23	111	<0.1	4172	52	2.20

	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Cd ppm	Ba ppm	Mn ppm	Fe %
Min Limit	0.1	1	2	1	0.1	2	1	0.01
Max Reported*	99.9	20000	20000	20000	99.9	9999	9999	99.99
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

COMP: METALL MINING
PROJ: 677
ATTN: GARY WELLS

MIN-EN LABS — WHOLE ROCK ANALYSIS

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0326-RL1
DATE: 93/07/16
* ROCK * (ACT:F26)

SAMPLE NUMBER	AL2O3 %	BA %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	SR %	TIO2 %	LOI %	S %
BCS 9827	12.49	.085	1.12	1.77	2.75	.45	.02	.06	.11	75.58	.090	.23	4.00	.02
BCS 9828	7.64	.890	.02	1.19	1.92	.60	.01	.29	.01	78.77	.145	.45	6.80	.16
BCS 9829	4.69	.205	.03	1.20	.98	.37	.01	.03	.01	86.70	.120	.23	4.60	.11
BCS 9830	10.65	1.630	.13	3.12	2.26	.77	.01	.20	.01	71.09	.150	.51	8.30	1.35
BCS 9833	11.80	.420	.32	1.14	3.56	.13	.01	2.76	.11	76.33	.145	.28	1.90	.08
BCS 9834	7.15	1.760	.05	.99	1.67	.57	.01	.17	.01	74.27	.235	.37	11.80	.12
BCS 9835	10.26	1.095	.06	1.80	2.57	.72	.01	.20	.06	74.49	.200	.45	7.00	.32
BCS 9836	9.04	.680	.07	1.30	2.20	.71	.01	.19	.01	78.68	.210	.53	5.20	.26
BCS 9837	6.98	1.985	.88	2.11	1.45	.44	.01	.44	.53	75.66	.395	.38	7.60	.11
BCS 9838	1.83	.540	.01	1.08	.40	.14	.01	.04	.01	90.55	.100	.10	4.10	.09
BCS 9839	11.20	1.155	.26	1.56	2.88	.85	.01	.07	.01	74.43	.175	.56	5.60	.17
BCS 9841	10.62	1.685	.01	.87	2.82	.79	.01	.09	.01	74.40	.170	.57	6.90	.12
BCS 9842	5.78	20.600	.01	1.89	1.25	.33	.01	.04	.07	61.93	.480	.28	6.10	.11
BCS 9844	17.30	.440	.01	5.19	3.28	.93	.02	.38	.05	63.43	.190	.81	7.10	.06
BCS 9845	11.25	.590	.18	3.03	2.68	.67	.01	.08	.11	73.24	.160	.49	6.20	.18
BCS 9846	11.89	.405	.09	1.67	2.99	.66	.01	.31	.11	75.82	.165	.25	4.50	.02
BCD 46951	3.12	.270	17.48	1.96	.85	4.59	.08	.04	.02	48.76	.550	.13	21.40	1.02
BCD 46952	8.77	.180	7.60	2.41	3.46	4.04	.03	.17	.12	59.06	.205	.38	12.40	1.25
BCD 46953	4.25	.135	1.03	2.49	.97	.54	.02	.03	.03	83.66	.130	.19	5.60	1.39
BCD 46954	14.88	.345	.34	2.57	3.29	.94	.01	.08	.01	68.69	.120	.62	7.00	.92

COMP: METALL MINING
PROJ: 677
ATTN: GARY WELLS

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0326-RJ1
DATE: 93/07/16
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU-FIRE PPB
BCS 9827	.1	1	231	.1	6	44	1	345	1
BCS 9828	.1	7	2824	.1	3	15	5	12	2
BCS 9829	.1	15	300	.1	11	4	1	1	4
BCS 9830	.1	13	350	.1	27	8	14	64	3
BCS 9833	.1	21	295	.1	6	10	1	13	2
BCS 9834	.1	6	3485	.1	6	7	4	8	2
BCS 9835	.1	3	2267	.1	11	12	2	28	1
BCS 9836	.1	6	1464	.1	4	11	2	9	3
BCS 9837	.5	17	4255	.1	29	9	10	59	5
BCS 9838	.1	25	1739	.1	9	11	7	37	2
BCS 9839	.1	1	3440	.1	3	11	5	13	1
BCS 9841	.1	3	4288	.1	1	10	7	7	2
BCS 9842	.1	8	3535	.1	15	5	9	90	4
BCS 9844	.1	1	1020	.1	28	16	1	118	2
BCS 9845	.8	9	1568	.1	26	14	8	165	6
BCS 9846	.1	8	1278	.1	7	12	1	92	5
BCD 46951	2.1	5	1295	.1	19	1	1	123	1
BCD 46952	.9	1	445	.1	30	8	1	302	1
BCD 46953	.1	16	239	.1	49	10	2	108	8
BCD 46954	.1	2	418	.1	54	12	1	174	3

COMP: METALL MINING CORP.
PROJ: 677
ATTN: GARY WELLS

MIN-EN LABS — WHOLE ROCK ANALYSIS

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0384-RL1+2
DATE: 93/08/11
* ROCK * (ACT:F26)

SAMPLE NUMBER	AL203 %	BA %	CAO %	FE203 %	K20 %	MGO %	MNO2 %	NA20 %	P205 %	SIO2 %	SR %	TIO2 %	LOI %	S %
BCS 9847	7.57	3.010	.27	.73	1.52	.71	.01	.01	.06	75.89	.030	.40	8.60	.03
BCS 9848	12.44	.560	.13	1.91	3.11	1.02	.01	.01	.17	73.67	.040	.67	5.10	.04
BCS 9849	7.82	2.775	.13	.90	1.55	.66	.01	.07	.05	74.91	.050	.39	9.90	.04
BCD 46955	6.55	.305	.52	3.23	1.08	.54	.01	.01	.11	79.77	.035	.29	6.20	1.52
BCD 46956	16.36	.435	1.72	5.18	3.86	1.52	.02	.01	.10	60.14	.040	.62	9.00	3.25
BCD 46957	1.97	.385	28.59	1.07	.01	.87	.04	.01	.10	42.11	.140	.09	23.80	.54
BCD 46958	4.90	.265	2.07	2.20	.88	.84	.02	.01	.05	81.19	.025	.25	6.10	1.08
BCD 46959	5.33	.270	2.37	1.97	.91	.77	.01	.01	.04	80.16	.030	.26	6.60	1.01
BCD 46960	16.06	.435	1.80	4.96	3.68	1.41	.04	.01	.10	61.18	.045	.63	8.70	1.84
BCD 46961	6.61	.125	13.32	2.16	2.54	7.01	.06	.01	.13	47.32	.040	.30	19.50	.73
BCD 46962	6.72	.075	14.70	1.32	2.50	6.04	.05	.01	.12	48.23	.040	.32	18.80	.13
BCD 46963	6.51	.095	14.96	1.59	2.51	6.88	.05	.01	.14	45.54	.045	.31	20.50	.26
BCD 46964	6.73	.095	13.74	1.80	2.90	6.70	.05	.01	.14	46.40	.045	.30	20.00	.71
BCD 46965	7.91	.115	11.80	2.14	3.55	5.66	.05	.04	.14	50.79	.045	.35	16.70	.77
BCD 46966	7.95	.120	9.28	3.07	3.68	4.29	.05	.01	.14	57.30	.045	.34	12.60	1.12
BCD 46967	9.10	.130	8.65	2.03	4.13	3.90	.05	.02	.15	59.30	.045	.39	11.10	.53
BCD 46968	8.61	.120	8.46	2.45	3.77	4.02	.05	.01	.31	59.56	.045	.38	11.50	.88
BCD 46969	6.35	.075	18.41	1.77	2.07	4.21	.11	.26	.13	44.07	.055	.28	21.30	.52
BCD 46970	6.03	.115	14.85	1.46	2.79	8.26	.05	.01	.12	43.89	.045	.27	21.40	.63
BCD 46971	6.71	.095	12.66	2.17	2.55	7.05	.04	.38	.13	48.32	.050	.30	18.60	.98
BCD 46972	9.41	.130	7.22	2.13	4.06	4.00	.03	.21	.19	60.82	.045	.41	10.50	.67
BCD 46973	7.46	.095	12.25	1.90	2.54	4.88	.04	.16	.11	53.49	.050	.33	16.00	.60
BCD 46974	9.02	.115	8.75	2.36	3.32	5.22	.03	.02	.16	57.56	.045	.42	12.20	.79
BCD 46975	9.04	.095	9.28	1.89	2.97	4.71	.04	1.05	.19	57.28	.050	.40	12.00	.36
BCD 46901	3.79	.160	3.67	1.07	1.57	.50	.01	.08	2.03	75.50	.045	.18	4.10	.04
BCD 46902	3.28	.160	.10	.79	.81	.26	.01	.07	.01	84.83	.040	.16	3.10	.18

COMP: METALL MINING CORP.
PROJ: 677
ATTN: GARY WELLS

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0384-RJ1+2
DATE: 93/08/11
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU-FIRE PPB
BCS 9847	.1	22	3962	.1	3	44	18	137	3
BCS 9848	.3	20	1915	.1	6	30	26	136	7
BCS 9849	.6	34	4054	.1	6	57	23	109	4
BCD 46955	.5	50	304	5.5	48	43	30	1455	3
BCD 46956	.1	5	109	.1	52	64	20	208	5
BCD 46957	.5	20	378	.1	17	103	9	292	2
BCD 46958	.1	31	659	.1	36	68	17	970	4
BCD 46959	.1	31	648	.1	45	39	18	1156	2
BCD 46960	.1	7	138	.1	45	42	20	259	4
BCD 46961	.1	12	547	.1	11	38	6	144	1
BCD 46962	.1	12	101	.1	5	33	6	134	1
BCD 46963	.1	15	264	.1	9	34	5	154	2
BCD 46964	.1	13	122	.1	11	39	6	134	2
BCD 46965	.1	15	161	.1	15	35	11	207	1
BCD 46966	.1	19	141	.1	27	54	13	371	2
BCD 46967	.1	19	162	.1	16	40	16	227	2
BCD 46968	.1	18	226	.1	23	49	17	371	1
BCD 46969	.1	15	159	.1	8	38	10	107	1
BCD 46970	.1	8	244	.1	6	35	6	128	3
BCD 46971	.1	12	248	.1	12	34	8	246	5
BCD 46972	.1	20	209	.1	22	33	20	240	1
BCD 46973	.1	15	313	.1	10	34	15	145	2
BCD 46974	.1	15	291	.1	13	36	14	194	2
BCD 46975	.1	16	193	.1	6	35	15	228	1
BCD 46901	.1	4	815	.1	35	118	13	206	5
BCD 46902	.2	24	575	.1	19	19	13	147	4

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VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
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SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Geochemical Analysis Certificate

3V-0326-RG2

Company: METALL MINING
Project: 677
Attn: GARY WELLS

Date: JUL-16-93
Copy 1. METALL MINING, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 6 ROCK samples submitted JUL-12-93 by G. WELLS.

Sample Number	AG PPM	CD PPM	CU PPM	PB PPM	ZN PPM
BCS 9831	.2	.1	4	3	21
BCS 9832	.2	.2	11	7	91
BCS 9840	.1	1.4	5	2	153
BCS 9843	.1	.1	19	2	3
BCD 46926	.5	.1	24	1	26
BCD 46927	.1	.3	34	6	86

Certified by _____

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SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

3V-0326-RA1

Company: METALL MINING
Project: 677
Attn: GARY WELLS

Date: JUL-21-93
Copy 1. METALL MINING CORP., VANCOUVER, B.C.

We hereby certify the following Assay of 20 ROCK samples submitted JUL-12-93 by G. WELLS.

Sample Number	BA %
BCS 9831	29.90
BCS 9832	39.90
BCS 9840	47.10
BCS 9843	51.70
BCD 46926	1.15
BCD 46927	.52

Certified by _____

MIN-EN LABORATORIES

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VANCOUVER OFFICE:
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NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9621

SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Geochemical Analysis Certificate

3V-0384-RG1

Company: **METALL MINING CORP.**
Project: 677
Attn: GARY WELLS

Date: AUG-11-93
Copy 1. METALL MINING CORP., VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 23 ROCK samples submitted MMM-DD-YY by .

Sample Number	CU PPM	ZN PPM	AG PPM	BA %	CD PPM	PB PPM
BCD 46928	55	166	.7	.36	.5	19
BCD 46929	63	140	.8	.41	.6	18
BCD 46930	24	110	1.4	.42	.2	27
BCD 46931	17	105	1.3	.13	.1	28
BCD 46932	42	456	1.0	.27	2.6	21
BCD 46933	45	895	.9	.38	4.3	18
BCD 46934	49	1940	.9	.21	9.7	13
BCD 46935	51	1500	1.0	.20	7.5	14
BCD 46936	42	695	.8	.55	3.3	19
BCD 46937	39	160	.5	.47	.4	24
BCD 46938	34	57	1.0	.49	.1	19
BCD 46939	41	157	.6	.50	.3	13
BCD 46940	45	26	.9	.41	.1	26
BCD 46941	28	163	1.2	.25	1.3	31
BCD 46942	15	190	1.0	.12	1.4	21
BCD 46943	8	133	.7	.18	.6	33
BCD 46944	4	62	.8	.34	.3	25
BCD 46945	36	150	.8	.48	.7	64
BCD 46946	35	127	.9	.47	.6	47
BCD 46947	26	92	.6	.49	.1	44
BCD 46948	43	28	1.0	.52	.1	73
BCD 46949	28	120	1.1	.75	.4	55
BCD 46950	37	225	1.2	.52	.2	56

Certified by _____

MIN-EN LABORATORIES

APPENDIX III

Diamond Drill Logs

HOLE NUMBER: YN-93-01

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: DATE: 27-May-1994
METRIC UNITS: X

PROJECT NAME: GATAGA
PROJECT NUMBER: 677
CLAIM NUMBER: NOEL 3
LOCATION: NTS 94F/11

PLOTTING COORDS GRID: FIELD
NORTH: 6950.00S
EAST: 175.00E
ELEV: 1850.00

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -65° 0' 0"
LENGTH OF THE HOLE: 143.00m
START DEPTH: 0.00m
FINAL DEPTH: 143.00m

COLLAR GRID AZIMUTH : 94° 0' 0"

COLLAR ASTRO. AZIMUTH : 56° 0' 0"

DATE STARTED: July 4, 1993
DATE COMPLETED: July 6, 1993
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
CAPPED: NO
HOLE SIZE: BDBGM

CONTRACTOR: BRITTON BROS.
CASING: 6.7 M, PULLED
CORE STORAGE: NOEL CREEK

PURPOSE: TO TEST NOEL CREEK BARITE HORIZON

COMMENTS :

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
50.60	-	-63° 0'	ACID	OK	
111.60	-	-65° 0'	ACID	OK	

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 8.30	«OB»					casing
8.30 TO 32.50	«SIL SHALE CHT»	-black, f.gr. siliceous shale, locally graphitic, 1-2 light grey bands (on dry surface) -associated with sulphides - possibly barite -also have light grey silty layers 1-2 cm thick 12.0 bedding @ 21.0 bedding @	 40 45		⌊8.3-13.9⌋ «3-5% py, tr sph» -py as disseminations and bands (1-2 mm thick) paralle to bedding -reddish brown sph associated with baritic bands	13.4-32.5 -very blocky core
32.50 TO 36.30	«CARB SH-BL EBBY BA?»	-light grey, f.gr. blebs of barite(?) or carb aligned paralle to beddings -zones occur at 32.5-33.35 and 35.0-35.8 -blebs react to HCl 33.0 bedding @	 30	-pervasive carbonate (may be primary feature)	-tr py	
36.30 TO 62.55	«GRAPH SHALE SLST»	-black to grey f.gr. - interbedded layers of black graphitic shale and grey silty layers -beds are 1-4 cm thick -silty layers are siliceous 40.0 bedding @ 41.3-41.8 -blebs (10%) of barite?/carbonate in carbonate rich host 45.1-50.7 -silty shales are pervasively carbonate rich 50.7 -fold 50.6 bedding @ 57.7 bedding @ 62.0 bedding @	 40 15 50 70	 48.2-62.0 -3-5% qtz-carb veins	-tr py (u.f.gr.)	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
62.55 TO 109.70	«SIL SHALE CHT»	-black, f.gr., locally well bedded -predominantly siliceous shale/chert with the odd shaly bed, graphitic on bedding plane 68.0 bedding @ 71.0-71.3 -5% frags consisting of py, py siltstone and shale up to 0.5 cm across -frags angular to subrounded ┤71.3-71.8├ «FLT» -fault gouge ┤75.8-78.3├ «FLT» -fault gouge, and very blocy core 79.3 bedding @ ┤84..6-90.2├ «FLT» -fault gouge and broken core 90.2-103.6 -good baned graphitic chert, locally beds are folded, get poker chip size frags when bedding too shallow to core axis ┤103.6-111.5├ «FLT» -fault gogue, milled rock + chert fragments	 60 55	-tr carb veins	┤62.55-69.6├ «3-5% py» -as disseminations mm thick beds and concretions up to 1-2 cm across ┤69.6-109.7├ «tr-1% py»	84.6-90.2 -40% recovery
109.70 TO 143.00	«PY SHALE»	-dark grey to black, f.gr., well bedded -upper contact occurs within fault zone 120.1 bedding @ -shale is graphitic on bedding planes 131.1 bedding @	 70 60	109.7 -block of pyrite (40%) in fault gouge (4 cm long) «5-10% py» -py occurs as v.f.gr. wisps disseminations and thin (<10 m) beds	Fault zone of 103.6-111.5 recovery = 50%; zone marks contact between chts and shales 131.05-131.3 -locally py rich beds contain 30-40% v.f.gr. leg	

Sample	From (m)	To (m)	Length (m)	ASSAYS CU ppm	ZN ppm	PB ppm	AG ppm	BA %	CD ppm	COMMENTS
BCD46926	8.30	9.80	1.50	24	26	1	.5	1.15	.1	
BCD46927	9.80	11.10	1.30	34	86	6	.1	.52	.3	
BCD46928	11.10	12.40	1.30	55	166	19	.7	.36	.5	
BCD46929	12.40	13.90	1.50	63	140	18	.8	.41	.6	
BCD46930	32.50	34.40	1.90	24	110	27	1.4	.42	.2	
BCD46931	34.40	36.30	1.90	17	105	28	1.3	.13	.1	
BCD46932	62.55	64.00	1.45	42	456	21	1.0	.27	2.6	
BCD46933	64.00	65.40	1.40	45	895	18	.9	.38	4.3	
BCD46934	65.40	66.80	1.40	49	1940	13	.9	.21	9.7	
BCD46935	66.80	68.20	1.40	51	1500	14	1.0	.20	7.5	
BCD46936	68.20	69.60	1.40	42	695	19	.8	.55	3.3	
BCD46937	126.30	127.80	1.50	39	160	24	.5	.47	.4	
BCD46938	127.80	129.30	1.50	34	57	19	1.0	.49	.1	
BCD46939	129.30	130.80	1.50	41	157	13	.6	.50	.3	
BCD46940	130.80	132.30	1.50	45	26	26	.9	.41	.1	

Total amount of samples= 15
Total length sampled = 22.5M

HOLE NUMBER: YN-93-01 LITHOGEOCHEM. SHEET DATE: 10-November-1993

Sample	From (m)	To (m)	Length (m)	AL2O3 %	BA %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	SR %	TIO2 %	S %	LOI %	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
BCD46951	33.00	36.00	3.00	3.12	.270	17.48	1.96	.85	4.59	.08	.04	.02	48.76	.550	.13	1.02	21.40	2.1	5	1295	.1	19	1	1	123	1
BCD46952	57.60	60.65	3.05	8.77	.180	7.60	2.41	3.46	4.04	.03	.17	.12	59.06	.205	.38	1.25	12.40	.9	1	445	.1	30	8	1	302	1
BCD46953	79.00	82.00	3.00	4.25	.135	1.03	2.49	.97	.54	.02	.03	.03	83.66	.130	.19	5.60	1.39	.1	16	239	.1	49	10	2	108	8
BCD46954	115.55	118.60	3.05	14.88	.345	.34	2.57	3.29	.94	.01	.08	.01	68.69	.120	.62	7.00	.92	.1	2	418	.1	54	12	1	174	3

Total amount of samples= 4
Total length sampled = 12.1M

HOLE NUMBER: YN-93-02

MINNOVA INC.
DRILL HOLE RECORD

DATE: 27-May-1994
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: GATAGA
PROJECT NUMBER: 677
CLAIM NUMBER: NOEL 1
LOCATION: NTS 94F/11

PLOTTING COORDS GRID: NOEL 92
NORTH: 7750.00S
EAST: 207.00E
ELEV: 1815.00

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -65° 0' 0"
LENGTH OF THE HOLE: 39.30m
START DEPTH: 0.00m
FINAL DEPTH: 39.30m

COLLAR GRID AZIMUTH : 90° 0' 0"
COLLAR ASTRO. AZIMUTH : 50° 0' 0"

DATE STARTED: July 6, 1993
DATE COMPLETED: July 7, 1993
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
CAPPED: NO
HOLE SIZE: BDBGM

CONTRACTOR: BRITTON BROS.
CASING: 8.55 M, PULLED
CORE STORAGE: NOEL CREEK

PURPOSE: TO TEST A PB-AG SOIL ANOMALY DOWNSLOPE OF SILICEOUS SHALES/CHERTS

COMMENTS :

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
0.00	-	0° 0'	ACID			-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 8.55	«OB»					casing
8.55 TO 30.20	«SHALE»	-black, f.gr., graphitic locally, most of unit black mud				8.55-39.3 -recovery: 20%
30.20 TO 39.30	«GRAPH CHT»	-black, f.gr., locally graphitic on fracture planes - no discernible bedding -hole abondoned at 39.3 due to very poor ground conditions				
	E.O.H.					

HOLE NUMBER: YN-93-02 LITHOGEOCHEM. SHEET DATE: 10-November-1993

Sample	From (m)	To (m)	Length (m)	AL2O3 %	BA %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	SR %	TIO2 %	S %	LOI %	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
BCD46902	30.20	39.30	9.10	3.28	.160	.10	.79	.81	.26	.01	.07	.01	84.83	.040	.16	.18	3.10	.2	24	.160	.1	19	19	13	147	4

Total amount of samples= 1
Total length sampled = 9.1M

MINNOVA INC.
DRILL HOLE RECORD

DATE: 27-May-1994
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: GATAGA
PROJECT NUMBER: 677
CLAIM NUMBER: YN 4
LOCATION: NTS 94F/11

PLOTTING COORDS GRID: FIELD
NORTH: 7350.00S
EAST: 275.00E
ELEV: 1790.00

COLLAR GRID AZIMUTH : 83° 0' 0"

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR ASTRO. AZIMUTH : 43° 0' 0"

COLLAR DIP: -67° 0' 0"
LENGTH OF THE HOLE: 181.10m
START DEPTH: 0.00m
FINAL DEPTH: 181.10m

DATE STARTED: July 8, 1993
DATE COMPLETED: July 11, 1993
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
CAPPED: NO
HOLE SIZE: BDBGM

CONTRACTOR: BRITTON BROS
CASING: 11.9 M, PULLED
CORE STORAGE: NOEL CREEK

PURPOSE: TO TEST A PB-CD SOIL ANOMALY AT CONTACT BETWEEN CHERTS AND RUSTY SHALES

COMMENTS :

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
39.30	-	-67° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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-	-	-	-	-		-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 13.60	«OB»					-casing
13.60 TO 14.45	«PY SHALE»	-black, f.gr. mm thick py beds and blebs parallel to bedding 14.0 bedding @ -contact with chert indistinct	65		⟨13.6-14.45⟩ «2-3% py» -py as thin (mm) beds, wisps and blebs parallel to bedding	13.65-43.0 -very blocky core
14.45 TO 42.30	«CHT»	-black, f.gr., massive at upper contact -graphitic of fracture surfaces *-no discernible bedding due to blocky core throughout unit*		-tr white qtz veins	-tr py	
42.30 TO 59.00	«PY SHALE S LST»	-black, f.gr., bedding defined by mm thick beds of py -a little coarser-grained, grey silty layers occur at 53.85-54.1, 56.4-57.2, 57.5-58.2 54.7 bedding @ 54.1-54.3 -2-3% grey siltstone fragments in black shale	60	-tr qtz and carb veinlets	⟨42.3-59.0⟩ «5% py» -occurs as nodules (1 mm- 5x10 mm size) thin (<1 mm beds and fine dissemi-tions	
59.00 TO 64.60	«CHT»	-dark grey to black, f.gr. - thick bedded - bedding only seen locally; graphitic on fracture planes -near upper contact have angular chert fragments (3x5 cm) in black shaly matrix		-tr qtz veinlets	-2 cm py nodule at 59.5	59.2-64.6 -blocky core
64.60 TO 72.65	«CALC STST CHT»	-light grey to black, f.gr. to m.gr., weakly bedded -calcareous siltstone beds have 10% dark grey rounded spots (3 mm diameter) locally -minor black cht interbeds 72 bedding @ -lower and upper contact sharp but obscured by blocky core	30			

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
72.65 TO 158.60	«CHT»	-black, f.gr., well bedded, locally graphitic on fracture surfaces		-tr qtz - calcite veins	-tr py -occurs as thin (3-5 mm) disrupted beds - locally associated with carbonate beds ie 106.8 m	ARE THIN PY BEDS IN CHERT CAUSE OF SOIL ANOMALY?
		80.0 bedding @	10			
		82.2-83.1 -carbonate rich bed			82.2 -3 mm band of py at upper contact of carbonate bed	
		99.0 bedding @	35			88.1-106.6 -very blocky core
		102.7-103.6 -c.gr., black, metallic graphite				
		112.5 bedding @	15		112.4-113.2 -5 mm thick py bed	
		122.0 bedding @	45	124.75-127.9		124.7-127.75
		138.5 bedding @	25	-qtz vein and blocky core		-recovery is 35%
		155.0 bedding @	30			
158.60 TO 159.90	«FAULT»	-black, f.gr. - blocky core and fault gouge		-tr qtz veins in blocky core		
159.90 TO 181.10	«PY SHALE»	-dark grey, f.gr., well bedded				
		164.0 bedding @	40		⌈159.9-181.1⌋ «5-7% py»	
		168.0 bedding @	45		-occurs as v.f.gr. dissemination and wisps parallel to bedding	-shales in this hole not as pyritic as to N in hole YN-93-01
		177.0 bedding @	50			
		180.0 bedding @	50			

Sample	From (m)	To (m)	Length (m)	ASSAYS CU ppm	ZN ppm	PB ppm	AG ppm	BA %	CD ppm	COMMENTS
BCD46945	42.30	45.40	3.10	36	150	64	.8	.48	.7	
BCD46946	45.40	48.50	3.10	35	127	47	.9	.47	.6	
BCD46947	48.50	51.50	3.00	26	92	44	.6	.49	.1	
BCD46948	51.50	54.60	3.10	43	28	73	1.0	.52	.1	
BCD46949	54.60	57.60	3.00	28	120	55	1.1	.75	.4	
BCD46950	57.60	59.00	1.40	37	225	56	1.2	.52	.2	

Total amount of samples= 6
Total length sampled = 16.7M

HOLE NUMBER: YN-93-03 LITHOGEOCHEM. SHEET DATE: 10-November-1993

Sample	From (m)	To (m)	Length (m)	AL203 %	BA %	CAO %	FE203 %	K20 %	MGO %	MNO2 %	NA20 %	P205 %	SIO2 %	SR %	TIO2 %	S %	LOI %	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
BCD46955	33.20	36.30	3.10	6.55	.305	.52	3.23	1.08	.54	.01	.01	.11	79.77	.035	.29	1.52	6.20	.5	50	.305	5.5	48	43	30	1455	3
BCD46956	48.50	51.50	3.00	16.36	.435	1.72	5.18	3.86	1.52	.02	.01	.10	60.14	.040	.62	3.25	9.00	.1	5	.435	.1	52	64	20	208	5
BCD46957	64.60	66.80	2.20	1.97	.385	28.59	1.07	.01	.87	.04	.01	.10	42.11	.140	.09	.54	23.80	.5	20	.385	.1	17	103	9	292	2
BCD46958	97.25	100.30	3.05	4.90	.265	2.07	2.20	.88	.84	.02	.01	.05	81.19	.025	.25	1.08	6.10	.1	31	.265	.1	36	68	17	970	4
BCD46959	133.85	136.90	3.05	5.33	.270	2.37	1.97	.91	.77	.01	.01	.04	80.16	.030	.26	1.01	6.60	.1	31	.270	.1	45	39	18	1156	2
BCD46960	167.40	170.40	3.00	16.06	.435	1.80	4.96	3.68	1.41	.04	.01	.10	61.18	.045	.63	1.84	8.70	.1	7	.435	.1	45	42	20	259	4

Total amount of samples= 6
Total length sampled = 17.4M

HOLE NUMBER: YN-93-04

MINNOVA INC.
DRILL HOLE RECORD

DATE: 27-May-1994
IMPERIAL UNITS:
METRIC UNITS: X

PROJECT NAME: GATAGA
PROJECT NUMBER: 677
CLAIM NUMBER: YN 6
LOCATION: NTS 94F/11

PLOTTING COORDS GRID: CHINA RIDGE 93
NORTH: 5000.00N
EAST: 400.00E
ELEV: 1700.00

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -64° 0' 0"
LENGTH OF THE HOLE: 205.50m
START DEPTH: 0.00m
FINAL DEPTH: 205.50m

COLLAR GRID AZIMUTH : 90° 0' 0"
COLLAR ASTRO. AZIMUTH : 50° 0' 0"

DATE STARTED: July 11, 1993
DATE COMPLETED: July 13, 1993
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
ROD LOG: NO

PULSE EM SURVEY: NO
CAPPED: NO
HOLE SIZE: BDBGM

CONTRACTOR: BRITTON BROS.
CASING: 6.1 M, LEFT IN HOLE
CORE STORAGE: NOEL CREEK

PURPOSE: TO TEST THE CHINA RIDGE BARITE HORIZON IN AN AREA OF WEAKLY ANOMALOUS PB IN SOILS

COMMENTS :

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
86.60	-	-62° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.10	«OB»					
6.10 TO 98.05	«CALC SHALE »	-dark grey to black, f.gr., well bedded -calcareous throughout but more calcareous beds are light grey in occur at: 34.15-35.6 44.2-45.15 47.6-49.4 49.8-50.3 76.6-78.45 81.3-82.8 86.85-89.2 8.0 bedding @ 25 16.0 bedding @ 10 23.0 bedding @ 05 32.5 bedding @ 55 38.0 bedding @ 70 43.0 bedding @ 65 56.0 bedding @ 70 66.0 bedding @ 70 -locally graphitic on fracutre planes 82.0 bedding @ 60		-tr py as wisps, blebs and f.gr. diss. + beds	-probably Road River shales 73.6 -py nodules 0.5 cm diameter assoc. with carb	
98.05 TO 102.40	«SLST, SS»	-light grey, f.gr. interbedded siltstone and sandstone - non calcareous -f.gr. sandstone beds at: 99.25-99.5 100.3-100.45 101 bedding @ 55		100.0-102.8 -10% qtz carb veins	-1-2% v.f.gr. py associated with sandstone beds	
102.40 TO 103.75	«FAULT»	-white to black, -milled rock, fault gouge, graphitic + qtz-carb veins in upper 0.4 m			-1% py blebs	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
103.75 TO 168.20	«CALC, SHALY SLST»	-dark grey, f.gr. thinly bedded 3-4 mm -shaly intrbeds between more silty layers -strongly calcareous throughout -unit has "poker chip" character -locally graphitic on bedding planes 107 bedding @ 132 bedding @	 70 60	-1-2% carb veins	-tr py rich beds (up to 0.5 cm thick) at 103.75 - approx 112.0 146.9-168.2 -1-2% py nodules -largest one at 155.65 - 2 cm x 4 cm -subrounded	
168.20 TO 205.50	«SHALE»	-black to light grey, f.gr. -only locally carbonaceous -thick bedded 192 bedding @	 65		-tr py nodules + py beds	-similar to above unit but thicker beds + no poker chips

Sample	From (m)	To (m)	Length (m)	ASSAYS CU ppm	ZN ppm	PB ppm	AG ppm	BA %	CD ppm	COMMENTS
BCD46943	98.05	99.50	1.45	8	133	33	.7	.18	.6	
BCD46944	99.50	100.45	0.95	4	62	25	.8	.34	.3	
BCD46941	102.85	104.35	1.50	28	163	31	1.2	.25	1.3	
BCD46942	161.30	162.80	1.50	15	190	21	1.0	.12	1.4	

Total amount of samples= 4
Total length sampled = 5.4M

HOLE NUMBER: YN-93-04 | LITHOGEOCHEM. SHEET | DATE: 10-November-1993

Sample	From (m)	To (m)	Length (m)	AL2O3 %	BA %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	SR %	TIO2 %	S %	LOI %	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
BCD46961	9.45	12.45	3.00	6.61	.125	13.32	2.16	2.54	7.01	.06	.01	.13	47.32	.040	.30	.73	19.50	.1	12	.125	.1	11	38	6	144	1
BCD46962	21.05	24.05	3.00	6.72	.075	14.70	1.32	2.50	6.04	.05	.01	.12	48.23	.040	.32	.13	18.80	.1	12	.075	.1	5	33	6	134	1
BCD46963	30.80	33.80	3.00	6.51	.095	14.96	1.59	2.51	6.88	.05	.01	.14	45.54	.045	.31	.26	20.50	.1	15	.095	.1	9	34	5	154	2
BCD46964	41.40	44.40	3.00	6.73	.095	13.74	1.80	2.90	6.70	.05	.01	.14	46.40	.045	.30	.71	20.00	.1	13	.095	.1	11	39	6	134	2
BCD46965	50.30	53.30	3.00	7.91	.115	11.80	2.14	3.55	5.66	.05	.04	.14	50.79	.045	.35	.77	16.70	.1	15	.115	.1	15	35	11	207	1
BCD46966	59.15	62.15	3.00	7.95	.120	9.28	3.07	3.68	4.29	.05	.01	.14	57.30	.045	.34	1.12	12.60	.1	19	.120	.1	27	54	13	371	2
BCD46967	73.35	76.35	3.00	9.10	.130	8.65	2.03	4.13	3.90	.05	.02	.15	59.30	.045	.39	.53	11.10	.1	19	.130	.1	16	40	16	227	2
BCD46968	80.00	83.00	3.00	8.61	.120	8.46	2.45	3.77	4.02	.05	.01	.31	59.56	.045	.38	.88	11.50	.1	18	.120	.1	23	49	17	371	1
BCD46969	86.90	89.90	3.00	6.35	.075	18.41	1.77	2.07	4.21	.11	.26	.13	44.07	.055	.28	.52	21.30	.1	15	.075	.1	8	38	10	107	1
BCD46970	117.60	120.60	3.00	6.03	.115	14.85	1.46	2.79	8.26	.05	.01	.12	43.89	.045	.27	.63	21.40	.1	8	.115	.1	6	35	6	128	3
BCD46971	146.05	149.05	3.00	6.71	.095	12.66	2.17	2.55	7.05	.04	.38	.13	48.32	.050	.30	.98	18.60	.1	12	.095	.1	12	34	8	246	5
BCD46972	149.05	152.05	3.00	9.41	.130	7.22	2.13	4.06	4.00	.03	.21	.19	60.82	.045	.41	.67	10.50	.1	20	.130	.1	22	33	20	240	1
BCD46973	164.30	167.30	3.00	7.46	.095	12.25	1.90	2.54	4.88	.04	.16	.11	53.49	.050	.33	.60	16.00	.1	15	.095	.1	10	34	15	145	2
BCD46974	173.50	176.50	3.00	9.02	.115	8.75	2.36	3.32	5.22	.03	.02	.16	57.56	.045	.42	.79	12.20	.1	15	.115	.1	13	36	14	194	2
BCD46975	189.00	192.00	3.00	9.04	.095	9.28	1.89	2.97	4.71	.04	1.05	.19	57.28	.050	.40	.36	12.00	.1	16	.095	.1	6	35	15	228	1

Total amount of samples= 15
Total length sampled = 45.0M

MINNOVA INC.
DRILL HOLE RECORD

DATE: 27-May-1994
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: GATAGA
PROJECT NUMBER: 677
CLAIM NUMBER: YN 6
LOCATION: NTS 94F/11

PLOTTING COORDS GRID: CHINA RIDGE
NORTH: 5000.00N
EAST: 350.00W
ELEV: 1650.00

ALTERNATE COORDS GRID:
NORTH: 0+ 0
EAST: 0+ 0
ELEV: 0.00

COLLAR DIP: -65° 0' 0"
LENGTH OF THE HOLE: 18.00m
START DEPTH: 0.00m
FINAL DEPTH: 18.00m

COLLAR GRID AZIMUTH : 270° 0' 0"
COLLAR ASTRO. AZIMUTH : 230° 0' 0"

DATE STARTED: July 14, 1993
DATE COMPLETED: July 15, 1993
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
CAPPED: NO
HOLE SIZE: BDBGM

CONTRACTOR: BRITTON BROS.
CASING: 6.70 M, PULLED
CORE STORAGE: NOEL CREEK

PURPOSE: TO TEST Pb, Ba, Cd, Ag SOIL ANOMALIES AT CONTACT BETWEEN SILURIAN/ORDOVICIAN LIMESTONES AND SHALES

COMMENTS :

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 6.70	«OB»					casing
6.70 TO 18.00	«GRAPH. CHT »	-black, f.gr., thin bedded (2-4 mm thick) -very siliceous 49 ft. bedding @ -hole abondoned at 18.0 m due to poor ground conditions	50			very blocky
	E.O.H.					

Sample	From (m)	To (m)	Length (m)	AL2O3 %	BA %	CAO %	FE2O3 %	K2O %	MGO %	MNO2 %	NA2O %	P2O5 %	SIO2 %	SR %	TIO2 %	S %	LOI %	AG PPM	AS PPM	BA PPM	CD PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
BCD46901	6.70	18.00	11.30	3.79	.160	3.67	1.07	1.57	.50	.01	.08	2.03	75.50	.045	.18	.04	4.10	.1	4	.160	.1	35	118	13	206	5

Total amount of samples= 1
Total length sampled = 11.3M

YN 1

SILURIAN SILTSTONES

DEVONIAN SHALES

XMAS B GRID

XMAS A GRID

XMAS93 GRID

SILURIAN SILTSTONES

KWADACHA LIMESTONE

DEVONIAN SHALES

SILURIAN SILTSTONES

YN 4

1993 NOEL GRID

NOEL GRID

NOEL 3

NOEL 1

1992 NOEL GRID

YN 2

YN 3

YN 5

LEGEND

Pb ppm Zn ppm

Pb >111 ppm

Zn >561 ppm

SHEET 1

SHEET 2

GEOLOGICAL BRANCH ASSESSMENT REPORT

23,396

METALL MINING CORPORATION

MAP No. 5A

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Pb, Zn

DATE : MAY 1994

FILE : YNSHEET1

DRAWN BY : GSW

REVISED :

SCALE: 1: 5,000

0 200m

SILURIAN SILTSTONES

DEVONIAN SHALES

SILURIAN SILTSTONES

DEVONIAN SHALES

1992
CHINA RIDGE
SOILS GRID

YN 5
YN 6

YN 3

CREEK

CHRISTMAS

YUEN 1
YUEN 3

YUEN 2
YUEN 4

1993
CHINA RIDGE
SOILS GRID

1992
CHINA RIDGE
SOILS GRID

1993
CHINA RIDGE
SOILS GRID

CIRQUE

CREEK

SILURIAN SILTSTONES

CREEK

N

LEGEND

Pb ppm Zn ppm

Pb >111 ppm

Zn >561 ppm

SHEET 1

SHEET 2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,396

METALL MINING CORPORATION

MAP No. 5A

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Pb, Zn

DATE : MAY 1994

FILE : YNSHEET2

DRAWN BY : GSW

REVISED :

SCALE: 1:5000

0 200m

YN 1

SILURIAN SILTSTONES

DEVONIAN SHALES

XMAS B GRID

XMAS A GRID

XMAS93 GRID

SILURIAN SILTSTONES

KWADACHA LIMESTONE

DEVONIAN SHALES

DEVONIAN SHALES

1993 NOEL GRID

NOEL GRID

NOEL 3

YN 4

YN 2

YN 3

NOEL 1

1992 NOEL GRID

YN 5

CREEK

N

LEGEND

Cu ppm Fe ppm

Cu >65 ppm

Fe >4.71%

GEOLOGICAL BRANCH ASSESSMENT REPORT

23,396

SHEET 1

SHEET 2

METALL MINING CORPORATION

MAP No. 5B

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Cu, Fe

DATE : MAY 1994

FILE : YNSHEET1

DRAWN BY : GSW

REVISED :

SCALE: 1: 5,000

0 200m

SILURIAN SILTSTONES

DEVONIAN SHALES

SILURIAN SILTSTONES

DEVONIAN SHALES

1992
CHINA RIDGE
SOILS GRID

YN 5
YN 6

YN 3

CREEK

CHRISTMAS

YUEN 1
YUEN 3

YUEN 2
YUEN 4

1993
CHINA RIDGE
SOILS GRID

1992
CHINA RIDGE
SOILS GRID

1993
CHINA RIDGE
SOILS GRID

SILURIAN SILTSTONES

CREEK

CIRQUE CREEK

LEON CREEK

N

LEGEND

Cu ppm Fe ppm

Cu >65 ppm

Fe >4.71%

SHEET 1

SHEET 2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,396

METALL MINING CORPORATION

MAP No. 5B

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Cu, Fe

DATE : MAY 1994

FILE : YNSHEET2

DRAWN BY : GSW

REVISED :

SCALE: 1:5000

0 200m

YN 1

SILURIAN SILTSTONES

DEVONIAN SHALES

XMAS B GRID

XMAS A GRID

XMAS93 GRID

SILURIAN SILTSTONES

KWADACHA LIMESTONE

DEVONIAN SHALES

SILURIAN SILTSTONES

YN 4

1993 NOEL GRID

NOEL GRID

NOEL 3

NOEL 1

YN 2

YN 3

YN 5

1992 NOEL GRID

LEGEND

Ag ppm Ba ppm

Ag >1.2 ppm

Ba >7211 ppm

GEOLOGICAL BRANCH ASSESSMENT REPORT

23,396

SHEET 1

SHEET 2

METALL MINING CORPORATION

MAP No. 5C

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Ag, Ba

DATE : MAY 1994

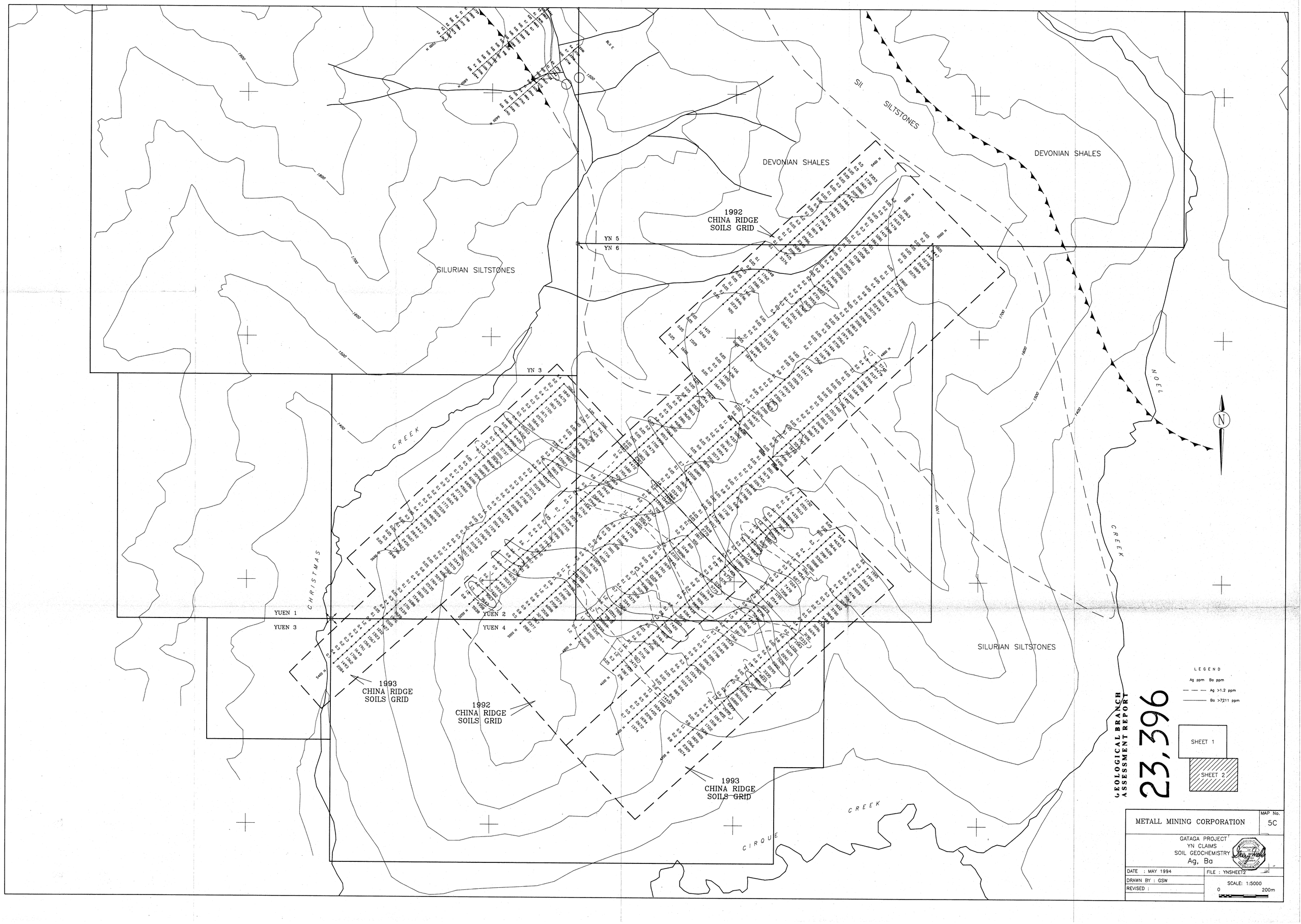
FILE : YNSHEET1

DRAWN BY : GSW

REVISED :

SCALE: 1: 5,000

0 200m


SILURIAN SILTSTONES
DEVONIAN SHALES
Sil
SILTSTONES
DEVONIAN SHALES
SILURIAN SILTSTONES
CREEK
CHRISTMAS
CREEK
CREEK
CIRQUE
TJON
1992
CHINA RIDGE
SOILS GRID
1993
CHINA RIDGE
SOILS GRID
1992
CHINA RIDGE
SOILS GRID
1993
CHINA RIDGE
SOILS GRID
YN 5
YN 6
YN 3
YUEN 1
YUEN 3
YUEN 2
YUEN 4
N
LEGEND
Ag ppm Ba ppm
Ag >1.2 ppm
Ba >7211 ppm
SHEET 1
SHEET 2
GEOLOGICAL BRANCH
ASSESSMENT REPORT
23,396
METALL MINING CORPORATION
MAP No. 5C
GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Ag, Ba
DATE : MAY 1994
FILE : YNSHEET2
DRAWN BY : GSW
REVISED :
SCALE: 1:5000
0 200m

YN 1

XMAS B GRID

XMAS A GRID

XMAS93 GRID

YN 2

YN 3

YN 4

YN 5

NOEL 1

NOEL 3

NOEL GRID

1993 NOEL GRID

1992 NOEL GRID

DEVONIAN SHALES

DEVONIAN SHALES

SILURIAN SILTSTONES

SILURIAN SILTSTONES

KWADACHA LIMESTONE

CREEK

LEGEND

Cd ppm Mn ppm

Cd >1.95 ppm

Mn >1071 ppm

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,396

SHEET 1

SHEET 2

METALL MINING CORPORATION

MAP No. 5D

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Cd, Mn

PROFESSIONAL ENGINEER Ian A. Wells PROVINCE OF BRITISH COLUMBIA

DATE : MAY 1994

FILE : YNSHEET1

DRAWN BY : GSW

REVISED :

SCALE: 1: 5,000

0 200m

SILURIAN SILTSTONES

DEVONIAN SHALES

SILURIAN SILTSTONES

DEVONIAN SHALES

1992
CHINA RIDGE
SOILS GRID

YN 5

YN 6

YN 3

YUEN 1

YUEN 3

YUEN 2

YUEN 4

1993
CHINA RIDGE
SOILS GRID

1992
CHINA RIDGE
SOILS GRID

1993
CHINA RIDGE
SOILS GRID

SILURIAN SILTSTONES

CREEK

CHRISTMAS

CREEK

CREEK

CIRQUE

N

LEGEND

Cd ppm Mn ppm

Cd >1.95 ppm

Mn >1071 ppm

SHEET 1

SHEET 2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,396

METALL MINING CORPORATION

MAP No. 5D

GATAGA PROJECT
YN CLAIMS
SOIL GEOCHEMISTRY
Cd, Mn

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

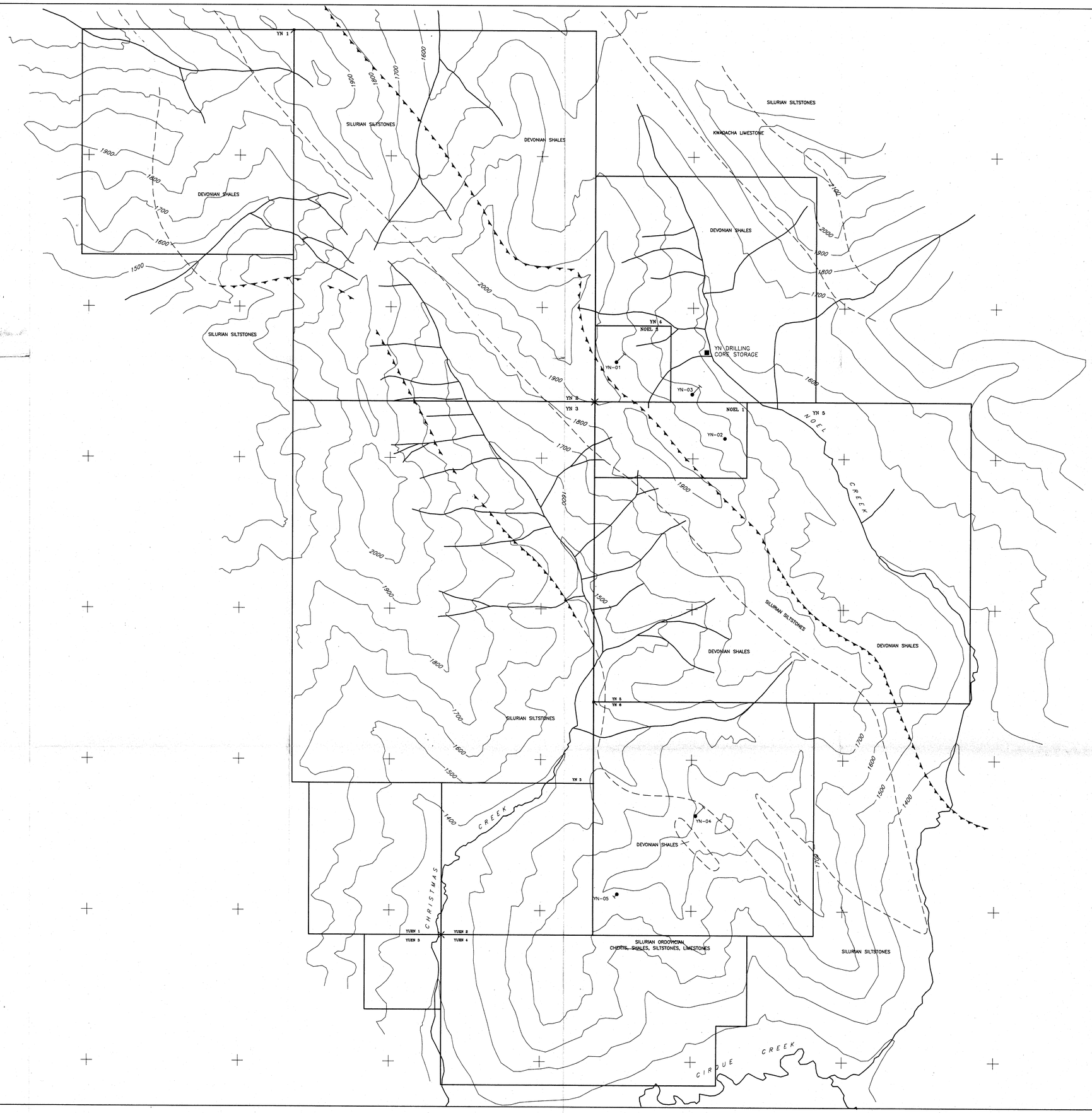
DATE : MAY 1994

FILE : YNSHEET2

DRAWN BY : GSW

REVISED :

SCALE: 1:5000
0 200m



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,396

YN-04 DRILL HOLE LOCATION

METALL MINING CORPORATION	MAP No. 6
GATAGA PROJECT YN CLAIMS 1993 DRILL HOLE LOCATION MAP	
DATE : MAY 1994	FILE : YNLITH.DWG
DRAWN BY : GSW REVISED :	SCALE: 1: 10,000 0 400m