



42A01NE0111 2.13957 TECK

010

BATTLE MOUNTAIN (CANADA) INC.

KIRKLAND LAKE PROJECT

DIAMOND DRILLING REPORT

**AMALGAMATED KIRKLAND PROPERTY
(OCTOBER - DECEMBER, 1990)**

**TECK TOWNSHIP, LARDER LAKE MINING DIVISION
ONTARIO, CANADA**

Kirkland Lake, Ontario

January, 1991

W. Benham



42A01NE0111 2.13957 TECK

010C

TABLE OF CONTENTS

	page
1.0 SUMMARY.....	1
2.0 INTRODUCTION.....	2
2.1 Property, Location and Access.....	2
2.2 Topography.....	2
3.0 PREVIOUS WORK.....	3
4.0 REGIONAL GEOLOGY.....	3
5.0 PROPERTY GEOLOGY.....	4
6.0 GEOPHYSICS.....	4
7.0 DRILLING.....	5
7.1 Drill Programme.....	5
7.2 Drill Results.....	5
7.3 Discussion of Drill Results.....	12
8.0 CONCLUSIONS & RECOMMENDATIONS.....	13
9.0 REFERENCES.....	14
 Figure I Kirkland Lake Project (75-JV-28) Location Map.....	3a
Table I Summary Listing of Diamond Drill Holes.....	9
Appendix I Diamond Drill Logs.....	15

TABLE OF CONTENTS

VOLUME 2

LIST OF DRAWINGS

Drawing Number	Description	Scale
GP - 001	Magnetic Interpretation	1:5000
DP - 001	Drill Plan	1:5000
DC - 001	Section 7350E	1:500
DC - 002	Section 7900E, S 1/2	1:500
DC - 003	Section 7900E, N 1/2	1:500
DC - 004	Section 8000E	1:500
DC - 005	Section 8050E, S 1/2	1:500
DC - 006	Section 8050E, N 1/2	1:500
DC - 007	Section 8100E	1:500
DC - 008	Section 8125E	1:500
DC - 009	Section 8150E	1:500
DC - 010	Section 8190E	1:500

TABLE OF CONTENTS

VOLUME 3

LIST OF DRAWINGS

Drawing Number	Description	Scale
DC - 011	Section 8200E, S 1/2	1:500
DC - 012	Section 8200E, N 1/2	1:500
DC - 013	Section 8300E	1:500
DC - 014	Section 8340E	1:500
DC - 015	Section 8350E	1:500
DC - 016	Section 8370E	1:500
DC - 017	Section 8400E	1:500
DC - 018	Section 8425E	1:500
DC - 019	Section 8450E	1:500
DC - 020	Section 8500E, S 1/2	1:500
DC - 021	Section 8500E, N 1/2	1:100
DC - 022	Section 8600E	1:500
DC - 023	Section 8825E	1:500

1.0 SUMMARY

During the period October 15, 1990 to December 13, 1990, a diamond drilling programme was carried out by Battle Mountain (Canada) Inc. ("BMCI") on the Amalgamated Kirkland property located in the Kirkland Lake mining district. Twenty-eight holes were drilled to test new gold discoveries and geophysical anomalies outlined by previous exploration work completed by BMCI.

Although no economic mineralization was discovered by the 1990 drill programme, significant anomalous gold mineralization, which is associated with the "102" structure, was intersected in holes drilled along a strike length of 1250 metres, from 7350E to 8600E, and at vertical depths of 20 to 119 metres. Quartz plus pyrite breccia zones, 0.05 to 6.2 metres wide, within a broader zone of hematized, sericitized and silicified altered tuffs, graywackes, mudstones and syenites, assayed from 11.25 g/t Au over 0.60 metres in hole AK90-09 to 7.64 g/t Au over 4.00 metres in hole AK90-06.

Drilling of the "99" and "100" structures failed to intersect any anomalous gold mineralization.

A programme of deeper drilling, at vertical depths of 250 to 300 metres, is recommended to further explore the "102" structure for economic gold deposits. Initial drill tests of the "104" and "105" sub-parallel structures are recommended, as well as deep drill tests of the "106" and "107" structures.

2.0 INTRODUCTION

This report describes the results of the 1990 diamond drilling programme completed by Battle Mountain (Canada) Inc. (BMCI) on the Amalgamated Kirkland property located in the Kirkland Lake mining district. Twenty-eight holes were drilled to test new gold discoveries and geophysical anomalies which were outlined by mapping and geophysical surveys, overburden stripping and channel sampling programmes which were carried out by BMCI during the period July, 1989 to July, 1990.

2.1 Property Location and Access

The Amalgamated Kirkland property consists of 27 mining claims optioned by Queenston Mining Inc. (formerly HSK Minerals Ltd.) from Premier Exploration Inc. The property is currently held by BMCI as part of an option agreement with Queenston Mining Inc. dated June 15, 1989.

An application for lease, mining rights only, was submitted November 12, 1987.

The property is located in the Larder Lake Mining Division in the southeast quarter of Teck Township south and southwest of the town of Kirkland Lake (NTS 42 A/1; UTM 538800E/568600N; See Figure 1).

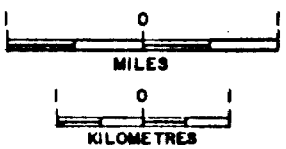
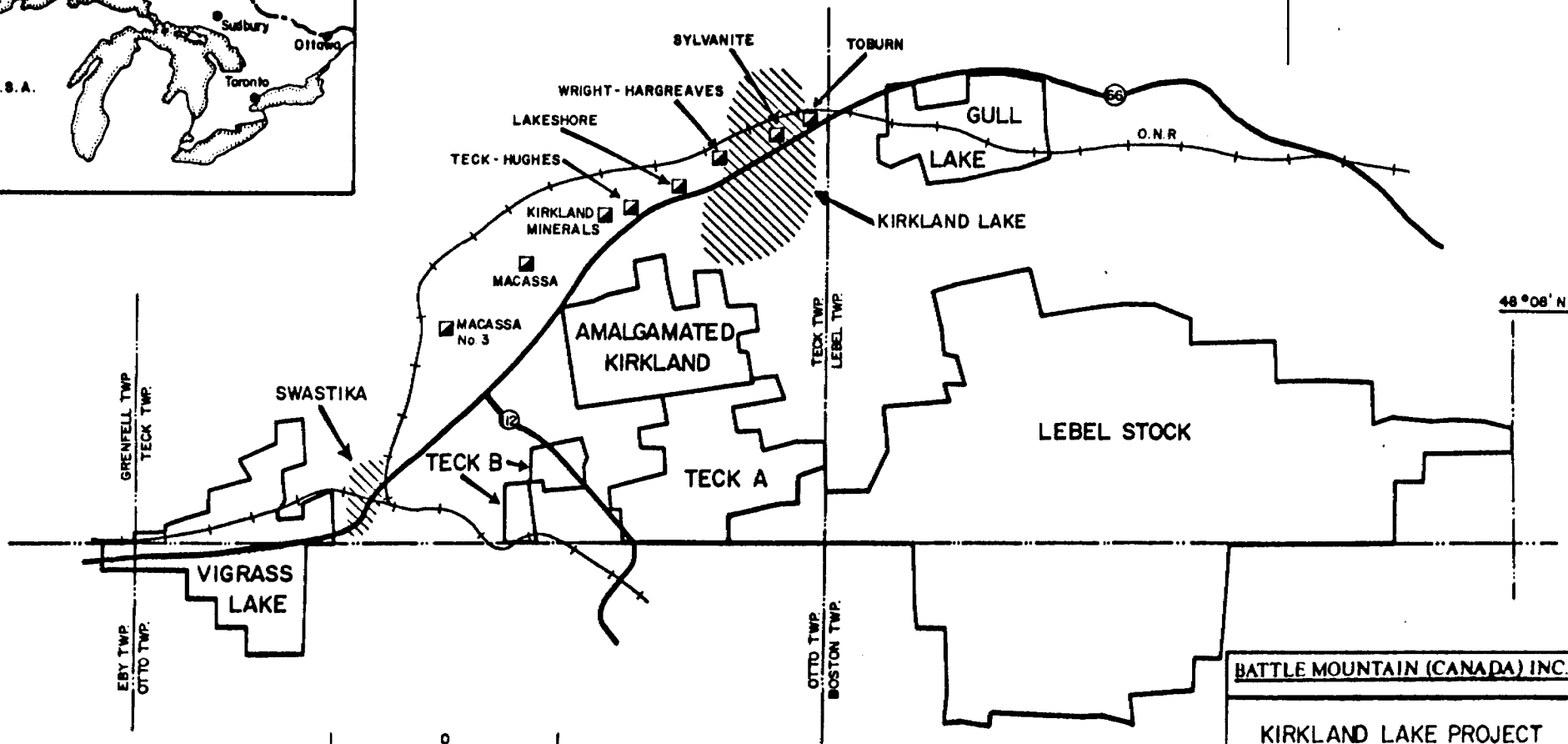
Access to the northeastern part of the property is provided by Main, Queen and Earl streets in the Town of Kirkland Lake and the Hunton Shaft bush road and to the northwest through Government Road West (Chaput Hughes) and the Industrial Plaza on Highway 66. A gravel road which exits the highway at a point approximately midway between the GM City dealership and the Industrial Mall, provides excellent access for heavy equipment such as diamond drills and backhoes. This road crosses patented claims held by Mr. Joe Morgan of Swastika, who kindly gave his permission to use this private road.

A right-of-way for hydro and natural gas lines crosses the northern part of the property. The south-westerly flowing Murdock Creek divides the property diagonally, approximately in half.

2.2 Topography

The topography consists of seventy percent low rounded knolls and ridges and thirty percent tag alder and black spruce swamps. Elevations range from 305 to 345 metres ASL. There is about thirty percent outcrop and overburden cover consisting of glacial till, one to twenty metres thick over the remainder of the claims.

Most of the property is covered by second growth poplar bush with local small stands of birch, spruce, balsam and pine.



BATTLE MOUNTAIN (CANADA) INC.

KIRKLAND LAKE PROJECT
ONTARIO

LOCATION SKETCH

Figure 1

3.0 PREVIOUS WORK

The Amalgamated Kirkland property has a long history of exploration activity which dates back to 1911. Prospecting, mapping, trenching, geophysical surveys and diamond drilling programmes have been carried out on specific geological targets such as the Amalgamated Kirkland syenite body in the north part of the property or carbonate alteration zones in close proximity to the Larder Lake Fault Zones which crosses the central portion of the claim block. The area between the Larder Lake Fault and the Amalgamated Kirkland syenite had not been intensely explored prior to 1989 except for numerous old prospector's trenches which probably date back to the period 1911 to 1924.

During the 1989 field season, a geological mapping and overburden stripping programme carried out by BMCI resulted in the discovery of two anomalous gold-bearing alteration zones (Bottrill, 1990, Benham, 1990). The 101-7290 gold zone averaged 2.48 g/t Au over a width of 6 metres, while the 102-8350 zone assayed 2.22 g/t Au across 6 metres including 5.0 g/t Au over 1.5 metres. Both showings are associated with altered, sericitic, pyritic, ductile-brittle shear zones striking 070° in Timiskaming volcanics and sediments which are intruded by syenite dykes.

In 1990, additional overburden stripping, detailed mapping and channel sampling were completed by BMCI (Benham, 1990a). The interpreted "102" structure was traced intermittently as a gold-bearing, pyritic, sericitic, silicic alteration zone for a strike length of 540 metres from 7910E to 8450E. Selected grab samples returned assays up to 36.55 g/t Au and channel samples up to 8.36 g/t Au over a width of 3.80 metres. A new showing of native gold, which was named the 99-8030 zone, returned a channel sample assay of 797.5 g/t Au across 0.45 metres.

A magnetometer survey (Roth, 1990) and a detailed IP survey (Roth, 1990a) were completed. Low magnetic linear anomalies with intermittent weak chargeability and high resistivity anomalies were found to be associated with the known mineralized structures.

4.0 REGIONAL GEOLOGY

The Kirkland Lake area is situated in the central part of the Archean, Abitibi Greenstone Belt, on the south limb of a major east-west trending, east plunging synclinorium which is located approximately at the mid-point between the Round Lake and Lake Abitibi Batholiths. The northern and southern limbs of this synclinorium are wide east west trending deformation zones known as the Procupine/Destor and Cadillac/Larder Lake Breaks, respectively. The Cadillac/Larder Lake deformation zone can be traced from Val d'Or, Quebec to the Matachewan area in Ontario and lies immediately south of Kirkland Lake. The trace of the more specific and historically referenced Larder Lake Break runs through the centre of the Amalgamated Kirkland property. All the historically significant and presently producing gold mines in the Kirkland Lake district are located to the north of the historical "Larder Lake Break", mostly along a sub-parallel structure known as the Kirkland Lake Main Break.

5.0 PROPERTY GEOLOGY

The property is underlain by three geological domains. The southern domain includes the northern half of the Murdock Creek syenite stock which intrudes altered, spinifex textured komatiitic volcanics of the Larder Lake Group. The central domain consists of complexly folded and faulted Timiskaming ash- and lapilli-tuffs interbedded with conglomerates, graywackes, siltstones and mudstones which are intruded by narrow syenite dykes. The northern domain is dominated by a 100 to 300 metre wide feldspar-porphyrific syenite body, known as the Amalgamated Kirkland Syenite, which intrudes Timiskaming conglomerates and graywackes. The southern and central domains are separated by a 50 to 300 metre wide zone of intense carbonatization and chlorite-carbonate-talc schists associated with the Larder Lake Fault Zone.

The Lakeshore (015° to 025°) and the Murdock Creek (035° to 045°) fault sets offset an earlier alteration-mineralization related ductile-brittle shear set at 055° to 080°.

Anomalous gold mineralization is associated with the earlier pyritic, sericitic, carbonated shear set. The best mineralization is found in silicified, blue-grey quartz-breccia zones containing up to 30 percent fine grained pyrite and minor galena and molybdenite.

Thin section studies have shown that the pyrite is the result of the total destruction of magnetite present as detrital grains within the tuffs and lapilli tuffs.

6.0 GEOPHYSICS

Total field and vertical gradient magnetic surveys were carried out over the central and northern geological domains along grid lines at 50 metre spacings and readings every 12.5 metres (Roth, 1990). Eight sub-parallel, linear, low magnetic anomalies, which are associated with the alteration-mineralization shear set trending 055° to 080° and offset by faults striking 015° to 045°, were interpreted from the ground magnetics. For reference purposes, these eight magnetic lows were named the "99", "100", "101", "102", "104", "105", "106", and "107" structures.

A pole-dipole IP survey, (a = 12.5m, n = 1 to 6), was completed to test for sulphide concentrations and/or zones of high resistivity associated with the "99", "100", "101" and "102" structures (Roth, 1990a). A weak chargeability anomaly with very high resistivities was detected over the 102-8350 gold zone. Weaker anomalies were located along strike to the east and to the west. Two moderate strength chargeability anomalies were indicated along the "100" structure at 8200E and 8500E to 8700E. A weak chargeability anomaly is associated with the "99" structure. Some IP anomalies are located to the north and south of the known and interpreted altered structures.

7.0 DRILLING

7.1 Drill Programme

Diamond drilling on the Amalgamated Kirkland property was started on October 15th and completed on December 6th by Heath & Sherwood Drilling (1986) Inc. of Kirkland Lake under the supervision of W. Benham. Twenty-eight holes were drilled for a total of 3318.67 metres. A total of 1733 sawn core samples and 145 check assays were assayed for gold by Swastika Laboratories Ltd. The core is presently stored at BMCI's warehouse which is located in the Industrial Plaza on Government Road West in Kirkland Lake.

7.2 Drill Results

The results of the drilling are described in drill logs AK90-01 to AK90-28 (Appendix I) and illustrated on drill sections DC-001 to DC-023 which accompany this report. Twenty-seven holes were logged by M. Masson and one hole, AK90-16, was logged by W. Benham. Drill hole locations are shown on Drawing DP-001. A listing of the significant gold intersections is presented in Table I.

Hole AK90-01, which was drilled to test the 102-8350 gold zone, intersected a 11.2 metre wide sericitic alteration zone from 49.70 to 60.90 metres down the hole. This alteration zone is cut by several low angle cross faults. A 0.75 metre wide breccia zone, with 5 - 10% pyrite and 5% quartz veining, was encountered from 59.40 to 60.15 metres. This zone assayed 0.62 g/t Au over 1.0 metres.

Hole AK90-02 tested the 102-8275 gold zone. A 1.70 metre wide altered fault zone was intersected from 61.90 to 63.60 metres. A 5 cm pyritic quartz vein was cut at 63.60 metres followed by a 45 cm wide syenite dyke. This vein and 50 cm of altered tuff assayed 0.17 g/t Au. A 1.40 metre wide sericitic fault zone, with 10-15% brecciated chloritic quartz veining and traces of pyrite, was intersected from 102.35 to 103.75 metres. A 1.00 metre wide section of this fault zone assayed 0.12 g/t Au.

Hole AK90-03, which tested the 102-8400 gold zone, intersected a 27.1 metre wide sericitic alteration zone from 61.90 to 89.00 metres. Three pyrite-quartz breccia zones were cut from 65.75 to 65.90 metres, 71.50 to 72.00 metres and 75.80 to 76.60 metres. A 5.20 metre wide section from 71.40 to 76.60 metres assayed 0.62 g/t Au including 2.14 g/t Au over 0.70 metres.

Hole AK90-04 was drilled to test a blue quartz breccia vein at 8370E, 10240N. A hematitic fault zone was intersected from 94.20 to 99.20 metres. A 5.1 metre wide section of strongly altered sericitic tuffs with 1% light grey pyritic quartz veinlets was encountered from 99.20 to 104.30 metres. A 2-4 cm quartz vein with 5-10% disseminated pyrite was cut at 100.10 metres. This vein is dislocated by two cross cutting fault slips at 65° and 30° to the core axis. A 0.50 metre sample which included this vein assayed 4.71 g/t Au.

Hole AK90-05 tested the "102" structure along line 8450E. Altered, sericitic, pyritic tuffs with 5% quartz veining were encountered from 56.79 to 58.14 metres. A 3.64 metre wide quartz-pyrite breccia zone with multiple phases of white, blue grey and grey quartz-carbonate veining and 5-15% pyrite assayed 0.15 g/t Au over 4.00 metres from 58.00 to 62.00 metres.

A syenite dyke was intersected from 74.07 to 78.94 metres. Sericitic tuffs, mudstones and graywackes, containing irregular 0.2 - 1 cm quartz-carbonate veinlets and traces of pyrite and chalcopyrite, were encountered below the syenite dyke. A section from 82.0 to 86.0 metres assayed 0.12 g/t Au over 4.00 metres.

Hole AK90-06 was planned to test the western part of the 102-8350 gold zone where it is not disrupted by numerous cross faults. Faulted, hematitic lapilli tuffs were intersected from 3.05 to 22.4 metres. This is the fault zone which probably cut out part of the mineralized zone in hole AK90-1, which was drilled 10 metres to the east. Altered sericitic, pyritic tuffs with blue-grey quartz breccia zones containing 5-20% pyrite were intersected from 25.12 to 29.95 metres. A 4.00 metre section from 26.00 to 30.00 metres assayed 7.64 g/t Au, including 10.66 g/t Au over 2.70 metres. Native gold was found at 26.60 metres, where the other half of the core assayed 25.54 g/t Au over 0.60 metres. A hematitic syenite dyke, with sericitic contacts, was intersected from 29.95 to 32.90 metres, and followed by sericitic tuffs from 32.90 to 43.65 metres.

Hole AK90-07 tested the "102" structure along section 8250E between the 102-8275 gold zone and the 102-8170 gold zone. A quartz + chlorite + pyrite breccia zone in sericitic graywacke was intersected from 80.50 to 85.15 metres. This zone assayed 1.53 g/t Au over a width of 4.70 metres including 5.56 g/t Au over 1.00 metres.

Hole AK90-08 was drilled beneath narrow, high grade quartz veinlets in sericitic mudstones and graywackes, which are exposed in the 102-8170 stripped area. A pyritic shear zone, which was intersected from 44.00 to 44.50 metres, assayed 1.19 g/t Au over 0.50 metres. From 75.90 to 76.55 metres, a quartz + pyrite zone, in finely laminated, sericitic mudstones/siltstones, assayed 3.58 g/t Au over 2.55 metres, including 10.04 g/t Au over 0.70 metres.

Hole AK90-09 tested the 102-8170 gold zone at 8150E. A 0.50 cm wide quartz + pyrite zone in mudstones assayed 11.25 g/t Au over 0.60 metres, from 93.65 to 94.25 metres.

Hole AK90-10 tested two low magnetic anomalies located along 8050E. A fault zone, with brecciated, black, quartz + chlorite veinlets, was intersected from 145.55 to 147.40 metres. A 0.50 metre wide sample from this zone assayed 0.65 g/t Au.

Hole AK90-11, which was drilled to test the 102-7912 gold zone, failed to intersect any anomalous mineralization. Bleached, sericitic, ash and lapilli tuffs, which contain no mineralized quartz veining, were intersected at 86.60 to 94.45 metres and 99.90 to 103.80 metres.

Holes AK90-12 to 14 tested, at 50 metre intervals, the low magnetic anomaly, the weak IP anomaly and the sericitic alteration zones which are associated with the 99-8030 high-grade native gold showing. Two altered, weakly pyritic sericite zones with minor quartz veining were intersected in each hole. The sericite zones are separated by a zone hematized tuffs. No anomalous assays were returned.

Holes AK90-15 and AK90-16 tested two relatively strong IP anomalies, which appear to be associated with the interpreted "100" structure. A weak sericitic alteration zone was intersected in hole AK90-15, but insufficient sulphides were encountered to explain the IP anomaly. Hole AK90-16 intersected a 20 metre wide section of silicified quartz-veined, pyritic, foliated, lapilli tuffs and conglomerates which assayed nil to trace gold.

Holes AK90-17 and 18 were drilled above hole AK90-04. Hole AK90-17 intersected a quartz + pyrite zone in sericitic lapilli tuffs from 24.25 to 32.58 metres. This section assayed 0.80 g/t Au over 8.38 metres including 1.55 g/t Au over 0.70 metres and 1.08 g/t Au over 4.58 metres. Hole AK90-18 intersected strongly altered tuffs from 50.20 to 64.80 metres; a pyritic sericitic and hematitic syenite from 64.80 to 66.15 metres and bleached tuffs from 66.15 to 76.65 metres. Quartz + pyrite zones were cut at 60.50 to 63.60 metres and 67.40 to 67.55 metres. A 6.70 metre wide section assayed 1.67 g/t Au including 2.09 g/t Au over 1.00 metres and 3.14 g/t Au over 2.80 metres, which included 16.40 g/t Au over 0.50 metres.

Holes AK90-19 and 20 were drilled along section 8425E, midway between holes AK90-03 and 05. From 34.90 to 44.62 metres, hole AK90-19 intersected a pyrite + quartz zone, which assayed 0.12 g/t Au over 6.10 metres. A quartz + pyrite zone, from 54.20 to 54.55 metres, assayed 6.30 g/t Au over 0.40 metres. Hole AK90-20 cut a 3.10 metre wide pyrite zone, at 78.50 to 81.60 metres, which assayed 1.59 g/t Au. This zone contains 0.5 - 10% finely disseminated pyrite and 1-3 cm blue grey silicified zones and quartz veins.

Hole AK90-21 tested IP and low magnetic anomalies which are associated with the "102" structure along section 8600E. Weakly to strongly altered sericitic tuffs were intersected from 69.10 to 93.50 metres and 96.50 to 98.90 metres. A pyritic, sericitic syenite was cut at 93.50 to 96.50 metres. A pyritic zone, with 0.5 - 3% pyrite and quartz breccia veins up to 0.50 metres wide, which were intersected from 69.10 to 74.00 metres, assayed 0.75 g/t Au over 5.00 metres. A 0.5 cm wide quartz vein with 1-2% pyrite at 83.10 metres assayed 7.05 g/t Au over 0.20 metres. A 8.45 metre wide section at 90.50 to 98.95 metres assayed 2.25 g/t Au including 12.87 g/t Au over 0.70 metres.

Hole AK90-22, which tested a weak IP anomaly and a magnetic low along 8825E, intersected a 32.9 metre wide section of silicified, sericitic, chloritic, pyritic, molybdenite-bearing, foliated, altered tuffs, from 114.00 to 147.90 metres. No anomalous assays were returned from this section. A fault zone at 82.00 to 82.20 metres assayed 0.42 g/t Au over 1.00 metres. A schistose zone with 1% disseminated pyrite and minor quartz veining at 93.70 to 93.85 metres assayed 0.36 g/t Au over 0.40 metres.

Holes AK90-23, 24 and 25 tested the 102-8170 zone at vertical depths of 119, 110 and 82 metres respectively, below holes AK90-07, 08 and 09, which had intersected significant gold mineralization over widths of 0.60 to 3.50 metres.

Hole AK90-23, an undercut of hole AK90-07, intersected from 129.70 to 168.00 metres, a 38.30 metre wide zone of weakly to moderately altered, chloritic, sericitic, brecciated graywackes with 2-3% quartz + chlorite veining with 0.5% pyrite along the vein contacts. A fault at 141.85 to 142.10 metres assayed 0.19 g/t Au.

Hole AK90-24, an undercut of hole AK90-08, intersected from 136.25 to 143.00 metres, altered, sericitic, silicified graywackes, which are cut by 3-5%, 0.1-0.5 cm, quartz ± chlorite ± pyrite veinlets. A 3.75 metre wide section assayed 2.74 g/t Au, including 6.35 g/t Au over 1.50 metres.

Hole AK90-25, which was drilled 25 metres west of and deeper than hole AK90-09, intersected from 102.65 to 104.50 metres, a pyrite + quartz breccia zone which assayed 2.41 g/t Au over 1.75 metres, including 8.01 g/t Au over 0.50 metres. This mineralized zone is at a fault contact between altered tuffs and mudstones.

Hole AK90-26, an undercut of hole AK90-21, intersected three mineralized zones down dip of the three zones which were encountered in hole AK90-21. A quartz + pyrite zone from 120.60 to 122.85 metres assayed 1.84 g/t Au over 3.00 metres, including 7.12 g/t Au over 0.75 metres. Moderately deformed, intercalated, sericitic mudstones and graywackes with 2-3% quartz veinlets, from 139.5 to 142.00 metres, assayed 0.10 g/t Au over 2.50 metres. Strongly foliated, pyritic pebble conglomerates and graywackes, at 148.00 to 149.80 metres, assayed 0.28 g/t over 1.80 metres.

Hole AK90-27 tested IP and low magnetic anomalies associated with the interpreted "99" and "100" structures. No significant mineralization was encountered. Moderately sericitized ash tuffs with traces of pyrite were intersected at 40.00 to 49.50 metres. Moderately to strongly deformed sericitic ash tuffs, with 0.5% finely disseminated pyrite, were cut from 123.70 to 124.80 metres.

Hole AK90-28 tested the 101-7290 gold zone along line 7350E. Weakly to moderately altered sericitic grawackes, conglomerates and tuffs with widespread, narrow pyritic quartz-veined zones were intersected. A pyritic, sericitic lapilli tuff at 44.00 to 46.00 metres averages 1.89 g/t Au over 2.0 metres, including 4.03 g/t Au over 0.50 metres.

KIRKLAND LAKE PROJECT, ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SUMMARY LISTING OF DIAMOND DRILL HOLES

Hole No.		Collar		Assays			
AK90 -	Easting	Northing	Total Length	From	To	Length (metres)	Au g/t
14	8100	9835	99.45	No significant assays			
15	8200	9970	102.75	No significant assays			
16	8500	10015	119.62	No significant assays			
17	8370	10210	56.55	24.20	32.58	8.38	0.800
				incl. 24.20	24.90	0.70	1.550
				24.90	28.00	3.10	0.210
				28.00	32.58	4.58	1.080
18	8370	10185	77.90	61.00	67.70	6.70	1.670
				incl. 62.00	63.00	1.00	2.090
				and 64.90	67.70	2.80	3.140
				incl. 67.20	67.60	0.50	16.400
19	8425	10205	71.20	34.00	40.10	6.10	0.120
				42.00	42.50	0.50	0.100
				48.50	49.50	1.00	0.200
				54.20	54.60	0.40	6.300
20	8370	10170	99.60	78.50	81.60	3.10	1.590
				incl. 78.50	81.00	2.50	1.940
21	8600	10174	117.70	69.00	98.95	29.95	0.880
				incl. 69.00	74.05	5.00	0.750
				incl. 69.60	70.60	1.00	1.490
				and 72.90	73.50	0.60	2.280
				82.00	86.00	4.00	0.670
				incl. 83.00	83.20	0.20	7.050
				and 85.00	86.00	1.00	1.080
				90.50	98.95	8.45	2.250
				incl. 90.50	96.50	6.00	2.970
				incl. 92.00	96.00	4.00	3.940
				incl. 92.00	92.70	0.70	12.870
				95.50	96.00	0.50	9.835
				and 98.55	98.95	0.40	2.245

TABLE I
KIRKLAND LAKE PROJECT, ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SUMMARY LISTING OF DIAMOND DRILL HOLES

Hole No.		Collar		Assays			
AK90 -	Easting	Northing	Total Length	From	To	Length (metres)	Au g/t
01	8350	10185	111.10	59.40	60.40	1.00	0.610
02	8300	10175	123.55	63.10 103.00	63.65 104.00	0.55 1.00	0.165 0.120
03	8400	10185	129.50	65.60 71.40 incl. 71.40 and 75.80	66.10 76.60 72.10 76.60	0.50 5.20 0.70 0.80	0.830 0.620 2.135 0.965
04	8370	10160	125.85	100.00	100.50	0.50	4.710
05	8450	10175	121.55	58.00 82.00	62.00 86.00	4.00 4.00	0.154 0.118
06	8340	10210	71.80	26.00 incl. 26.40 incl. 26.40 incl. 26.40	30.00 30.00 29.10 27.00	4.00 3.60 2.70 0.60	7.640 8.460 10.663 26.540
07	8250	10165	108.20	80.50 incl. 80.50 incl. 83.00	85.20 84.00 84.00	4.70 3.50 1.00	1.530 2.010 5.560
08	8190	10165	123.45	44.00 74.00 incl. 75.85	44.50 76.55 76.55	0.50 2.55 0.70	1.190 3.580 10.040
09	8150	10155	124.00	93.65	94.25	0.60	11.250
10	8050	10100	173.70	147.00	147.50	0.50	0.650
11	7900	10175	117.40	No significant assays			
12	8000	9840	99.55	No significant assays			
13	8050	9845	90.17	No significant assays			

KIRKLAND LAKE PROJECT, ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SUMMARY LISTING OF DIAMOND DRILL HOLES

Hole No.		Collar		Assays			
AK90 -	Easting	Northing	Total Length	From	To	Length (metres)	Au g/t
22	8825	10380	155.30	81.50 93.60	82.50 94.00	1.00 0.40	0.420 0.360
23	8250	10145	191.70	141.85	142.35	0.50	0.190
24	8190	10140	151.00	136.25 incl. 136.25 and 138.50	140.00 138.50 140.00	3.75 2.25 1.50	2.740 0.340 6.350
25	8125	10150	142.90	102.65 incl. 102.65 incl. 103.90	106.00 104.40 104.40	3.35 1.75 0.50	1.300 2.407 8.010
26	8600	10155	160.68	120.00 incl. 120.45 incl. 120.45 and 139.50 and 148.00	123.00 122.35 121.20 142.00 149.00	3.00 1.90 0.75 2.50 1.00	1.840 3.890 7.120 0.100 0.280
27	7900	9890	130.10	No significant assays			
28	7350	10170	122.40	44.00 incl. 44.70	46.00 45.20	2.00 0.50	1.890 4.030
TOTAL TO DATE			3318.67				

7.3 DISCUSSION OF DRILL RESULTS

Although no economic mineralization was encountered by the 1990 drill programme, significant anomalous gold mineralization, which is associated with the "102" structure, was intersected in holes drilled along a strike length of 550 metres, from 8050E to 8600E, and at vertical depths of 20 to 119 metres. Mineralized intersections vary considerably in width and grade from 11.25 g/t Au over 0.60 metres in hole AK90-09 to 7.64 g/t Au over 4.0 metres in hole AK90-06. In hole AK90-28, a 29.95 metre wide intersection, which averaged 0.88 g/t Au, consists of four anomalous zones which assayed 0.75 g/t Au over 5.0 metres, 0.67 g/t Au over 4.0 metres, 2.97 g/t over 6.0 metres and 2.25 g/t Au over 0.4 metres.

To the east of 8275E, (in holes AK90-1 to 6, AK 90-17 to 21 and AK 90-26) the "102" structure consists of a silicified breccia with 3-5% pyrite, from 0.05 to 6.2 metres wide, within a broader zone of altered sericitized lapilli tuffs. Pyrite + quartz breccia zones in each of these holes appear to be visually almost identical. However, individual samples returned a considerably wide range of assays from 0.25 to greater than 25 g/t Au. Averages for the mineralized zones vary from 0.12 g/t Au over 6.10 metres in hole AK90-19 to 7.64 g/t Au over 4.00 metres in hole AK90-6.

Anomalous gold mineralization was encountered above, within, and below a zone of red, hematite alteration up to three metres wide, which was interpreted in outcrop to be a syenite dyke. In drill core, this unit usually appears to have diffuse sericitic contacts and it is distinguished by its colour and lack of distinct clasts. It may be an earlier hematitic alteration phase or a syenite dyke.

From 8050E to 8275E (in holes AK90-7 to 10 and AK 90-23 to 25) the mineralization is similar to the 102-8170 zone, which is exposed at surface, and consists of 1-3 cm wide grey quartz veins in silicified, pyritic, sericitic, laminated mudstones and chloritic, pyritic, brecciated, sericitic graywackes.

The mineralized zones dip 65 to 85° to the south, and are offset by northwest and southeast dipping cross faults.

Hole AK90-11, along 7900E, intersected over 20 metres of altered sericitic tuffs, graywackes and mudstones which possibly could be the "102" structure. However, no mineralized pyrite + quartz breccia zones were encountered.

The 101-7290 zone, tested by hole AK90-28, may be part of the "102" structure rather than part of a sub-parallel structure. A re-interpretation of the IP and magnetic survey data indicates that the "102" structure may extend from 7290E, 10220N to 8900E, 10240N, (See Drawing GP-001). An anomalous grab sample (150 ppb Au) of sericitic, foliated conglomerates from an old trench at 8900E, 10240N, indicates the possibility that hole AK90-22 may not have been drilled far enough to intersect the "102" structure. This hole was the only one drilled from north to south in anticipation of deep overburden to the south of the drill target. The silicified, pyritic, alteration zone, which was intersected in hole AK90-20, may be a barren sub-parallel structure or it may be related to the cross-cutting Murdock Creek fault zone.

Drill tests of the "99" and "100" structures did not return any anomalous assays. The low magnetic and IP anomalies are due to zones of sericite + carbonate + hematite alteration with quartz veining and pyrite mineralization.

8.0 CONCLUSION & RECOMMENDATIONS

The 1990 Amalgamated Kirkland drill programme encountered significant gold mineralization, which is associated with the "102" structure, over a strike length of 1,250 metres, from 7350E to 8600E. The "102" structure exhibits good continuity and strength along strike and down dip. The "102" structure has excellent potential for the discovery of economic gold deposits below or along strike of the 1990 drill intersections.

A programme of deeper drilling is recommended to test the "102" structure at depths of 250 to 300 metres at 200 metre intervals.

Drill tests of the interpreted "104" and "105" sub-parallel structures are recommended.

Drilling, prior to 1989, intersected anomalous gold mineralization which is associated with the interpreted "106" and "107" structures within the Amalgamated Kirkland syenite. Drill holes, to test these structures at vertical depths of 250 to 300 metres, are recommended.

Further drilling of the "99" and "100" structures is not recommended at this time.

FL: KLADDRPT4QT.NO2

9.0 REFERENCES

Benham, W., 1990

Report on Geological Mapping, Amalgamated Kirkland Property, Kirkland Lake Project, Teck Township, Larder Lake Mining Division, Ontario; Battle Mountain (Canada) Inc.

Benham, W., 1990a

Report on Overburden Stripping, Detailed Mapping and Channel Sampling, Amalgamated Kirkland Property, Kirkland Lake Project, Teck Township, Larder Lake Mining Division, Ontario; Battle Mountain (Canada) Inc.

Bottrill, T. J., 1990

Report on Overburden Stripping, Outcrop Washing and Channel Sampling, Amalgamated Kirkland Property (July - December, 1989) Teck Township, Larder Lake Mining Division, Ontario; Battle Mountain (Canada) Inc.

Roth, J., 1990

Report on a Magnetometer Survey, Amalgamated Kirkland Property, Kirkland Lake, Ontario for Battle Mountain (Canada) Inc.; Stratagex Ltd.

Roth, J., 1990a

Report on an IP/Resistivity Survey, Amalgamated Kirkland Property, Kirkland Lake, Ontario for Battle Mountain (Canada) Inc.; Stratagex Ltd.

APPENDIX I
DIAMOND DRILL LOGS

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 1 of 13

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 17-20 1990	EASTING	8350.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10185.00
CLAIM No.	L 49163	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	October 16, 1990	DRILLED BY	Heath & Sherwood	LENGTH	111.10
COMPLETED	October 18, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
28.96		45
102.10		40

PURPOSE To test 102-8350 Gold Zone
COMMENTS Alteration Zone 49.7-60.9, 11.2 m
 Pyrite Zone 59.4-60.15, 0.75 m

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t	
From	To		From	To		From	To			
0.00	2.00	CASING			53.50 - 54.10	Foliation @ 60° tca	59.40	60.40	1.00	0.61
2.00	12.30	CONGLOMERATE			54.10 - 56.90	Fault Zone @ 40° tca				
		7.55 - 7.87			59.40 - 60.15	Pyrite Zone				
		9.40 - 9.80				5 - 10 % py, 1 - 3 % qtz				
		11.90 - 12.15			60.60 - 60.85	Fault Zone @ 30° tca				
12.30	14.10	ASH TUFF	60.90	80.10	LAPILLI TUFF					
14.10	14.45	CONGLOMERATE	80.10	83.10	ASH TUFF					
14.45	18.40	LAPILLI TUFF			80.10 - 80.20	Fault @ 17° tca				
		15.85 - 16.00			82.80 - 83.10	Fault @ 20° tca				
18.40	22.70	ASH TUFF	83.10	84.75	LAPILLI TUFF					
		22.45 - 22.60			ASH TUFF					
22.70	41.20	LAPILLI TUFF	84.75	87.80	84.75 - 85.20	Fault Zone @ 47° tca				
		29.80 - 30.00			LAPILLI TUFF					
		37.26 - 37.70			92.20 - 92.40	Fault @ 47° tca				
41.20	49.70	ASH TUFF	87.80	92.50	CONGLOMERATE					
		41.20 - 42.00			COARSE LAPILLI TUFF					
49.70	60.90	SERICITIC ALTERATION ZONE	92.50	92.80	LAPILLI TUFF					
		50.80 - 51.65								
		52.35 - 53.50			E.O.H.					
			107.50	111.10						
			111.10							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 2 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	2.00	CASING									
2.00	12.30	<p>CONGLOMERATE / GRAYWACKE</p> <p>Polymictic pebble conglomerate, matrix supported, weak to non-magnetic, massive to weakly foliated with prominent pebble fabric @ 52° tca. Unit consists of 0 - 25% angular to moderately well rounded, polymictic (mafic volcanic, feldspar porphyry, spotted trachyte) clasts up to 4 cm (avg 2 cm) in a fine grained feldspar + quartz + lithic fragments (graywacke) groundmass. Minor wispy sericite is pervasive throughout.</p>									
	2.85 - 2.87	Fault @ 50° tca	6177	2.00	3.00	1.00		Foliated Cgl, Fault @ 2.85 - 2.87	0.02		
		tight chlorite and sericite schist with moderate to strong ankerite.	6178	3.00	3.50	0.50		Conglomerate - weak sericite	0.02		
	3.74 - 3.85	Fault @ 57° tca	6179	3.50	4.00	0.50		Cgl + sericite + ankerite schist	0.03		
		Sericite + Ankerite Schist - leading contact marked by 1 cm quartz albite veinlet with sharp chloritic boundaries. Lower contact is gradational with wispy sericitic conglomerate.	6180	4.00	5.00	1.00		Weakly foliated Conglomerate	0.03		
			6181	5.00	6.00	1.00		Massive Conglomerate	0.02		
	6.75 - 6.85	Fault @ 23° tca	6182	6.00	6.50	0.50		Massive Conglomerate	0.04		
		Sericite + chlorite + quartz/albite, rubby button core	6183	6.50	7.00	0.50		Foliated Cgl, fault @ 6.75 - 6.85	0.02		
	7.30 - 7.40	Fault @ 15° tca	6184	7.00	8.00	1.00		Foliated sheared Conglomerate, fault @ 7.30 - 7.55	0.04	0.01	
		Chlorite + sericite + calcite; tight 1 mm wide chlorite schist with calcite along fault faces.									
	7.55 - 7.87	Fault @ 22° tca									
		Sericite + ankerite + chlorite + quartz; open vuggy fault with wispy to laminated sericite, strong rusty appearance due to ankerite weathering.	6185	8.00	9.00	1.00		Massive to foliated Conglomerate	0.02		
	9.40 - 9.80	Fault @ 30° tca	6186	9.00	10.00	1.00		Sheared Cgl - Sericite+ Ank + Qtz/Albite	0.02		
		Sericite + ankerite + quartz/albite; strong sericite/ankerite schist and brecciated quartz albite veinlets.	6187	10.00	11.00	1.00		Massive Conglomerate	0.03		
			6188	11.00	11.50	0.50		Massive Conglomerate	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 3 of 13

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
	11.90 - 12.15	Fault @ 37° tca Sericitic + chlorite + calcite + quartz; pseudo brecciated to brecciated quartz vein, 3 cm wide, in sericite chlorite schist.	6189	11.50	12.20	0.70		Ser + Chl Schist + Qtz Breccia Massive Ash Tuff	0.01		
			6190	12.20	13.00	0.80			0.01		
12.30	14.10	TRACHYTIC TUFF / ASH TUFF Fine grained, massive, purplish-grey, non-magnetic; contains 1% barren milky white quartz veins up to 0.5 cm wide.	6191	13.00	14.00	1.00		Massive Ash Tuff, fault @ 13.70 - 13.85	0.03		
	13.70 - 13.85	Fault @ 33° tca: sericite + ankerite + chlorite + quartz; boudinaged white quartz ± albite vein ≤ 1 cm wide in sericite + ankerite schist.									
	14.00 - 14.10	Quartz ± albite vein: barren, massive, milk white, irregular contact.									
14.10	14.45	CONGLOMERATE / GRAYWACKE Weakly foliated conglomerate with < 5% clasts in a fine grained graywacke matrix; moderate sericite to 3%; poorly sorted; contacts appear to be co-incidental with late barren quartz ± albite veins @ 14.10 and 14.40 m.	6192	14.00	14.50	0.50		Massive Foliated Cgl with white barren quartz veins	0.02	0.01	
14.45	18.40	LAPILLI-TUFF / CONGLOMERATE Massive to moderately well foliated with clast elongation @ 55° tca. Heterolithic clasts from very fine grained dark green to fine grained reddish-brown and spotted trachyte, generally moderately to well rounded in a fine grained feldspar and sericite groundmass. Clast size varies from 1-2 mm to 2 cm (avg. 1 cm) and from 10-50% of unit; poorly sorted; non-bedded and non-magnetic; lower contact marked by 1.5 cm irregular quartz vein.	6193	14.50	15.00	0.50		Massive Lapilli Tuff	0.03		
			6194	15.00	16.00	1.00		Massive to foliated Lapilli Tuff - fault @ 15.85 - 16.00	0.02		
	15.85 - 16.00	Fault @ 52° tca: sericite + quartz/albite schist; strong to moderately sericitized tuff with late, barren white quartz veinlets to 0.5 cm.	6195	16.00	17.00	1.00		Massive undeformed Lapilli Tuff	0.02		
			6196	17.00	17.70	0.70		Massive Lapilli Tuff with minor late QV's	0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 4 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS						
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M		
18.40	22.70	17.45 - 17.50	Fault @ 67° tca: sericite + chlorite + quartz schist; 1 cm buff-milk white quartz vein with 1 mm wide chlorite selvage in strongly sheared sericite schist.	6197	17.70	18.40	0.70		Massive Lapilli Tuff	0.02			
		18.00 - 18.06	Fault @ 27° tca: sericite + chlorite + quartz pseudo-brecciated to brecciated white quartz vein within sericite-chlorite schist.										
		18.20 - 18.40	Contact zone with ash tuff is strongly sericitized with very irregular quartz ± albite veinlets throughout.										
		ASH TUFF		Massive to poorly bedded dark-grey to green ash tuff. Unit is fine grained and very homogeneous in composition and texture. Non-magnetic, undeformed and very weakly altered with < 1% patchy, wispy sericite.									
		18.70 - 18.90	Fault @ 50° tca: sericite + chlorite + quartz; irregular buff to white quartz veinlets and brecciated masses in sericite + chlorite schist.	6198	18.40	19.00	0.60		Massive Ash Tuff with sericite + quartz, fault @ 18.70	0.01			
		19.55 - 19.60	Fault @ 32° tca: sericite + chlorite + ankerite + quartz; rusty weathered carbonatized shear zone approximately 2 cm wide with a late pseudo-brecciated quartz vein.	6199	19.00	20.00	1.00		Ash Tuff with minor faulting and quartz	0.01			
		19.80 - 20.10	Bedding @ 12 - 15° tca: very finely laminated ash tuff in contacts with slightly coarser ash tuff; small scale micro faulting evident with 0.5 - 1 cm movement.	6200	20.00	21.00	1.00		Massive Ash Tuff	nil			
22.70	41.20	19.80 - 20.10	Bedding @ 12 - 15° tca: very finely laminated ash tuff in contacts with slightly coarser ash tuff; small scale micro faulting evident with 0.5 - 1 cm movement.	6201	21.00	22.00	1.00		Massive Ash Tuff	0.01			
		22.45 - 22.60	Fault breccia @ 22° tca: angular brecciated white quartz fragments up to 3 cm in a dark green to black chloritic matrix. Minor late calcite in fractures.	6202	22.00	22.70	0.70		Massive Ash Tuff with fault breccia @ 22.45	0.01			
		LAPILLI TUFF		Multi-coloured, poorly sorted, non-bedded lapilli tuff with 1 - 25% clasts; clasts vary from aphanitic light red trachyte to pale green sericitized spotted trachyte to dirty brown porphyritic trachyte with phenocrysts to 1 - 2 mm in holocrystalline									
		6203	22.70	23.50	0.80		Massive Lapilli Tuff	0.01					
		6204	23.50	24.00	0.50		Massive Lapilli Tuff - minor late calcite	0.01					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 6 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
41.20	50.80	ASH TUFF Unit is generally massive to poorly bedded, very fine to fine grained, dark grey to green to mauve (hematitic) and contains < 1% clasts greater than 5 mm. Generally non-magnetic but has some locally strongly magnetic areas; irregular, white quartz veinlets up to 0.5 cm are pervasive throughout.	6223	41.20	42.00	0.80		Fault Zone - Qtz breccia , chlorite and sericite	0.01		
	41.20 - 42.00	Fault Zone - Fault Breccia @ 37° tca: sericite + chlorite + quartz; upper contact marked by a sharp 1 mm chlorite slip with a 2 mm quartz vein; section is semi-massive to foliated fault breccia consisting of fractured and brecciated white to creamy coloured quartz masses and veinlets (10-15%) in a fine grained yellow - green sericitic + chloritic groundmass.	6224	42.00	43.00	1.00		Massive Ash Tuff with 2% late Qtz veinlets	0.01		
	43.32 - 43.40	Fault @ 47° tca: sericite + quartz + chlorite; upper and lower contacts marked by tight, 1 - 5 mm chlorite + quartz vein bounding predominantly sericitic ash tuff.	6225	43.00	44.00	1.00		Massive Ash Tuff - fault @ 43.32 - 43.40	0.02		
	44.66 - 44.75	Fault @ 70° tca: sericite + chlorite + quartz; 4 cm buff to white quartz vein bounded by dark green chlorite and wispy sericite.	6226	44.00	45.00	1.00		Ash Tuff - fault @ 44.66 - 44.75	0.01		
	46.26 - 46.35	Quartz Vein: very irregular quartz vein with moderate to strong sericite alteration at contacts and within 1 - 2 cm inclusion; quartz is milk-white to pinkish and appears to have undergone three periods of silicification.	6227	45.00	46.00	1.00		Massive weakly sericitic Ash Tuff	nil		
	48.90 - 49.30	Well bedded Ash Tuff: very fine grained light grey-green ash tuff with 1 - 2 mm wide purple (hematite) beds @ 62° tca. These beds are cross-cut by 1 - 2 mm wide quartz veinlets with distinct 0.5 - 1 cm alteration (sericite?) halos evident which obliterates bedding proximal to these veinlets.	6228	46.00	47.00	1.00		Massive Ash Tuff with 1% quartz veins	nil		
	49.30 - 49.38	Fault @ 55° tca: sericite + quartz + chlorite; 3 cm buff-pink to white quartz vein bounded by tight, irregular sericite + chlorite slips.	6229	47.00	48.00	1.00		Ash Tuff with 1% quartz and chlorite veinlets	0.02		
			6230	48.00	49.00	1.00		Massive Ash Tuff with 1 - 2% quartz veinlets	nil		
			6231	49.00	50.00	1.00		Bedded Ash Tuff - fault @ 49.30	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 7 of 13

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		49.70 - 50.40 Sericite isograd @ 49.70 m: unit becomes weakly, pervasively altered with very fine (<= 1 mm) spotty sericite throughout, leading to highly altered and sheared tuffs.	6232	50.00	50.80	0.80		Weakly sericitic Ash Tuff	0.02	0.05	
50.80	51.65	FAULT ZONE @ 45° tca Sericite + Chlorite + Quartz Very strongly deformed and comprised of 70% sericite, 15% chlorite, 15% quartz; fine grained yellow-green sericite + chlorite encompassing a very fine grained light brown to grey groundmass of sericite + chlorite + quartz.	6233	50.80	51.65	0.85		Fault Zone - sheared Lapilli Tuff	nil		
		51.30 - 51.50 Fine grained reddish-pink trachytic clasts up to 1 cm are evident within a strongly foliated sericite + chlorite schist which gives rise to a "Augen" type texture.									
51.65	52.35	LAPILLI TUFF Moderately well foliated @ 57° tca; heterolithic lapilli tuff with clasts from 2 mm - 7 mm (avg. 3-4 mm), moderately rounded and consisting of 75% brown-green, very fine grained clasts, 10 - 15% fine grained red clasts, 10% sericitized yellow-green clasts; groundmass is well foliated and consists of 75% very fine lithics and 25% sericite	6234	51.65	52.35	0.70		Sericitized Lapilli Tuff	0.05		
52.35	53.50	FAULT ZONE @ 51° tca - Sericite + Chlorite + Quartz Strongly deformed lapilli tuff with patchy and wispy sericite + chlorite in a pseudo-brecciated groundmass of lapilli tuff and 10 - 15% irregular quartz masses outlined by dark chloritic boundaries.	6235	52.35	53.00	0.65		Sericitic fault + Fault Breccia Rubbly core - sericite + chlorite + quartz schist	0.01		
		53.10 - 53.60 Tight chlorite + sericite fault approximately 2 - 3 mm wide running sub-parallel to core axis. Rusty limonitic stain to gouge material.	6236	53.00	53.50	0.50			0.04		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 8 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
53.50	54.10	LAPILLI TUFF Well foliated, multi-coloured, heterolithic lapilli tuff; groundmass is fine grained greyish-brown colour comprising 80% of unit. Clasts comprise 20% of unit and consist of roughly equal proportions of red, reddish-brown, light to dark green, very fine grained trachytic fragments. Clasts are angular to sub-rounded from 2 mm - 1 cm (avg. 0.5 cm); prominent stretching @ 60° tca.	6237	53.50	54.10	0.60		Foliated, moderately sericitic Lapilli Tuff	0.01		
54.10	56.90	FAULT ZONE @ 35° - 40° tca Entire section is comprised of strongly foliated to sheared lapilli tuff with closely spaced (10 - 25 cm) tight sericite + chlorite ± quartz faults throughout; sericite alteration is pervasive and occurs as 5 - 10% fine wisps and spots in highly foliated lapilli tuff, to 85% sericite + 15% chlorite + quartz in fault zones. 56.65 Fault Breccia @ 37° tca: angular white-pink quartz + calcite fragments up to 0.5 cm in a 1 cm wide very fine grained black chloritic matrix.	6238	54.10	55.00	0.90		Strongly sheared, foliated sericitic Tuff	nil		
			6239	55.00	56.00	1.00		Sheared Lapilli Tuff - sericite + chlorite	0.02		
			6240	56.00	56.90	0.90		Strongly sheared sericitic Tuff	0.07		
56.90	59.40	ASH TUFF Unit is fine grained greyish-brown to green, massive to moderately well foliated non-magnetic tuff; alteration consists primarily of pervasive sericitization as thin wisps, laminations, spotty sericite and sericitized clasts ranging from 5 - 15% of unit; secondary quartz + chlorite veinlets up to 5 mm comprise 2% of total	6241	56.90	57.90	1.00		Moderately foliated, sericitic Ash Tuff	0.02		
			6242	57.90	58.90	1.00		Massive to foliated Ash Tuff	0.07		
			6243	58.90	59.40	0.50		Massive sericitic Ash Tuff	0.09		
59.40	60.15	PYRITIC ZONE - (Rehealed Breccia) Unit is yellow-brown to green in colour and is brecciated by fine grained dark grey irregular pyritic band or veinlets generally 1 - 3 mm in thickness and coalescing into masses up to 1 cm wide; pyritic bands are comprised of very fine grained pyrite + quartz, 75% and 25% respectively; host rock is pervasively sericitized and contains 1 - 3% very fine grained disseminated pyrite interstitial to more massive pyritic veinlets; at least 2 stages of quartz flooding are evident as 1) white, narrow <= 5	6244	59.40	59.90	0.50		Pyrite Zone, 5 - 10% pyrite in sericitic Tuff	0.88	0.84	
			6245	59.90	60.40	0.50		Pyrite Zone, 3 - 5% pyrite in sericitic Tuff	0.36		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 9 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
60.15	60.90	mm quartz ± chlorite veinlets parallel to fabric and having strong pyritic boundaries and 2) late white cross-cutting quartz veinlets and masses; upper contact is very sharp and somewhat irregular @ 65° tca; lower contact is very irregular, sharp and is marked by a 5 mm quartz vein with semi-massive, fine grained pyrite along vein boundaries 1 - 2 mm wide; average pyrite content 5 - 10%.									
		SERICITIC ASH TUFF Massive to weakly foliated light green, fine grained sericitic ash tuff; unit contains 1 - 2% very finely disseminated pyrite from 60.50 - 60.60 m.	6246	60.40	60.90	0.50		Sericitic Ash Tuff + Fault Breccia	0.08		
		60.35 - 60.40 Fault Breccia @ 53° tca: 3 - 4 cm black, chloritic breccia with angular, sericitic trachyte clasts to 1.5 cm.									
		60.60 - 60.85 Fault @ 30° tca: sericite + chlorite + quartz.									
60.90	80.10	LAPILLI TUFF Massive to weakly foliated dark grey to green, fine to medium grained lapilli tuff; groundmass is fine grained, chloritic and moderately to strongly magnetic through out; clast component from 5 - 25% of the unit, are angular to sub-rounded, generally less than 1 cm in size, and are comprised predominantly of light brown coloured, fine grained to aphanitic trachyte up to 80%; very weak to non-existent fabric or clast elongation, i.e.: massive, poorly bedded and moderately well sorted.	6247	60.90	61.90	1.00		Massive weakly sericitic Lapilli Tuff	0.04		
			6248	61.90	62.50	0.60		Massive Lapilli Tuff	0.01		
			6249	62.50	63.50	1.00		Massive Lapilli Tuff fault @ 63.30	0.04		
			6250	63.50	64.50	1.00		Massive chloritic Lapilli Tuff	nil		
			6251	64.50	65.50	1.00		Massive Lapilli Tuff	0.01		
			6252	65.50	66.50	1.00		Massive Lapilli Tuff	0.01		
		63.30 Fault @ 20° tca: sericite + chlorite schist; tight 2 - 3 mm wide sericite + chlorite shear.	6253	66.50	67.50	1.00		Massive Lapilli Tuff	0.01		
			6254	67.50	68.50	1.00		Massive Lapilli Tuff	0.01	0.01	
		73.35 Fault @ 71° tca: Chlorite + Quartz ± calcite; 1 cm wide chloritic shear with 0.5 cm pink quartz + calcite.	6255	68.50	69.50	1.00		Massive unaltered Lapilli Tuff	0.01		
			6256	69.50	70.50	1.00		Massive unaltered Lapilli Tuff	0.01		
			6257	70.50	71.50	1.00		Massive unaltered Lapilli Tuff	0.02		
			6258	71.50	72.50	1.00		Massive unaltered Lapilli Tuff	0.05		
			6259	72.50	73.50	1.00		Massive unaltered Lapilli Tuff	0.01		
			6260	73.50	74.50	1.00		Massive unaltered Lapilli Tuff	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 10 of 13

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
80.10	80.20	FAULT ZONE @ 17° tca Sericite + Chlorite + Quartz buff to pink quartz + calcite breccia in sericite + chlorite schist; fault marks upper contact of fine grained massive, bleached ash tuff	6261	74.50	75.50	1.00		Massive unaltered Lapilli Tuff	nil		
			6262	75.50	76.50	1.00		Massive unaltered Lapilli Tuff	0.02	0.01	
			6263	76.50	77.50	1.00		Massive unaltered Lapilli Tuff	nil		
			6264	77.50	78.50	1.00		Massive unaltered Lapilli Tuff	0.01		
			6265	78.50	79.50	1.00		Massive unaltered Lapilli Tuff	nil		
			6266	79.50	80.50	1.00		Massive Lapilli Tuff - fault @ 80.10	nil		
80.20	83.10	ASH TUFF / ALTERED LAPILLI TUFF Massive to weakly foliated with weak clast elongation @ 55° tca; unit is buff-brown (bleached?) to greyish-green in colour; framework consists of 5% angular to sub-rounded buff-brown coloured clasts, very fine grained to aphanitic and from 1 - 3 mm in size, and appear to be somewhat altered to sericite; groundmass is fine grained, equigranular composed of 95% feldspar and lithic fragments (indiscernible) and 5% black, fine magnetite grains approximately 0.5 mm in size; unit is therefore strongly magnetic; where groundmass is bleached to a buff-brown colour (possibly sericite alteration), clasts become obliterated and difficult to distinguish. 82.80 - 83.10 Lower contact faulted @ 20° tca: sericite + chlorite + pink-buff quartz; minor (<<1%) coarse, euhedral pyrite along slip face.	6267	80.50	81.50	1.00		Bleached Ash Tuff with 5% Magnetite	0.01		
			6268	81.50	82.50	1.00		Massive to bleached Tuff with 3 - 5% Magnetite	0.01		
			6269	82.50	83.50	1.00		Bleached to unaltered Ash - / Lapilli Tuff	0.02		
83.10	84.75	LAPILLI TUFF Medium to coarse grained dark grey to green, moderately magnetic lapilli tuff; clasts from 1 - 2 mm to 2.5 cm (avg. 4 - 5 mm) in size and comprise 1 - 10% of the unit; clasts are angular to sub-rounded and are buff-brown in colour and very fine grained;	6270	83.50	84.50	1.00		Massive Lapilli Tuff	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 11 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
84.75	85.20	matrix is fine grained dark grey-green, equigranular and consists of 65% feldspar, 35% lithics. FAULT ZONE Sericite + Chlorite + Quartz @ 47° tca Leading contact marked by 1 - 2 cm pink-white quartz vein with sharp, black chloritic edges 1 - 2 mm wide; lower contact also marked by 0.5 cm pink-buff quartz vein with 2 - 5 mm sericite + chlorite contacts.	6271	84.50	85.20	0.70		Sericite + Chlorite + Quartz Fault	0.01	0.01	
85.20	87.80	ASH TUFF Fine grained, massive dark-green ash tuff with <= 1% buff-brown lapilli fragments; unit is characterized by patchy buff-brown sericite alteration halos up to 2 cm wide centered on narrow (1 - 5 mm) white-pink quartz veinlets oriented @ 40° tca (25% + sericite); buff-brown alteration halos have very diffuse boundaries grading outward into less altered, sericitic tuffs with 1 - 5% sericite; contact with lower lapilli tuff unit is gradational and is noted by an increase in lapilli size clast content	6272	85.20	86.00	0.80		Ash Tuff with sericitic halos proximal to quartz veins	0.01		
			6273	86.00	87.00	1.00		Ash Tuff with sericite alteration halos	0.01		
			6274	87.00	87.80	0.80		Ash tuff with sericite alteration halos	0.01		
87.80	89.10	LAPILLI TUFF Intercalated ash; unit is quite variable in colour and texture from dark grey-green, brown to brown purple and contains from 1 - 5% sub-rounded, buff-brown trachytic clasts in a fine to very fine grained matrix.	6275	87.80	88.50	0.70		Massive unaltered Lapilli Tuff	0.03		
			6276	88.50	89.10	0.60		Massive Lapilli-/ Ash Tuff with magnetite	0.02		
		88.85 - 89.10 Light brown, fine grained ash tuff with weakly bedded magnetite grains and specks throughout (2 - 3% of total).									
89.10	92.50	LAPILLI TUFF Massive to weakly foliated light to dark green to brown in colour with patchy, strong magnetics throughout; framework consists of sub-rounded clasts from 3 mm - 1.5 cm of buff-brown to pink trachyte and spotted trachyte in a fine grained equigranular ash matrix.	6277	89.10	90.10	1.00		Massive unaltered Lapilli Tuff	0.02		
			6278	90.10	91.00	0.90		Massive weakly sericitic Lapilli Tuff	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-01

PAGE: 13 of 13

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
107.50	111.10	<p>LAPILLI TUFF Heterolithic - massive, dark green to mauve coloured strongly magnetic tuff; clasts are heterolithic, sub-angular and vary from 1 mm - 1.5 cm (avg. 0.5 cm) and comprise 10 - 20% of unit; matrix is fine grained, dark green chloritic and strongly magnetic.</p> <p>108.95 Fault @ 30° tca; 0.5 cm wide quartz + chlorite shear.</p> <p>111.10 E.O.H.</p> <p>NOTE: Abbreviations Used Ank = Ankerite , Cgl = Conglomerate Chl = Chlorite , QV = Quartz Vein Qtz = Quartz , Ser = Sericite</p>	6297	107.50	108.00	0.50		Massive heterolithic Tuff	nil		
			6298	108.00	109.00	1.00		Massive Lapilli Tuff	nil		
			6299	109.00	110.00	1.00		Massive Lapilli Tuff	nil		
			6300	110.00	111.10	1.10		Massive unaltered heterolithic tuff	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-02

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 21-22 1990	EASTING	8300.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10175.00
CLAIM No.	L 491663	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	October 18, 1990	DRILLED BY	Heath & Sherwood	LENGTH	123.55
COMPLETED	October 19, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
38.10		44
96.00		41

PURPOSE To test 102-8275 Gold Zone
 COMMENTS Alteration Zone 54.5-64.0, 9.5 m
 No appreciable sulphide mineralization

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH	AVERAGE
From	To		From	To		From	To		
0.00	2.44	CASING	103.75	123.55	GRAYWACKE	63.10	63.65	0.55	0.165
2.44	4.10	ASH TUFF			3 - 4 % sericite				
4.10	11.20	LAPILLI TUFF		123.55	E.O.H.	103.00	104.00	1.00	0.12
		8.40 - 9.00 Shear Zone @ 24° tca							
11.20	54.50	ASH TUFF							
54.50	61.90	BLEACHED ASH TUFF							
61.90	63.60	FAULT ZONE							
		63.55 - 63.60 Quartz Vein @ 35° tca							
		1 - 3 % pyrite							
63.60	64.00	SYENITE							
64.00	69.50	LAPILLI TUFF							
69.50	79.20	ASH - LITHIC TUFF							
		70.45 - 70.80 Sheared , Sericitic							
		74.75 - 75.15 Fault @ 45° tca							
		78.75 - 79.20 Bleached							
79.20	102.35	COARSE LAPILLI TUFF							
102.35	103.75	FAULT ZONE							
		10 - 15 % brecciated quartz veining and chloritic fractures							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-02

PAGE: 3 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		generally weak to non-magnetic; intercalated lapilli beds are heterolithic with clast component ranging from 5-25% in a fine grained ash matrix; bedding varies from 5 - 20° tca and quite often shows evidence of cross-bedding in ash component.									
	25.30 - 25.70	White to cream to pink coloured irregular barren quartz vein running sub-parallel to core axis. Minor sericite and chlorite in wall rock.	6306	24.00	25.00	1.00		Massive Ash / Lapilli Tuff Quartz vein in massive Ash Tuff	0.01		
			6307	25.00	25.50	0.50			0.01		
	25.70 - 25.95	Fault @ 17° tca: sericite + chlorite + quartz + calcite; 3 - 5 cm brecciated quartz + calcite vein within tight sericitic, muddy slips 1 - 2 mm wide on both walls.	6308	25.50	26.00	0.50		Fault Zone @ 25.70 m Massive Ash Tuff	0.01		
			6309	26.00	27.00	1.00			0.03		
	49.75 - 49.90	Fault @ 40° tca: chlorite + sericite + quartz; strongly sheared, muddy fault with narrow (1 - 3 mm) quartz veinlets.									
	53.55 -	Fault @ 33° tca: tight 1 cm wide chlorite + sericite shear.									
54.50	61.90	BLEACHED ASH TUFF This section is characterized by 5-10% cross-cutting quartz veinlets with bleached, buff-brown irregular sericitized alteration halos surrounding them. Unaltered sections are massive, fine grained grey-green ash tuff as at 11.20 - 55.50 metres. At least 3 stages of quartz veining are evident: 1) Primary quartz flooding with sericite (@ 20° tca) alteration halos up to 2 cm wide bounding milk-white irregular quartz veins @ 15° - 20° tca with inclusions of sericitized wall rock. Veins have 0.5 - 3 cm wide halos. 2) and 3) Two stages of later cross-cutting quartz flooding @ 90° to initial veining. These veins are narrow (1 - 3 mm) and are frequently stepped due to small scale microfaulting parallel to primary vein orientation.	6310	53.00	54.00	1.00		Massive Ash Tuff, minor faulting Massive Ash Tuff Ash Tuff with sericite alteration on quartz Ash Tuff with quartz veins and sericite Sericitized Ash Tuff with quartz veins Bleached Ash Tuff + quartz veins Bleached Ash Tuff + quartz veins Bleached Ash Tuff with 3 - 5% quartz veins Bleached Ash Tuff with 5% quartz veins Bleached Ash Tuff with 3 - 5% quartz veins	nil		
			6311	54.00	54.50	0.50			0.01		
			6312	54.50	55.00	0.50			0.01		
			6313	55.00	56.00	1.00			0.01		
			6314	56.00	57.00	1.00			nil		
			6315	57.00	58.00	1.00			0.01	0.01	
			6316	58.00	59.00	1.00			0.01		
			6317	59.00	60.00	1.00			nil		
			6318	60.00	61.00	1.00			nil		
			6319	61.00	61.90	0.90		nil			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-02

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
61.90	63.60	<p>FAULT ZONE Mylonite @ 37° tca: strongly foliated to sheared, sericitized tuffs; unit displays cataclastic to pseudo-mylonitic texture with wispy to banded sericite (25 - 50%) encompassing stretched and broken lithic clasts up to 5 mm (avg. 1 - 3 mm) in size; groundmass is unrecognizable due to grain destruction; section is cut by 5% irregular quartz masses and veinlets (<= 0.5 cm) which have been brecciated parallel to schistosity and by late cross-cutting, narrow (<= 1 mm) quartz veinlets @ 37° tca (80° to schistosity).</p>	6320	61.90	62.50	0.60		Sheared sericitic Mylonite	0.01		
			6321	62.50	63.10	0.60			Sericitic Mylonite	0.01	
			63.20 - 63.50	Broken, rubbly schistose core; sericite schist; very strong, muddy breaks throughout this section.							
	63.50 - 63.60	Quartz vein : Buff to white quartz vein, 5 cm wide, with sharp sericite-chlorite slip face which marks lower contact @ 35° tca; vein displays crack and seal texture with multiple periods of quartz flooding; sericite slips up to 1 mm wide and carrying 1 - 3% pyrite cross-cut late quartz veinlets (1 - 3 mm) (i.e., pyrite mineralization post dates latest quartz veining); these pyritic slips display minor sinistral displacement (<= 1 mm); very minor (<<1%) disseminated pyrite is evident within quartz matrix.	6322	63.10	63.65	0.55		Sericite Schist + 5 cm quartz pyrite vein	0.16	0.17	
63.60	64.00	<p>SYENITE Massive very fine grained to porphyritic and reddish-purple in colour. Matrix is very fine grained to aphanitic with 1 - 2% wispy sericite along micro-fracture planes (<< 1 mm wide). Unit is cut by 3 - 5% late irregular white quartz veinlets at all angles to core axis with prominent, black chloritic margins. 2-5% sub and anhedral, milk-white poorly developed phenocrysts average 0.5 - 1 mm in size. Lower contact fault controlled with 3 - 4 mm wide chlorite + sericite slip and sericite foliation developed in syenite for 1 cm at contact (i.e., post syenite fault) @ 75° tca.</p>	6323	63.65	64.00	0.35		Syenite - late quartz chlorite veining	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-02

PAGE: 6 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M	
79.20	102.35	70.45 - 70.80 Sheared to sericitized lithic tuff; dirty brown coloured altered tuff with 5 - 10% pervasive sericite and numerous tight chloritic slips throughout; 70.50 - 70.55 buff-brown, halo-crystalline (cherty), irregular quartz mass, fractured and cut by 0.5 mm black chloritic slips; lower contact sharp 2 - 3 mm chlorite + quartz vein @ 52° tca.	6332	69.60	70.40	0.80		Massive Lithic Tuff	nil			
			6333	70.40	70.90	0.50		Sericitic Lithic Tuff - cherty quartz @ 70.45	0.01			
			6334	70.90	71.90	1.00		Massive Lithic Tuff - minor quartz + bleaching	0.01			
			6335	71.90	72.50	0.60		Massive Lithic Tuff	0.02			
			6336	72.50	73.50	1.00		Massive Lithic Tuff	0.04	0.05		
			6337	73.50	74.50	1.00		Massive Lithic Tuff, minor quartz	0.01			
			6338	74.50	75.50	1.00		Foliated Tuff with quartz and 0.5% pyrite	nil			
		74.75 - 75.15	Fault @ 45° tca: foliated to sheared lithic tuff with sericite + quartz throughout; quartz occurs as white to buff disrupted masses and brecciated veinlets up to 0.5 cm with 0.5% disseminated pyrite in wall rock @ 75.05 - 75.10 m.	6339	75.50	76.50	1.00		Massive Lithic Tuff	nil		
				6340	76.50	77.50	1.00		Lithic Tuff with fault breccia	0.01		
		77.00 - 77.03	Fault breccia @ 77° tca: 1 - 1.5 cm white brecciated quartz vein in a dark green fine grained chloritic matrix.	6341	77.50	78.50	1.00		Massive Lithic Tuff	0.01		
				6342	78.50	79.20	0.70		Lithic Tuff with bleached veins	0.01		
		78.75 - 79.20	Bleached lithic tuff: 3 - 5% milk-white quartz veinlets 1 - 5 mm wide along hair-line slips @ 50° tca with irregular light brown bleached, sericitic halos up to 1 - 2 cm. Where veins coalesce together bleached areas increase in width but not necessarily in intensity.									
79.20	102.35	LAPILLI TUFF Monolithic coarse lapilli tuff; unit is massive, undeformed dark grey-green in colour with light grey to reddish clasts; clasts are matrix supported, angular to sub-rounded and range from 2 mm to 5 cm + (avg. size 1 - 1.5 cm) and comprise 5 - 10% of total; 98% of clasts are buff-grey to reddish fine grained to porphyritic trachyte; 5% exotic, very fine grained clasts; matrix is dark grey-green fine grain lithic ash, moderately magnetic; upper contact with lithic tuff is sharp @ 40° tca; unit is cut by 3 - 4% pink to white quartz veinlets (1 - 3 mm) at various core angles.	6343	79.20	80.00	0.80		Massive coarse Lapilli Tuff	nil			
			6344	80.00	81.00	1.00		Massive Lapilli Tuff	nil			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-02

PAGE: 7 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
102.35	103.75	81.00 - 81.50 Bleached sericitic zone; leading edge is tight sericite + chlorite slip @ 57° tca; section is yellow-green in colour, massive to moderately foliated with pervasive wispy sericite throughout; lower contact is gradational; lower contact marked by strong, 1.4 m wide fault zone.	6345	81.00	81.50	0.50		Bleached sericitic Lapilli Tuff	0.02		
			6346	81.50	82.00	0.50		Massive Lapilli Tuff - minor bleaching	nil		
			6347	82.00	83.00	1.00		Massive Lapilli Tuff, quartz veins + bleaching	0.02		
			6348	83.00	84.00	1.00		Massive Lapilli Tuff - bleaching	0.02		
			6349	84.00	85.00	1.00		Massive unaltered Lapilli Tuff	0.03	0.02	
			6350	85.00	86.00	1.00		Massive Lapilli Tuff	0.01		
			6351	99.00	100.00	1.00		Massive coarse Lapilli Tuff	nil		
			6352	100.00	101.00	1.00		Massive Lapilli Tuff	nil		
			6353	101.00	101.50	0.50		Massive Lapilli Tuff	nil		
			6354	101.50	102.35	0.85		Massive to foliated Tuff @ fault contact	0.01		
102.35	103.75	103.75 - 104.00 FAULT ZONE Fault zone @ 57° tca: sericite + chlorite + quartz schist; strongly sheared to brecciated fault zone comprised of 80% massive sericite (yellow-green colour) plus tight chlorite sericite slips (1 - 2 mm) and massive to brecciated white to grey quartz veins throughout (10 - 15%). Trace fine grained pyrite in chlorite slips. This section may include very fine grained, yellow-green sericitic mudstone with sharp, tight sericite + chlorite boundaries.	6355	102.35	103.00	0.65		Fault zone - sericite schist	0.01		
			6356	103.00	104.00	1.00		Fault zone - sericitic greywacke	0.11	0.13	
103.75	123.55	123.55 - 104.00 GREYWACKE Massive, moderately well sorted, grey-green in colour and cut by <= 1% late, barren white quartz veinlets (0.5 - 2 mm), and contains 1 - 2% scattered, angular, aphanitic mudstone clasts up to 10 - 15 cm (avg. 1 - 2 cm) and jasper (1 mm - 3 cm); matrix comprises 95% + of the unit and consists of very fine grained quartz + feldspar + rock fragments in equal amounts; unit is pervasively sericitized with up to 3 - 4% wispy and spotty sericite prevalent throughout; generally non-magnetic.	6357	104.00	105.00	1.00		Sericitic Greywacke @ fault	0.02		
			6358	105.00	106.00	1.00		Massive Greywacke, spotty sericite	0.02		
			6359	106.00	107.00	1.00		Massive Greywacke - mudstone clasts	0.01		
			6360	107.00	108.00	1.00		Massive Greywacke - mudstone clasts	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 1 of 11

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 23-24 1990	EASTING	8400.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10185.00
CLAIM No.	L 491633	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	October 21, 1990	DRILLED BY	Heath & Sherwood	LENGTH	129.50
COMPLETED	October 22, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
35.00		43
65.50		42
114.00		41

PURPOSE To test 102-8425 Gold Zone
COMMENTS Alteration Zone 61.90 - 89.00, 27.1 m
 Pyrite Quartz Breccia Zones, 65.75 - 65.90
 71.50 - 72.00, 75.80 - 76.60

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	2.74	CASING	71.50	72.00	PYRITE QUARTZ BRECCIA	65.60	66.10	0.50	0.83
2.74	3.70	LAPILLI TUFF			3 - 5 % pyrite , 50 % Quartz				
3.70	4.00	FAULT ZONE	72.00	75.80	SYENITE	71.40	76.60	5.20	0.62
4.00	8.50	ASH TUFF	75.80	76.60	PYRITE QUARTZ BRECCIA 1 % pyrite				
8.50	16.50	LAPILLI TUFF	76.60	77.35	SYENITE	74.10	72.10	0.70	2.135
16.50	22.70	ASH TUFF	77.35	77.50	FAULT BRECCIA @ 44° tca				
22.70	29.25	SERICITIC ASH TUFF	77.50	89.00	HEMATITIC LAPILLI TUFF	75.80	76.60	0.80	0.965
		22.50 - 29.25 Fault breccia @ 15° tca	89.00	99.50	ASH TUFF				
29.25	52.65	LAPILLI TUFF Hematitic, foliated @ 52° tca			99.35 - 99.50 Fault @ 25° tca				
		33.40 - 33.45 Fault @ 22° tca			54.10 - 56.90 Fault Zone @ 40° tca				
		35.97 - 36.45 Fault Zone @ 70° tca	99.50	109.60	LAPILLI TUFF				
		41.25 - 41.35 Fault @ 30° tca			101.05 - 101.70 Fault @ 18° tca				
		43.00 - 43.16 Sericite Zone @ 10° tca			102.20 - 102.60 Fault @ 55° tca				
52.65	61.90	LITHIC TUFF / LAPILLI TUFF			105.90 - 106.10 Fault Breccia @ 22° tca				
		61.90 Fault @ 55° tca			109.00 - 109.60 Fault @ 25° tca				
61.90	65.75	SERICITIC TUFF / LAPILLI TUFF	109.60	120.85	SERICITIC LAPILLI TUFF				
		62.40 - 62.60 Fault @ 40° tca	120.85	122.00	MUDSTONE				
65.75	65.90	PYRITE / QUARTZ BRECCIA 3-5 % pyrite	122.00	129.50	SERICITIC LAPILLI TUFF				
65.90	71.50	SERICITIC TUFF		129.50	E.O.H.				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 3 of 11

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		No.	FROM	TO	Length % Rec		DESCRIPTION	Au, g/t	Au, Check
16.50	22.70	*NOTE: This unit is in part intercalated with narrow, jasperoidal conglomerate beds but seem to have little or no quartz associated with them (up to 1 m wide). Unit is also intercalated with moderately well bedded (@ 17° tca) fine grained ash tuffs up to 1 m wide (avg. 25 cm); contacts are gradational with coarse lapilli tuffs.								
		13.65 - 13.80 Quartz + ankerite vein @ 18° tca: dirty, fractured quartz + ankerite vein 2 cm wide with sharp chloritic slip boundaries.								
		ASH TUFF Massive, fine grained dark green to grey in colour, well sorted with poorly developed bedding; undeformed, unaltered; unit is in part intercalated with coarse, heterolithic lapilli tuff horizons up to 0.5 metres wide with very gradational contacts; unit also contains, narrow, up to 25 cm wide, jasperoidal conglomerate interbeds which also display very gradational contacts; moderately magnetic throughout.								
		19.20 - 19.30 Quartz + ankerite vein: 7 cm wide milk white quartz + ankerite vein; upper contact is sharp sericitic shear (2 - 3 mm) @ 90° tca; lower contact is irregular with some brecciation of quartz evident; lower contact of unit is arbitrary leading to altered, bleached tuffs but appears to be marked by a tight, sericitic slip @ 22.7 m.	6364	19.00	19.50	0.50	Quartz ankerite vein in Ash Tuff	0.01		
		22.70 Fault @ 22°: strong, tight muddy break 1 - 2 mm wide with chlorite + sericite gouge and ankerite alteration of wall rock up to 0.5 cm symmetrically about fault.	6365	22.50	23.50	1.00	Massive Ash Tuff - tight mud fault	nil		
22.70	27.50	BLEACHED ASH TUFF Light grey to buff-brown coloured bleached tuffs; unit is massive, non-magnetic, very fine grained with 5% wispy and spotty sericite alteration throughout; unit is cut by 1% late quartz + chlorite veinlets (<= 1 mm wide) which display symmetrical	6366	23.50	24.50	1.00		nil		
			6367	24.50	25.50	1.00		nil		
			6368	25.50	26.50	1.00		nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 4 of 11

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
27.50	29.25	sericitic alteration (bleaching) around margins up to 0.5 cm wide.; lower contact marked by strong wide fault breccia.	6369	26.50	27.50	1.00			nil			
		FAULT BRECCIA										
		Very strong muddy fault breccia with upper contact @ 15° tca; unit is very recognizable with distinct red-purple-yellow colouration due to a very fine grained hematized groundmass with wispy sericite; zone displays strong cataclastic texture comprised of angular bright red clasts of hematite (very fine grained) up to 1 cm (avg. 0.5 cm) and what appear to be narrow disrupted hematitic beds 1 mm wide and up to 3 - 4 cm long; groundmass is comprised of fine grained dark green chlorite + hematite + sericite mix and irregular wispy sericite masses; (70% chlorite + hematite, 30% sericite); fault breccia grades into strongly foliated, altered hematized heterolithic lapilli tuff.	6370	27.50	28.50	1.00			Hematitic Fault Breccia	nil		
			6371	28.50	29.25	0.75			0.02	0.01		
29.25	52.65	LAPILLI TUFF Hematized, heterolithic, coarse lapilli tuff.										
		29.25 - 31.50 Unit is highly deformed and well foliated @ 52° tca and consists of 50% heterolithic clasts of multi-coloured and textured trachytic rocks which are angular to sub-rounded with prominent stretching parallel to foliation (1.2 mm - 7 cm in size); matrix is grey to green, fine grained, sericitized and deformed rock fragments and constitutes 50% of unit; pervasive hematite alteration.	6372	29.25	30.10	0.85			Foliated Hematized Lapilli Tuff	0.02		
			6373	30.10	31.00	0.90			Hematized Lapilli Tuff, 3 cm quartz	nil		
			6374	31.00	31.50	0.50			Foliated Lapilli Tuff	0.01		
		31.50 - 33.40 Unit is somewhat lesser deformed, moderately to well foliated and is cut by 2 - 3% narrow (1 - 3 mm) quartz, quartz + chlorite and quartz + hematite veinlets.	6375	31.50	32.00	0.50				0.01		
			6376	32.00	33.00	1.00				0.02	0.02	
			6377	33.00	33.50	0.50			Foliated Lapilli Tuff - mud break @ 33.40	0.02		
		33.40 - 33.45 Fault @ 22° tca: strong tight (2 mm) mud gouge with late quartz (1 mm) infilling on margins.	6378	33.50	34.00	0.50				0.01		
	6379	34.00	35.00	1.00				0.03				
			6380	35.00	35.90	0.90			0.03			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 5 of 11

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
35.97 - 36.45	41.25 - 41.35	Fault zone @ 70° tca: sericite + quartz + ankerite; strongly foliated to sheared rusty weathered fault zone with 4 cm brecciated quartz vein @ 36.0 m; sharp sericitic boundaries with minor muddy fault gouge. Fault @ 30° tca: sericite + quartz; 3 cm milk-white to pink, massive quartz vein with sharp sericite slip boundaries. Sericite + chlorite + quartz @ 10° tca: irregular mass of sericite + pseudo-brecciated wall rock within a fractured quartz + chlorite vein; lower contact of unit is faulted with tight sericitic slip and moderate to strong sericite alteration of wall rock.	6381	35.90	36.50	0.60		Sericite + Quartz + Ankerite Fault	0.01		
			6382	36.50	37.00	0.50		Foliated Lapilli Tuff	0.01		
			6383	37.00	38.00	1.00		Hematized coarse Lapilli Tuff	0.02		
			6384	38.00	39.00	1.00			0.03		
			6385	39.00	40.00	1.00			0.02		
			6386	40.00	41.00	1.00			0.02		
			6387	41.00	41.50	0.50		Quartz + Sericite fault zone	0.03		
			6388	41.50	42.00	0.50		Massive hematized Lapilli Tuff	0.02		
			6389	42.00	43.00	1.00			0.03		
			6390	43.00	44.00	1.00			0.05	0.07	
			6391	44.00	45.00	1.00			0.02		
			6392	45.00	46.00	1.00			0.02		
			6393	46.00	47.00	1.00			0.02		
			6394	47.00	48.00	1.00			0.01		
			6395	48.00	49.00	1.00			0.02		
			6396	49.00	50.00	1.00			0.02		
			6397	50.00	51.00	1.00			0.02		
			6398	51.00	52.00	1.00			0.01		
			6399	52.00	52.65	0.65			0.03		0.03
			52.65	61.90	LITHIC TUFF / LAPILLI TUFF Zone of intercalated lithic and lapilli tuffs; unit is massive, undeformed light brown to green, non-bedded and non-magnetic; unit is typically fine-medium grained lithic tuff comprised of 80% very fine grained matrix with 20% angular buff-brown lithic fragments, 1 - 3 mm in size; moderately well sorted; section is intercalated (gradational contacts) with clast-rich (25 - 30%) lapilli tuffs with sub-rounded clasts to 2 cm; clasts are 75% red-brown fine grained trachyte; 20% grey-green trachyte; 5% purple-brown fine grained trachyte.	6400	52.65	53.00	0.35		Foliated sericitic Lithic Tuff @ fault contact
			6401	53.00	54.00	1.00			0.01		
			6402	54.00	55.00	1.00			0.01		
			6403	55.00	56.00	1.00			0.01		
			6404	56.00	57.00	1.00			0.02		
			6405	57.00	58.00	1.00			0.01		
			6406	58.00	59.00	1.00			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 6 of 11

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
61.90	65.75	61.9 Fault @ 55° tca: tight (1 mm) chlorite slip with <<0.5% pyrite + chalcopyrite. BLEACHED TUFFS - LAPILLI TUFF Massive fine to medium grained lithic - and lapilli - tuff with characteristic spotted, porphyritic texture; groundmass comprises 80% of unit and is light grey-green to brown very fine grained and completely sericitized; matrix is comprised of black, irregular to semi-prismatic amphibole crystals 1 - 2 mm in size and are altered to chlorite and/or hematite; altered hornblende and magnetite grains; occasional large, well rounded clasts to 5 cm are evident, dispersed throughout unit, but display weak, diffuse boundaries due to pervasive sericite alteration; these dark grey clasts are medium grained and porphyritic, with white plagioclase phenocrysts to 1 mm.	6407	59.00	60.00	1.00			0.02		
			6408	60.00	61.00	1.00			0.02		
			6409	61.00	61.90	0.90			0.03		
			6410	61.90	62.40	0.50		Bleached, sericitic 'salt + pepper' Tuff	0.01		
65.75	65.90	62.40 - 62.60 Fault @ 40° tca: sericite + chlorite + ankerite; rusty weathered, brecciated and sericitized wall rock fragments in a highly altered sericite + chlorite + ankerite groundmass. PYRITE - QUARTZ BRECCIA ZONE Brecciated, white to grey quartz veins and masses centered in tight 0.5 cm sericite + quartz + pyrite ± molybdenite slips @ 62° tca; matrix is comprised of irregular, wispy sericite with 3 - 5% fine disseminated pyrite proximal to quartz breccia; sericite and pyrite content decreases away from vein center with 1 - 3% pyrite up to 7 - 10 cm away from vein.	6411	62.40	62.90	0.50		Sericite + chlorite + ankerite Fault Breccia	0.01	0.01	
			6412	62.90	63.50	0.60			0.02		
			6413	63.50	64.00	0.50			0.01		
			6414	64.00	65.00	1.00			0.02		
			6415	65.00	65.60	0.60			0.01	Altered, bleached sericitic Tuff	
			6416	65.60	66.10	0.50		Pyrite zone = 3 - 5% pyrite in sericite + quartz breccia	0.70	0.96	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 7 of 11

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS			
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au* M
65.90	71.50	BLEACHED TUFFS Massive, pervasively sericitized, lapilli tuff with characteristic yellow-green to buff groundmass with 10 - 15% coarse, angular to sub-rounded altered clasts up to 5 - 7 cm; unit displays spotted porphyritic, pseudo-porphyrific texture with black subhedral to anhedral, chloritized ± hematized crystals (5 - 25%) in a very fine grained, sericitic groundmass.	6417	66.10	67.00	0.90		Sericitized Lapilli Tuff	0.03		
			6418	67.00	68.00	1.00			0.02		
			6419	68.00	69.00	1.00			0.01		
			6420	69.00	70.00	1.00			0.02		
			6421	70.00	71.00	1.00			0.01		
			6422	71.00	71.40	0.40			0.02		
71.50	72.00	PYRITE - QUARTZ BRECCIA ZONE Zone is grey in colour with 10 - 15% brecciated quartz fragments up to 0.5 cm in a very fine grained sericite + quartz + pyrite groundmass (50% quartz, 45% sericite, 3 - 5% pyrite); leading contact marked by very tight (<= 1 mm) chlorite + quartz + pyrite slip @ 65° tca; very minor (< 0.5%) disseminated pyrite occurs in wall rock for 1 - 2 cm outside of this slip plane; lower contact also marked by tight chlorite + quartz + pyrite slip @ 60° tca.	6423	71.40	72.10	0.70		Pyrite Zone = 3 - 5 % pyrite in sericite + quartz breccia	2.13	2.14	
72.00	77.50	SYENITE 72.00 - 74.63 Altered syenite (?); massive fine grained to porphyritic (?) yellow-green in colour with 5 - 10% black, subhedral chloritized phenocrysts (0.5 - 1 mm) in a fine grained sericitic groundmass; upper contact is obscured by pervasive sericite alteration; unit is cut by (1 - 2%) narrow quartz + chlorite veinlets up to 0.5 cm wide @ 40° and 80° tca; unit contains 0.5% disseminated fine pyrite and minor pyrite along chloritic fracture planes; these yellow-green sericitized sections grade into less altered, red syenite with 5% white plagioclase and 7 - 10% black chloritic phenocrysts. 75.80 - 76.60 Fault zone: sericite + quartz ± pyrite.	6424	72.10	73.00	0.90		Sericitized Syenite ?	0.31		
			6425	73.00	74.00	1.00		Sericitized Syenite with 5% quartz veins and < 0.5 % pyrite	0.31		
			6426	74.00	74.60	0.60		Sericitic Syenite with < 0.5% pyrite	0.53		
			6427	74.60	75.10	0.50		Red weakly altered Syenite	0.10		
			6428	75.10	75.80	0.70		Red massive Syenite	0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-03

PAGE: 8 of 11

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		75.80 - 76.20	6429	75.80	76.60	0.80		Sericite + quartz brecciated fault with 0.5 - 1% disseminated pyrite	0.90	1.03	
		76.20 - 76.60									
		77.35 - 77.50	6430	76.60	77.35	0.75		Altered Lapilli Tuff with fault breccia	0.05		
			6431	77.35	77.85	0.50			0.03		
77.50	89.00	BLEACHED LAPILLI TUFF Massive to weakly foliated, light grey to reddish-brown in colour where unit is hematized; framework constitutes 10 - 15% of the unit and consists of angular to sub-rounded clasts from 2 mm - 3 cm in size (avg. 1/2 - 1 cm) of buff-brown very fine grained trachyte and red-brown to green trachyte and mauve coloured hematized clasts; matrix is very fine grained, equigranular buff-brown to red in colour, quite hard and non-magnetic and maybe silicified; an average unit is cut by <1% late, narrow (1 - 3 mm) quartz veinlets.	6432	77.85	78.50	0.65		Bleached, massive Lapilli Tuff	0.02		
			6433	78.50	79.50	1.00			0.02		
		80.00	6434	79.50	80.10	0.60		Bleached Tuff with fault + quartz veins @ 80.0 m	0.02		
			6435	80.10	81.00	0.90			Massive Bleached Tuff	0.01	
			6436	81.00	82.00	1.00		0.03		0.02	
			6437	82.00	83.00	1.00		0.01			
			6438	83.00	84.00	1.00		0.01			
			6439	84.00	85.00	1.00		0.01			
			6440	85.00	86.00	1.00		0.01			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-04

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 25 1990	EASTING	8370.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10160.00
CLAIM No.	L 491633	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	October 22, 1990	DRILLED BY	Heath & Sherwood	LENGTH	125.85
COMPLETED	October 23, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
PURPOSE	To test 102-8250 Gold Zone				
COMMENTS	Alteration Zone. 95.10 - 104.30 , 9.2 m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45
76.00		42
114.00		39

SUMMARY LOG

ASSAY SUMMARY

INTERVAL From To		DESCRIPTION	INTERVAL From To		DESCRIPTION	INTERVAL From To		LENGTH in metres	AVERAGE Au g/t	
0.00	4.87	CASING			100.10	dislocated 2 cm quartz vein with 7% pyrite				
4.87	16.85	ASH TUFF								
16.85	39.55	LITHIC TUFF	104.30	111.83	LITHIC TUFF / LAPILLI TUFF					
39.55	81.25	ASH TUFF			108.65 - 108.68 Fault Breccia @ 47° tca					
		61.85 - 62.55 Sericitic Graywacke 1% pyrite	111.83	125.85	LAPILLI TUFF					
		64.50 - 64.85 Fault @ 50° tca			E.O.H.					
		67.95 - 69.30 Sericitic		125.85						
		79.60 - 80.10 Fault @ 55° tca								
		79.60 - 81.25 Hematitic								
81.25	94.20	GRAYWACKE / CONGLOMERATE Sericitic								
		88.05 - 88.03 Fault @ 37° tca								
94.20	95.10	FAULT ZONE Sericitic								
		94.20 Mud Gouge @ 40° tca								
		94.40 - 95.10 Schistose , 1 - 2 mm hematitic veinlets 20% quartz veinlets								
95.10	99.20	SERICITIC TUFF								
		5 % quartz chlorite veins								
99.20	104.30	ALTERED LAPILLI TUFF Sericitic, "peppered texture"								
							100.00	100.50	0.50	4.71

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-04

PAGE: 2 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au * M
0.00	4.87	CASING									
4.87	16.85	ASH TUFF Massive, undeformed, unaltered dark grey-green in colour; generally fine grained ash with very minor local lapilli clasts scattered throughout; unit is non-bedded and displays patchy, strong magnetics; lower contact obscured due to rubbly core.									
16.85	21.96	LITHIC TUFF Massive to very poorly bedded, fine grained, dark grey-green to light green in colour; unit is comprised of 15 - 30% small, angular to sub-rounded, heterolithic clasts from 0.5 - 3 mm (average 1 mm) in size, in a very fine grained ash matrix; moderately chloritic; strongly magnetic; patchy zones of hematization are notable @ 20.00 - 21.00 metres.									
21.96	23.40	CONGLOMERATE Polymictic, jasperoidal pebble conglomerate bed which is fault bounded; unit is moderately well foliated @ 30° tca, and displays pervasive wispy, sericite alteration throughout; contacts are tight chlorite + sericite + quartz ± ankerite slips @ 35 - 45° tca.									
23.40	39.55	LITHIC TUFF Massive to very poorly bedded, fine grained, dark grey-green to light green in colour; unit is comprised of 15 - 30% small, angular to sub-rounded, heterolithic clasts from 0.5 - 3 mm (average 1 mm) in size, in a very fine grained ash matrix; moderately chloritic; strongly magnetic.									
	29.90 - 30.91	Sericitized tuff; irregular wispy sericite + quartz veining @ 10° tca in a massive fine grained ash-lithic tuff with spotty leucoxene alteration.	6460	29.90	30.40	0.50		Sericitized Tuff	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-04

PAGE: 3 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M	
		30.66 - 30.80	15 cm buff-brown to white brecciated sericite + quartz vein.	6461	30.40	31.00	0.60	Sericitized Tuff with quartz vein	nil			
		37.44 - 37.45										Fault @ 14° tca; chlorite + quartz; tight (1 mm) chloritic slip with 0.5 cm, buff to pink quartz veinlet.
39.55	61.85	39.15 - 39.30	15 cm buff-brown to white, brecciated quartz vein with tight, irregular sericitic boundaries @ 45° tca.	6462	39.00	39.60	0.60	Quartz breccia vein and sericitized tuffs	nil			
		39.30 - 39.55	Bleached, light green sericitized tuff with 5% white quartz masses and veinlets.									
		ASH TUFF										
		Massive to well bedded dark grey to green, very fine grained ash tuff; unit displays sporadic zones of cross-bedding with narrow (1 - 3 mm) very fine magnetite beds @ 10 - 35° tca; unit is intercalated with narrow (up to 0.5 metres) lithic and lapilli tuff beds which typically display gradational contacts, and minor conglomerate interbeds (up to 25 cm) which also have gradational contacts.										
		57.97 - 52.00	Fault @ 45° tca: tight (1 mm) chlorite + sericite slip with 1.5 cm buff-brown to pink quartz vein.	6463	57.10	57.60	0.50	Quartz breccia vein with sericitized groundmass	0.01			
		57.20 - 57.50	Quartz Breccia Vein; very irregular buff to white to pinkish coloured, brecciated quartz vein with fragments up to 2 cm in a fine grained sericite + chlorite matrix; contacts are sharp but irregular.									
61.85	62.55	GRAYWACKE										
		Massive to weakly foliated graywacke with pervasive sericite alteration with 3 - 5% wispy sericite in a fine grained chloritic matrix; unit contains 0.5 - 1% disseminated pyrite occurring as very fine subhedral grains and pyritic clots to 1 mm; bedding contact is sharp but irregular @ 10 - 15° tca.										
		6464	61.80	62.60	0.80	Graywacke bed with 0.5 - 1% disseminated pyrite	0.02					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-04

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
62.55	67.95	ASH TUFF Massive to well bedded dark grey to green, very fine grained ash tuff; unit displays sporadic zones of cross-bedding with narrow (1 - 3 mm) very fine magnetite beds @ 10 - 35° tca; unit is intercalated with narrow (up to 0.5 metres) lithic and lapilli tuff beds which typically display gradational contacts, and minor conglomerate interbeds (up to 25 cm) which also have gradational contacts.									
		63.40 - 63.60	6465	62.60	63.20	0.60		Patchy sericite, altered Ash Tuff	nil		
			6466	63.20	63.70	0.50		Fault zone @ 63.40 m	0.01		
			6467	63.70	64.40	0.70		Massive, weakly sericitic Ash Tuff	0.01	0.02	
67.95	70.01	64.50 - 64.85	6468	64.40	65.00	0.60		Fault zone with 25 - 30% quartz veining and masses	0.01		
		64.50 - 64.53						Massive Ash Tuff - weak sericite	0.01		
		64.53 - 64.70	6469	65.00	66.00	1.00		Ash Tuff with 5% sericite + quartz	0.03		
		64.70 - 64.85	6470	66.00	67.00	1.00		Massive Ash Tuff	0.01		
			6471	67.00	67.90	0.90					
67.95	70.01	LITHIC TUFF Bleached (sericitized) pale yellow-green coloured tuff with 1 - 2% dark green, altered lithic fragments; upper contact is abrupt, lower contact very gradational.									
		67.95 - 69.30	6472	67.90	68.50	0.60		Bleached sericitized Lithic Tuff	0.01		
			6473	68.50	69.50	1.00		Massive Lithic Tuff	0.01		
		69.30 - 70.10	6474	69.50	70.10	0.60			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-04

PAGE: 5 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
70.01	79.60	ASH TUFF Massive to well bedded dark grey to green, very fine grained ash tuff; unit displays sporadic zones of cross-bedding with narrow (1 - 3 mm) very fine magnetite beds @ 10 - 35° tca; unit is intercalated with narrow (up to 0.5 metres) lithic and lapilli tuff beds which typically display gradational contacts, and minor conglomerate interbeds (up to 25 cm) which also have gradational contacts.	6475	79.00	79.50	0.50		Massive, weakly sericitic Tuff	0.01	0.02	
79.60	81.25	HEMATIZED ASH TUFF 79.60 - 80.10 Fault zone; sericite + chlorite + quartz + hematite; very sharp, tight (1 mm) chlorite slip @ 55° tca marks leading contact; section is dark green to purple in colour with 3% irregular quartz masses in a very fine grained green to purple, sericite + hematized unit with 1% late irregular quartz veins and brecciated masses up to 2 - 3 cm wide; lower contact is tight chlorite + quartz slip @ 40° tca.	6476	79.50	80.10	0.60		Hematized Tuff with 3% quartz veining and tight chloritic slips	0.02		
			6477	80.10	80.90	0.80		Hematized Tuff with 1% quartz	0.02		
			6478	80.90	81.40	0.50		Hematized Tuff + Graywacke	0.01		
81.25	94.20	GRAYWACKE / CONGLOMERATE Massive to moderately foliated polymictic pebble conglomerate and graywacke, light to dark green in colour; unit is pervasively sericitized with 5 - 10% sericite development in matrix and selective sericitization of certain clasts (mafic volcanics?) within the conglomerates; this section is also intercalated with very fine grained, red-brown to purple, hematized, ash tuff beds (?), up to 0.5 metres wide, which display gradational contacts with surrounding sediments.	6479	81.40	82.10	0.70		Massive weakly sericitic Graywacke	0.02		
			6480	82.10	83.00	0.90			0.02		
		83.85 Fault @ 32° tca; tight chlorite + sericite slip with 0.5 cm quartz vein on south wall.	6481	83.00	84.00	1.00			0.02		
			6482	84.00	85.00	1.00		Hematized Tuff and Graywacke	0.02	0.01	
		85.02 - 85.13 Vuggy, buff-pink irregular quartz vein with open cavities up to 0.5 cm partially infilled with drusy quartz, calcite and a few euhedral pyrite crystals.	6483	85.00	85.50	0.50		Hematized Tuff with vuggy quartz vein	0.01		
			6484	85.50	86.00	0.50			0.01		
			6485	86.00	87.00	1.00			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-05

PAGE: 1 of 7

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 27 1990	EASTING	8450.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10175.00
CLAIM No.	L 491633	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	October 24, 1990	DRILLED BY	Heath & Sherwood	LENGTH	121.55
COMPLETED	October 25, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
84.00		42
114.00		41

PURPOSE To test 102 - 8425 Zone
 COMMENTS Alteration Zone 57.50 - 79.95, 22.45m (Weak),
 Quartz Pyrite Zone 58.20 - 62.35, 4.15m

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 8.50	CASING					
8.50 58.20	LAPILLI TUFF			58.00 62.00	4.00	0.154
	32.00 Fault @ 35° tca					
	38.75 - 39.12 Fault @ 35° tca			82.00 96.00	4.00	0.118
	56.00 Fault @ 60° tca					
58.20 62.35	QUARTZ PYRITE ZONE					
	Altered, brecciated Lapilli Tuffs,					
	5 - 10 % pyrite, 10 - 15 % Quartz					
62.35 75.95	GRAYWACKE					
	5 % Sericite					
75.95 79.90	SYENITE					
79.90 121.55	GRAYWACKE / CONGLOMERATE					
	80.0 - 86.0 Sericitic graywacke and mudstone,					
	0.5 - 1 % pyrite					
	93.0 - 95.4 Mudstone					
121.55	E.O.H.					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-05

PAGE: 2 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
0.00	8.50	CASING									
8.50	58.20	LAPILLI TUFF Coarse monolithic lapilli tuff; unit is massive to weakly foliated @ 50° tca; matrix is fine grained, light gray-green to purple where hematitic (patchy throughout) and constitutes 90 - 95% of unit; clasts comprise 5 - 10% of unit and consist predominantly of light buff-brown to grayish fine grained to porphyritic trachyte which range in size from 2 - 3 mm to 5 cm (avg. 1 cm) and are generally angular to sub-rounded; unit is strongly magnetic, unaltered, undeformed.									
		29.75 - 30.45 Buff to white to pink (multi-phase) quartz vein running sub-parallel to core axis; vein displays banded appearance with interstitial wispy sericite; late bull quartz.									
		32.00 - 32.23 Fault @ 35° sericite + ankerite + chlorite; rusty weathered, ankeritic sericite schist with tight chloritic margins.									
		38.75 - 39.12 Fault @ 35° tca: sericite + ankerite + quartz; rusty, ankeritic fault with 10% late, white quartz veinlets and stockwork in wall rock.	6512	38.50	39.20	0.70		Rusty weathered quartz + ankerite Fault	0.02		
			6513	54.00	55.00	1.00		Massive Lapilli Tuff	0.01		
			6514	55.00	56.00	1.00			nil		
		56.00 - 56.05 Fault @ 60° tca: sericite + chlorite + gouge; strong muddy break with fault gouge on slip faces; upper contact very sharp; lower contact grades to foliated, sericitic tuffs for 0.5 metres.	6515	56.00	56.50	0.50		Fault zone @ 56.0 with 0.5m sericitic Tuffs	0.01		
			6516	56.50	57.00	0.50			0.01		
		57.50 - 58.20 Weakly foliated, weakly sericitic lapilli tuff with notable pyrite replacement of selective clasts which are dark gray in colour, angular clasts up to 0.5 cm.	6517	57.00	58.00	1.00		Massive Lapilli Tuff - weak sericite	0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-05

PAGE: 3 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS		
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check
58.20	62.35	<p>QUARTZ - PYRITE ZONE Altered + brecciated lapilli tuff; zone is highly altered to brecciated lapilli tuff with gradational contacts marked by notable increase in sericite alteration, pyrite content, quartz veining and blue-gray (pyrite + molybdenite) diffuse alteration zones with 5 - 10% pyrite and 10 - 25% quartz.</p>								
	58.20 - 58.22	1 - 2 cm white, pseudo-brecciated quartz vein on down hole side of tight chloritic slip @ 42° tca; this slip face is sheared by a very fine grained, blue-gray sulphide mass (pyrite ± molybdenite or galena) mass.	6518	58.00	58.50	0.50			0.10	
	58.22 - 59.00	Altered tuff: blue-gray to green coloured, altered lapilli tuff with a very fine grained sericite + pyrite matrix with 3 - 5% disseminated pyrite and pyritic altered clasts (semi-massive pyrite) up to 0.5 cm; zone is cut by at least three stages of quartz veining: buff-white to cream, massive to in-situ brecciated quartz veins up to 1 - 2 cm wide, sub-parallel to foliation, which tend to have strong pyritic margins up to 3 mm wide in the wall rock; no pyrite within quartz vein; two stages of late cross-cutting quartz veinlets (1 - 3 mm wide) at low angles to core axis, and transecting earlier quartz veinlets, with no pyrite.	6519	58.50	59.00	0.50			0.13	
	59.00 - 59.35	Quartz Breccia: light gray to green angular pyritic wall rock fragments cemented and brecciated by light gray to white quartz and later cut by cross-cutting (extensional) ladder veins (1 - 2 mm wide); quartz contains little to no pyrite while the wall rock and wall rock fragments carry 5 - 10% finely disseminated pyrite.	6520	59.00	59.50	0.50			0.16	0.19

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-05

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		59.35 - 60.00	Altered Tuff; light gray-green sericitic matrix with blue-gray alteration patches (very fine sulphides) which display irregular, diffuse alteration fronts; matrix contains 1 - 3% disseminated pyrite.	6521	59.50	60.00	0.50			0.12	
		60.00 - 60.60	Altered Tuff; sericitized tuff with 3 - 5% disseminated pyrite cut by 5 - 10 % quartz, quartz + chlorite veinlets.	6522	60.00	60.50	0.50			0.25	0.25
		60.60 - 62.00	Sericitic tuffaceous groundmass with 3 - 10% disseminated pyrite, brecciated by multiphase, milk-white to gray quartz veins and masses up to 0.5 metres wide.	6523	60.50	61.00	0.50			0.07	
				6524	61.00	61.50	0.50			0.28	0.26
				6525	61.50	62.00	0.50			0.11	
		62.00 - 62.35	Strongly to moderately sericitic groundmass with 0.5 - 1% disseminated pyrite, cut by 2 - 3% late, buff-white quartz veinlets; lower contact of unit is gradational with gradual decline in pyrite content to 1% at 62.3 metres.	6526	62.00	62.50	0.50			0.02	
62.35	75.95	GRAYWACKE Massive to weakly foliated @ 50° tca; dark gray to green matrix comprised of quartz, feldspar and rock fragments in roughly equal proportions with approximately 5% pervasive sericite; unit contains 1 - 5% angular, very fine grained, light gray-green mudstone clasts up to 3-4 cm in size, randomly distributed throughout; unit is also intercalated with narrow (<= 0.5 metre) pebble-rich conglomerate beds with gradational contacts; non-magnetic.									
				6527	62.50	63.00	0.50		Massive Graywacke with mudstone clasts	0.02	
		63.55 - 63.95	Chlorite slip, sub-parallel to core axis with 1 - 2 cm wide late white quartz vein and 1% smeared pyrite along slip face.	6528	63.00	64.00	1.00		Massive Graywacke - weakly sericitic	0.07	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-05

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
			11834	64.00	65.00	1.00		<0.5%, 0.1-0.5 cm quartz ± chlorite veinlets, trace pyrite	0.01		
			11835	65.00	66.00	1.00		as above	0.01		
			11836	66.00	67.00	1.00		as above	0.01		
			11837	67.00	68.00	1.00		Sericitic Graywacke	nil		
			11838	68.00	69.00	1.00		Sericitic Graywacke	0.01		
			11839	69.00	70.00	1.00		10 - 20% sericitic mudstone clasts or disrupted beds up to 20 cm wide	0.01		
			11840	70.00	71.00	1.00		as above	0.01		
			11841	71.00	72.00	1.00		40% sericitic Mudstone, 1% chlorite ± quartz veinlets with trace pyrite	nil		
			11842	72.00	73.00	1.00		1 - 3 mm quartz + chlorite + hematite veinlet with trace pyrite at 72.50	0.01	0.01	
	73.25 - 74.00	Chlorite + quartz vein sub-parallel to core axis; late white quartz on chloritic slip with minor blebby chalcopyrite masses (<<0.5%).	6542	73.00	74.00	1.00		Quartz vein - parallel to core axis, minor chalcopyrite	0.01		
			6529	74.00	75.00	1.00		Massive Graywacke - mudstone clasts	0.03		
			6530	75.00	75.50	0.50		Graywacke	0.01		
	75.75 - 75.95	Altered rock; strongly sericitized, massive unit with 5% black, chloritic spots (phenocrysts?) and black chloritic rims around irregular white feldspars up to 2 - 3 mm in size, in a fine grained sericitized matrix; possibly altered syenite?	6531	75.50	76.00	0.50		Contact zone - sericitized syenite?	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-05

PAGE: 6 of 7

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS			
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au*M
75.95	79.90	SYENITE									
		75.95 - 76.40	Massive, dirty green-brown colour, with 10% black anhedral chloritized crystals (?), 1 - 2 mm in size, and 2 - 3% white, irregular, milk-white quartz and/or feldspar "clots" in a fine grained, red-green, sericitic matrix; this section grades into more typical, red coloured syenite with 3-5% irregular, white quartz/feldspar masses up to 1 cm (avg. 3 mm) in a fine grained red-brown matrix; characteristic "snowflake" type texture (alteration product?).	6532	76.00	77.00	1.00		Massive Syenite	0.01	
				6533	77.00	78.00	1.00			0.01	
				6534	78.00	79.00	1.00			0.01	
		79.00 - 79.90	Unit grades to yellow-green sericitized syenite with 10% black needle-like phenocrysts, 1 - 3 mm in size, in a very fine grained light green matrix; lower contact is sharp and irregular, marked by 1 - 3 mm wide sericite + chlorite ± quartz + 1 - 2% fine pyrite; contact is offset by later quartz + chlorite slips and veinlets @ 33° tca with 1 - 2 cm of apparent dextral displacement; unit is cut by 1 - 2% transecting quartz veinlets up to 1 cm wide @ 40° tca.	6535	79.00	80.00	1.00		Sericitized Syenite with pyritic contact 1 - 3 mm wide	0.04	
79.90	121.55	GRAYWACKE / CONGLOMERATE									
		Massive, fine grained, grey-green graywacke with minor intercalated conglomerate beds up to 35 cm wide; unit typically contains 1 - 2%, yellow-green, aphanitic mudstone clasts up to 5 cm in size, generally very angular, in a fine grained, equigranular graywacke matrix (quartz + rock fragments); unit also contains minor angular fuchsitic (lime-green) clasts, generally less than 1 cm in size; matrix is pervasively sericitized with up to 3 - 5% wispy sericite; unit also contains 0.5 - 1% disseminated pyrite in matrix and also occasionally in mudstone clasts and a few cross-cutting quartz veinlets 1 - 5 mm in width @ 30 - 50° tca; unit is typically non-magnetic.		6536	80.00	81.00	1.00		Sericitized Graywacke + Conglomerate	0.05	
				6537	81.00	82.00	1.00		Graywacke with mudstone clasts and 0.5% disseminated pyrite	0.04	
				6538	82.00	83.00	1.00			0.15	
				6539	83.00	84.00	1.00			0.03	
				6540	84.00	85.00	1.00			0.16	0.15
				6541	85.00	86.00	1.00			0.15	
				6543	87.00	88.00	1.00		Sericitic Graywacke with mudstone clasts + 0.5% pyrite	0.06	
				6544	88.00	89.00	1.00			0.08	0.07

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-06

PAGE: 1 of 7

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 29 1990	EASTING	8340.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10210.00
CLAIM No.	L 491663	SIGNED BY	<i>W. Heath</i>	ELEVATION	
STARTED	October 26, 1990	DRILLED BY	Heath & Sherwood	LENGTH	71.80
COMPLETED	October 27, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
42.00		44

PURPOSE To test 102-8350 Gold Zone @ 25m depth, 10m west of AK-90-01
COMMENTS Alteration Zone 25.00 - 43.60, 18.6 m
 Quartz + Pyrite Zone 26.42-29.07, 2.65 m

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 3.00	CASING	32.90 40.37	BLEACHED TUFF	26.00 30.00	4.00	7.64
3.00 10.10	FAULT ZONE Foliation @ 45 - 50° tca		5 - 10 % Sericitic			
	8.55 - 9.45 Sericite Schist @ 47° tca	40.37 71.80	37.40 - 40.37 Quartz veining sub-parallel to core axis			which includes the following
10.10 25.00	LAPILLI TUFF		LAPILLI TUFF	26.40 30.00	3.60	8.46
	Altered, Hematitic		Coarse, monolithic			
	13.50 Fault @ 17° tca	71.80	40.37 - 43.60 Weakly sericitic			
	17.00 - 17.90 Fault Breccia @ 30° tca, 10 % quartz chlorite veins		43.60 Fault @ 60° tca			
	22.30 Fault gouge @ 35° tca		69.47 - 70.20 Fault Zone			
25.00 26.42	ALTERED TUFF		E.O.H.			
	Sericitic, 0.5 % pyrite					
26.42 29.07	QUARTZ PYRITE ZONE					
	Sericitic Tuffs with 3 - 5 % pyrite, 5% quartz breccia veins with 1 - 3 % pyrite					
29.07 30.00	ALTERED TUFF					
	Sericitic, 0.5 - 1.0 % pyrite					
30.00 32.90	SYENITE					
	31.70 - 32.00 Sericitic, 10% quartz veins					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-06

PAGE: 2 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au,Check	Au*M
0.00	3.00	CASING									
3.00	10.10	FAULT ZONE Strongly deformed and altered conglomerates and intercalated ash tuff horizons displaying varying degrees of deformation from pseudo-brecciated to brecciated with well developed cataclastic texture to sericite schist and mud gouge; prominent foliation @ 45 - 50° tca.									
	3.00 - 5.20	Pseudo-brecciated and brecciated conglomerate strongly foliated to cataclastic type texture with broken and fractured clasts, and crushed matrix.	6557	3.00	4.00	1.00			nil		
			6558	4.00	5.00	1.00			0.02		
	5.20 - 6.00	Bleached, sericitized tuff (light green to white) with strong ankeritic shear @ 15 - 20° tca.	6559	5.00	6.00	1.00			0.01		
	6.00 - 8.55	Massive to moderately well foliated conglomerate and lapilli tuff cut by 10% quartz veinlets and masses up to 2 cm wide; matrix contains 10 - 15% wispy sericite.	6560	6.00	7.00	1.00			nil		
			6561	7.00	8.00	1.00			nil		
			6562	8.00	8.50	0.50			nil		
	8.55 - 9.45	Sericite schist; strongly deformed unit with semi-massive laminated sericite schist developed @ 47° tca; at 9.45 sharp mud break with sericite + chlorite gouge.	6563	8.50	9.50	1.00			nil		
	9.45 - 10.10	Sericite + ankerite; rusty weathered, ankeritic zone with minor quartz veining (<=1%).	6564	9.50	10.50	1.00			0.03		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-06

PAGE: 3 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
10.10	25.00	<p>LAPILLI TUFF Altered tuff; red-brown to purple to light green coloured, deformed and altered lapilli tuff; unit is comprised of 10 - 20%, heterolithic, subrounded clasts up to 2-3 cm, which quite frequently display diffuse boundaries due to pervasive bleaching (sericitization) of matrix; matrix is fine grained, typically crushed, with 10 - 15% interstitial, wispy sericite pervasive throughout; unit is cut by 3 - 5% irregular quartz stockwork with at least two stages of quartz flooding evident:</p> <p>1) irregular quartz masses and veinlets subparallel to foliation @ 40° tca which are often stretched and boudinaged; 2) later, cross-cutting ladder vein system of veinlets 1 - 2 mm wide at right angles to foliation;</p> <p>Unit carries very minor amounts of blebby and disseminated pyrite.</p> <p>13.50 - 13.60 Fault @ 17° tca: sericite + chlorite + quartz; upper contact irregular and gradational sericite alteration grading to sericite schist; lower contact sharp, tight, chlorite + sericite slip.</p> <p>17.00 - 17.90 Fault Breccia @ 30° tca: strongly deformed, sericitized tuffs with 10% quartz + chlorite veins up to 1 cm brecciating altered wall rock fragments; also angular wall rock fragments to 0.5 cm in black, aphanitic chlorite groundmass.</p> <p>17.35 - 17.60 Rubbly broken core approximately 35% recovery; some minor pyrite evident on chloritic slips.</p> <p>20.50 - 20.80 Sericite + ankerite schist; rubbly core.</p>									
			6565	10.50	11.00	0.50			0.08	0.07	
			6566	11.00	12.00	1.00			nil		
			6567	12.00	13.00	1.00			nil		
			6568	13.00	13.50	0.50			nil		
			6569	13.50	14.00	0.50			0.02		
			6570	14.00	15.00	1.00			0.01		
			6571	15.00	16.00	1.00			nil		
			6572	16.00	17.00	1.00			0.01		
			6573	17.00	18.00	1.00		Fault breccia	0.01		
			6574	18.00	19.00	1.00			nil		
			6575	19.00	20.00	1.00			0.01	0.01	
			6576	20.00	21.00	1.00			0.01		
			6577	21.00	22.00	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-06

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M	
25.00	30.00	22.30	Fault @ 35° tca; strong, tight (2 - 3 mm) mud break.		6578	22.00	22.50	0.50	Altered Lapilli Tuff with mud break @ 22.30 m	nil		
		6579	22.50	23.00	0.50	nil						
		6580	23.00	24.00	1.00	nil						
		6581	24.00	25.00	1.00	Bleached Altered Tuff	0.01					
		QUARTZ - PYRITE ZONE Light green to blue grey coloured sericitized tuffs with 3 - 5% disseminated pyrite in matrix and containing 5% quartz breccia veins with 1 - 3% pyrite.										
		25.00 - 26.42	Light green to yellow altered tuff with pervasive sericite alteration and up to 0.5% disseminated pyrite.	6582	25.00	26.00	1.00	Bleached Tuff with 0.5% disseminated pyrite	0.06			
		26.42	Contact marked by 3 mm wide sericite + ankerite + quartz slip @ 15° tca; up hole side of break is 3 - 4 cm of highly sericitized, altered tuff with 0.5 - 1% disseminated pyrite; down hole side of slip is quartz breccia vein system.	6583	26.00	26.40	0.40		0.23			
		26.42 - 26.85	Quartz breccia; fine grained, light green sericitized matrix with 1 - 3% disseminated pyrite transected by blue-grey to white quartz breccia and veinlets with 3 - 5% disseminated pyrite; at least three stages of quartz flooding are evident:	6584	26.40	27.00	0.60	Quartz breccia zone with 3 - 5% pyrite and 1 speck of native gold	25.52	27.87		
		<ol style="list-style-type: none"> 1) fine grained, blue-grey to white brecciated quartz + pyrite with angular quartz and wall rock clasts to 0.5 cm; 2) two stages of later cross-cutting quartz veinlets 1 - 3 mm wide, one set @ 0 - 10° tca and one @ 70 - 90° tca; pyrite 										

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-06

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		also occurs along narrow (<=1 mm)irregular fracture planes which carry 5 - 10% finely disseminated pyrite.									
	26.60	0.01 by 1 mm smeared Native Gold grain along pyritic fracture plane.									
	26.85 - 27.60	Sericitized tuff; section is fine grained, yellow-green pervasively sericitized tuff (occasional remnant clasts) with 1% disseminated pyrite in matrix and cut by 1% narrow (<=1 mm) sericite + chlorite + pyrite slips containing 3 - 5% fine pyrite; pyrite replacement also evident within clasts and as blue-grey, irregular anastomosing masses < 1 cm wide; zone also contains tight slips (< 1 mm wide) with blue-grey hue of aphanitic, smeared sulphides which may include molybdenite and/or galena?	6585	27.00	27.50	0.50		Sericitized Tuff with 3% pyrite and minor quartz	3.91	3.94	
	27.60 - 28.75	Sericitized tuff with 2% quartz breccia veins and 1 - 3% disseminated pyrite in matrix.	6586	27.50	28.00	0.50		Sericitic Tuff with 2 - 3 % quartz, 3% disseminated pyrite	7.17	7.17	
	28.75 - 29.07	Sericitized tuff with 5% quartz breccia mass 30 cm wide with 1 - 3% pyrite; lower contact is sharp, blue-grey sericite + pyrite schist 2 - 3 mm wide, with brecciated quartz slip face @ 75° tca.	6587	28.00	28.50	0.50		Sericitized Tuff with 1% quartz, 1 - 3% pyrite	8.22	9.24	
			6588	28.50	29.10	0.60		Sericitized Tuff with 5% quartz, 2 - 3% pyrite	4.97	4.87	
	29.07 - 30.00	Light green massive sericitized tuff with <=0.5 - 1% disseminated pyrite in matrix and minor tight (<=1 mm) blue-grey smeared sulphides and small pyrite dollars up to 1 mm on chlorite + sericite slips @ 15° tca.	6589	29.10	30.00	0.90		Sericitized Tuff with 0.5% pyrite	2.09	1.61	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-06

PAGE: 6 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
30.00	32.90	<p>SYENITE Red-brown to dark red, massive, fine grained, equigranular groundmass; unit contains 5% wispy sericite interstitial to red, fine grained matrix, giving rise to weak foliation @ 55° tca; unit displays characteristic snowflake texture with 2 - 3% white, irregular, quartz and/or feldspar clots, up to 3 - 4 mm in size, which occasionally are rimmed with dark, aphanitic chlorite and hematite; unit is cut by 3 - 5% thin (1 - 2 mm) white quartz veinlets @ 45 - 50°, generally on very tight chlorite slips, sub-parallel to each other, and by earlier irregular quartz veins and occasional breccia veins (wall rock within quartz) up to 1 cm wide; minor coarse pyrite occurs along chlorite slips and as occasional clots in syenite; upper contact is sharp and irregular with strongly sericitized tuffs; lower contact is sharp with strong sericite alteration of footwall rocks.</p> <p>31.70 - 32.00 Unit contains 10% quartz stockwork veins in moderately sericitized syenite.</p>	6590	30.00	31.00	1.00		Massive Syenite - minor quartz veinlets	0.03		
			6591	31.00	31.50	0.50			0.08		
			6592	31.50	32.00	0.50		Quartz stockwork in sericitized syenite	0.02		
			6593	32.00	33.00	1.00		Massive Syenite + 10 cm sericitic altered wall rock	0.02		
32.90	40.37	<p>BLEACHED TUFF Dark grey-green to brown, sheared, altered and bleached and appears to contain intercalated ash- and lapilli-tuff beds; ash tuff component is grey-green in colour with 10 - 15% black crystals, lath shaped and quite frequently broken, up to 1 mm in size, and moderate lineation fabric developed @ 50° tca; matrix is very fine grained with 5 - 10% pervasive sericite; crystal tuff?; tuff is intercalated with highly altered, coarse lapilli tuff beds which are comprised of very fine grained to aphanitic, soft, sericitic, dirty brown matrix and 5 - 10% coarse grained 1-2 cm clasts; these clasts show strongly corroded and diffuse boundaries due to alteration and have a coarse igneous texture to them.</p>	6594	33.00	34.00	1.00		Bleached crystal Tuff at Syenite contact	0.01		
			6595	34.00	35.00	1.00		Bleached Lapilli Tuff	0.01		
			6596	35.00	36.00	1.00			nil		
			6597	36.00	37.00	1.00			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-07

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 30 1990	EASTING	8250.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10165.00
CLAIM No.	L 491663	SIGNED BY	<i>[Signature]</i>	ELEVATION	
STARTED	October 27, 1990	DRILLED BY	Heath & Sherwood	LENGTH	108.20
COMPLETED	October 28, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '102' structure between 8275 and 8170 zones	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	Quartz - chlorite vein zone: 80.50 - 85.15 m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		43
80.00		42

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 2.44	CASING	77.70 78.55	MUDSTONE	80.50 85.20	4.70	1.53
2.44 16.30	CONGLOMERATE / GRAYWACKE	78.55 80.50	78.15 - 78.55 Fault @ 37° tca	which includes the following		
16.30 19.50	6.81 - 7.20 Fault @ 32° tca	80.50 85.15	LAPILLI TUFF	80.50 84.00	3.50	2.01
19.50 25.50	ASH TUFF	85.15 108.20	80.50 Fault gouge @ 52° tca	83.00 84.00	1.00	5.56
25.50 26.38	CONGLOMERATE		QUARTZ CHLORITE BRECCIA ZONE			
26.38 29.70	ASH TUFF		Sericitic Graywacke, 15% quartz, quartz + chlorite and chlorite breccia veins, 0.5 - 1% pyrite			
29.70 32.50	LITHIC TUFF		GRAYWACKE			
32.50 34.85	29.25 Fault @ 43° tca		Weakly to moderately sericitic, 1% chlorite breccia veins			
34.85 71.90	29.60 - 29.70 Fault @ 30° tca		101.60 - 101.62 Fault @ 40° tca			
	GRAYWACKE		104.10 - 105.00 0.5% pyrite			
	FAULT ZONE @ 10 - 15° tca		E.O.H.			
	ASH TUFF / LAPILLI TUFF					
	Massive to well bedded @ 10° tca					
	57.34 Fault @ 40° tca					
	59.95 Fault @ 30° tca					
71.90 73.70	FAULT ZONE @ 32° tca					
73.70 77.70	73.35 Fault gouge					
	GRAYWACKE					
	Weakly Sericitic					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-07

PAGE: 3 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
19.50	25.50	<p>CONGLOMERATE Coarse grained polymictic pebble conglomerate with 5 - 30% well rounded pebbles up to 4 cm (avg. 1 cm) in a dark green, fine grained graywacke matrix; contains very minor pyrite blebs up to 1 cm which appear to be replacing certain pebble clasts; locally weakly magnetic.</p> <p>20.00 - 21.40 Cemented with white quartz, interstitial to pebble framework and matrix.</p>									
25.50	26.38	<p>ASH-TUFF Very fine grained dark green, well bedded @ 10° tca; bedding is marked by 1-2 mm wide dark magnetite beds approximately 0.5 to 1 cm apart.</p> <p>Note: Although bedding planes run parallel to core axis, lithological change is abrupt and appears to be at right angles to core axis but contacts are somewhat marked by irregular quartz veinlets.</p>									
26.38	29.70	<p>LITHIC-TUFF / GRAYWACKE Massive, medium grained light to dark green, 50 - 60% lithic clasts, angular to well rounded and ranging in size from 1 - 3 mm (well sorted) with moderate elongation fabric @ 50° tca; matrix is very fine grained, light green in colour and quite soft (sericitic); contains minor jasper clasts, as do the graywackes, but there is little or no quartz in the matrix.</p> <p>28.10 - 29.70 Grades into heterolithic lapilli and ash tuff. 29.25 Fault @ 43° tca: sharp tight (1 - 2 mm) chlorite + sericite slip.</p>	6611	28.00	29.00	1.00			0.01	0.01	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-07

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au,Check	Au*M
	29.60 - 29.70	Fault @ 30° tca: sericite + chlorite + ankerite + quartz; 1.5 cm wide white to buff quartz vein with strong sericitic margins 1-2 cm up-hole from a tight sericite + chlorite + ankerite slip face; adjacent wall rock is moderately sericitized for 3 - 5 cm around vein and fault slip.	6612	29.00	29.80	0.80		Sericitic Tuff with quartz vein and fault slip	0.01		
29.70	32.50	GRAYWACKE Massive, dark green to grey-green, fine to medium grained; matrix of 10-15% quartz, 30% feldspars and 55-65% heterolithic rock fragments including jasper; matrix is also pervasively sericitized with 1-2% spotty, wispy sericite; cut by 1% white to pink quartz veinlets.	6613	29.80	30.50	0.70		Sericitic Graywacke	nil		
			6614	30.50	31.00	0.50			nil		
			6615	31.00	32.00	1.00			0.01		
			6616	32.00	32.50	0.50			0.01		
32.50	34.85	FAULT ZONE Fault zone @ 10°-15° tca; very strongly deformed fault zone of sericite + quartz + chlorite + calcite; quartz is dirty brown to buff white as veins and brecciated masses and comprises 35-40% of unit; matrix is reddish-brown to green and completely crushed and altered to sericite as pervasive alteration and as wispy foliation planes; strong, tight (<= 1 mm) chlorite + sericite + calcite slip sub-parallel to core axis displays strong slickensides with 50° rake.	6617	32.50	33.00	0.50		Strongly deformed Fault Zone subparallel to core axis	nil		
			6618	33.00	34.00	1.00			nil		
			6619	34.00	34.90	0.90			0.01		
34.85	71.90	ASH-TUFF / LAPILLI-TUFF Zone of intercalated ash- and lapilli-tuff with very sharp to gradational contacts; ash-tuffs are massive to well bedded @ 10° tca, dark grey-green and very fine grained; bedding is derived from thin (<= 1 mm) magnetite beds which quite often display weak cross bedding; ash- and lapilli-tuff beds are 0.5 to 1 metre wide; lapilli-tuff is medium grained heterolithic, with clasts averaging 2-4 mm (0.1 - 1 cm) of very	6620	34.90	36.00	1.10		Massive Ash Tuff	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-07

PAGE: 6 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		masses which are brecciated by black, aphanitic chlorite slips; upper contact is sharp 1-3 mm wide brecciated quartz vein with black, chloritic groundmass; lower contact is sharp, tight sericitic slip.	6633	71.90	72.40	0.50		Bleached Tuffs in strongly foliated to schistose fault zone with 10% quartz and quartz breccias	0.02		
		73.35 Mud gouge, 0.5 cm wide.	6634	72.40	73.00	0.60			0.03		
			6635	73.00	73.70	0.70			0.01		
73.70	77.35	LAPILLI-TUFF Light brown to green to purple (hematized), 5% sub-rounded clasts up to 4 cm, in a fine grained, bleached ash matrix; clasts are light green to brown to pinkish, generally fine grained trachyte, and frequently have diffuse boundaries due to penetrative sericite alteration; unit is cut by 2-3% white quartz veinlets 1-3 mm wide; lower contact is tight sericite shear with 2 cm quartz vein.	6636	73.70	74.50	0.80		Hematized Lapilli Tuff - 1% quartz veins Bleached, hematite + sericite altered Tuffs with 1 - 2% quartz veinlets	0.03		
			6637	74.50	75.00	0.50			0.02		
			6638	75.00	76.00	1.00		Sericitized Ash Tuff with minor graywacke	0.02		
			6639	76.00	77.00	1.00			0.02		0.02
			6640	77.00	77.70	0.70			nil		
77.35	77.70	GRAYWACKE Medium grained, dark green graywacke with minor quartz veining (1%) and 2-3% spotty sericite in matrix; lower contact is sharp sericitic slip with 1.5 cm quartz vein.									
77.70	78.55	MUDSTONE Massive aphanitic dark green mudstone with <1% cross cutting quartz veinlets.	6641	77.70	78.15	0.45		Massive aphanitic Mudstone 6 cm wide quartz + ankerite vein	0.04		
		78.15 - 78.55 Fault @ 37° tca; upper contact is sheared dark green mudstone with sericitic parting, leading to dirty brown quartz + ankerite vein 6 - 7 cm wide, which tends to be vuggy and infilled with lime muds and altered mudstone clasts.	6642	78.15	78.55	0.45			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-07

PAGE: 7 of 8

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS			
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au*M
78.55	80.50	LAPILLI-TUFF Dark green to reddish brown lapilli-tuff which contains 1 - 2% cross cutting quartz veinlets which display buff-brown sericite alteration halos up to 2 cm wide and with irregular alteration fronts; lower contact is strong mud break @ 52° tca.	6643	78.55	79.20	0.65		Weakly sericitic Lapilli Tuff Bleached sericite halos with 2 - 3% quartz veinlets	0.01		
			6644	79.20	79.70	0.50			nil		
			6645	79.70	80.50	0.80			0.02		
80.50	85.15	QUARTZ + CHLORITE + PYRITE BRECCIA Stockwork zone of yellow-green, sericitic graywacke which is brecciated by 15% quartz, quartz + chlorite and chlorite breccias and by narrow, dark quartz chlorite veinlets to give a pseudo-brecciated, "crack and seal" appearance to the unit; graywacke matrix is pervasively sericitized and carries 0.5-1% patchy disseminated pyrite in places. These breccias display four distinct characteristics:									
		1) Pseudo-brecciated, "crack and seal" texture with <= 1 mm black chlorite ± quartz stringers, pseudo-brecciating graywacke matrix with 0-0.5% disseminated, patchy, pyrite;	6646	80.50	81.00	0.50		Brecciated Graywacke with 0.5% pyrite	2.23	2.21	
		2) Chlorite breccia veins up to 30 cm wide with angular wall rock clasts up to 1-2 cm in a black, aphanitic chlorite groundmass;	6647	81.00	82.00	1.00			0.03		
		3) Chlorite + quartz breccia veins; black aphanitic chlorite + quartz groundmass with inclusions of angular wall rock (graywacke) and white to grey quartz fragments; this more siliceous breccia tends to have up to 1% disseminated pyrite, while the chlorite breccias appear to be pyrite poor;	6648	82.00	83.00	1.00			0.33		
		4) Bluish-grey quartz veins up to 1 - 2 cm wide which carry 2 - 3% disseminated pyrite and pyrite along fracture planes.	6649	83.00	84.00	1.00		Pseudo brecciated Graywacke, 0.5% pyrite + blue grey quartz veins (1-2 cm) with 2 - 3% pyrite	5.45	5.66	
			6650	84.00	84.50	0.50		Sericitic Graywacke with 1 - 2% chlorite breccia and < 0.5% disseminated pyrite	0.11		
			6651	84.50	85.20	0.70		Pseudo brecciated Graywacke with 0.5% pyrite	0.18		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-07

PAGE: 8 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
85.15	108.20	GRAYWACKE Typically light green to yellow-green, massive fine to very fine grained and well sorted, 15% quartz, 25% feldspar and 60% rock fragments, all less than 1 mm in size; typically non-magnetic; contains less than 1% chlorite breccia veins and "crack and seal" textured areas within massive, fine grained weakly to moderately sericitic graywackes with 1% angular, light green, aphanitic mudstone clasts, up to 3-4 cm in size. 101.60 - 101.62 Fault @ 40° tca chlorite + quartz + sericite. 104.10 - 105.00 0.5% disseminated pyrite in weakly sericitic matrix. 104.75 - 105.00 1-2 mm pyritic band with interstitial wispy sericite.	6652	85.20	86.00	0.80		Massive Graywacke - very minor chlorite breccias and quartz veinlets	0.03		
			6653	86.00	87.00	1.00		Little to no pyrite	nil		
			6654	87.00	88.00	1.00			0.01		
			6655	88.00	89.00	1.00			0.01		
			6656	89.00	90.00	1.00		Graywacke with 1% chlorite breccias	0.01		
			6657	90.00	91.00	1.00			0.01		
			6658	91.00	92.00	1.00			0.01		
			6659	102.00	103.00	1.00		Massive Graywacke	0.01		
			6660	103.00	104.00	1.00			0.01		0.01
			6661	104.00	104.50	0.50		Graywacke with 0.5% disseminated pyrite	0.02		
			6662	104.50	105.00	0.50		1 - 2 mm wide pyritic beds in Graywacke	0.02		
			6663	105.00	106.00	1.00		Massive Graywacke	0.01		
				108.20	E.O.H.						

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-08

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	October 31 1990	EASTING	8190.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10165.00
CLAIM No.	L 491663	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	October 28, 1990	DRILLED BY	Heath & Sherwood	LENGTH	123.45
COMPLETED	October 30, 1990	SURVEYED BY		UNITS	metres
		CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
40.00		43
80.00		40
114.00		40

PURPOSE To test 102 - 8170 zone
 COMMENTS Quartz + Pyrite zone: 75.90 - 76.55, 2.55m in Mudstone/Siltstone

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH	AVERAGE
From	To		From	To		From	To		
0.00	3.20	CASING	68.10	70.50	ASH TUFF	44.00	44.50	0.50	1.19
3.20	43.60	CONGLOMERATE	70.50	72.00	GRAYWACKE				
		7.20 Fault @ 28° tca	72.00	73.85	LAPILLI TUFF	74.00	76.55	2.55	3.58
		26.90 Fault @ 45° tca	73.85	95.75	MUDSTONE / SILTSTONE				
		28.65 Fault @ 25° tca			75.90 - 76.55 3 - 5% Pyrite, silicified				which includes the following
		34.35 Fault breccia @ 40° tca	95.75	106.15	87.60 Fault @ 32° tca	75.85	76.55	0.70	10.04
43.60	48.00	42.20 Fault gouge @ 40° tca			LAPILLI TUFF / ASH TUFF	116.20	116.80	0.60	0.07
		FAULT ZONE (Mylonite)	106.15	107.80	99.40 Fault @ 05° tca				
		Sericitic, chloritic, quartz breccia veins	107.80	112.15	BLEACHED GRAYWACKE				
		44.13 - 44.40 10% finely disseminated pyrite	112.15	115.50	LAPILLI TUFF				
48.00	48.62	ALTERED LAPILLI TUFF	115.50	118.00	GRAYWACKE				
		Strongly to weakly sericitic			LAPILLI TUFF				
48.62	61.30	BLEACHED LAPILLI TUFF	118.00	121.85	Weakly sericitic				
		Hematitic, sericitic	121.85	123.45	116.25 - 116.50 5 cm gray quartz vein, 1 - 3% pyrite				
		57.15 Fault @ 30° tca			GRAYWACKE				
61.30	64.40	SILTSTONE / MUDSTONE			ASH TUFF				
64.40	65.00	GRAYWACKE							
		5 - 10% Sericite							
65.00	68.10	FAULT @ 00° tca			E.O.H.				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-08

PAGE: 2 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	3.00	CASING									
3.00	3.20	DIABASE Medium grained, massive dark green from end of casing shoe; core is somewhat rubbly and lower contact is not visible to determine whether it is in situ or not.									
3.20	43.60	CONGLOMERATE Massive to weakly foliated dark grey to green, polymictic pebble conglomerate; clasts are angular to well rounded and range from 2 mm to 3 cm (avg. 5 mm) as 25-35% of unit; prominent clast elongation @ 50° tca; matrix is very fine grained, light to dark green, chloritic, 60% lithics, 25% feldspar, and 15% quartz; locally strongly magnetic; intercalated with pebble poor, graywacke beds up to 1 metre wide, with generally very gradational contacts noted by a gradual decline in pebble component.									
	7.20 - 7.33	Fault @ 28° tca: sericite + ankerite; rusty weathered, rubbly core section; upper contact is rubbly ankeritic sericite schist; lower contact is irregular, tight sericite slip with mud gouge.									
	26.90 - 27.35	Fault zone @ 45° tca: sericite + chlorite + quartz; 70% buff-white to pink, fractured and broken quartz with 25% interstitial, wispy sericite and 5% tight (<= 1 mm) chlorite + sericite slips; this fault zone is cut by a later fault @ 22° tca which is a tight sericitic, muddy slip.	6664	26.80	27.40	0.60		Fault zone	0.01	0.01	
	28.65 - 28.90	Fault @ 25° tca: sericite + chlorite + quartz; upper and lower contacts are sharp, tight sericitic slips with minor gouge; interstitial material is sericitic graywacke with 15% brecciated and fractured, white to pink quartz.	6665	28.50	29.00	0.50		Fault zone	0.01		
	34.35 - 34.42	Fault breccia @ 40° tca; white to pink brecciated quartz fragments to 0.5 cm in a fine grained, dark green, chlorite + sericite groundmass.	6666	39.00	39.50	0.50		Massive Graywacke	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-08

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		46.00 - 46.50	6676	46.00	46.50	0.50		Foliated, buff brown altered unit	0.02		
		46.50 - 47.00	6677	46.50	47.00	0.50			nil		
		47.00 - 48.00	6678	47.00	48.00	1.00		Coarse fault breccia, chloritic groundmass	0.03		
48.00	48.62	ALTERED LAPILLI-TUFF Dirty green-brown altered tuff with strong sericite at upper fault contact, grading to somewhat less deformed (faint primary clasts evident), sericitized tuff.	6679	48.00	48.62	0.62		Sericitic Tuff at fault contact	0.01		
48.62	61.30	BLEACHED LAPILLI-TUFF Light green-brown to dark green to purple (hematized), bleached tuffs; original matrix appears to be dark green, fine grained and chloritic, which is being pervasively hematized to a purple colour which in turn is being bleached (sericitized) to a light green colour; these bleached zones are patchy and display diffuse alteration fronts; where unit is dark green to purple, primary 5-10% angular, sub-rounded, red-brown to mauve, from 2-7 mm clasts are evident; cut by 2-3% cross cutting quartz veinlets and minor chlorite slips and chlorite breccia veins to 1 cm; lower contact is sharp @ 50° tca.	6680	48.62	49.25	0.63		Hematized Lapilli Tuff	0.01		
			6681	49.25	50.00	0.75		Bleached sericitic Lapilli Tuff	nil		
			6682	50.00	51.00	1.00			0.01		
			6683	51.00	52.00	1.00			0.02		
			6684	52.00	53.00	1.00			0.01		
			6685	53.00	54.00	1.00			0.01		
			6686	54.00	55.00	1.00			0.02		
		57.15 - 57.35						Fault @ 30° tca: strong sericite schist with black, interstitial chlorite and brecciated quartz to 3 mm in size.			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-08

PAGE: 5 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
61.30	64.40	SILTSTONE / MUDSTONE Very fine grained, massive, dark green siltstone with minor intercalated light green aphanitic mudstone beds up to 1 cm wide; very well layered, massive and non-magnetic. 63.20 - 63.75 Blocky, rubbly core due to chlorite slip sub-parallel to core axis.									
64.40	65.00	GRAYWACKE Fine grained, light green-brown, massive graywacke with 5-10% pervasive sericite in matrix; contact with mudstone is somewhat irregular but sharp.	11551	64.00	65.00	1.00		Bleached Graywacke	0.02		
65.00	68.10	FAULT ZONE Fault @ 0° tca: extremely rubbly broken core (60-70% recovery) due to sericite + chlorite + quartz + ankerite fault running sub-parallel to core axis.	11552	65.00	66.00	1.00		Fault zone parallel to core axis	0.01		
			11553	66.00	67.00	1.00	60		0.01		
			11554	67.00	68.10	1.10	60		0.01		
68.10	70.50	ASH-TUFF Fine grained, massive, dirty grey-brown ash-tuff cut by numerous tight chlorite slips; quite soft (sericitic) and non-magnetic; lower contact marked by irregular white to pink quartz vein 4 cm wide, symmetrically centered on a tight sericite slip.	11555	68.10	69.00	0.90			0.01		
			11556	69.00	70.00	1.00			0.01		
			11557	70.00	70.55	0.55			0.02		
70.50	72.00	GRAYWACKE Fine grained, massive, light grey-green graywacke with 1% irregular wispy mudstone bands up to 3 mm wide; lower contact marked by irregular 1 cm quartz vein @ 15° tca.	11558	70.55	71.00	0.45			0.01		
			11559	71.00	72.00	1.00			0.01		
72.00	73.85	LAPILLI-TUFF Fine to medium grained, light brown-white, spotted textured matrix, comprised of 25% subhedral (lath shaped) chloritized amphibole crystals in a fine grained grey-white groundmass; clasts are 2-3% of unit as light red to grey trachyte fragments to 3 cm (avg. 1 cm) often with diffuse boundaries; lower contact is sharp @ 67° tca.	11560	72.00	73.00	1.00			0.01		
			11561	73.00	73.55	0.55			0.01		
			11562	73.55	74.00	0.45			0.01	0.01	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-08

PAGE: 6 of 8

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS				
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au*M	
73.85	95.75	MUDSTONE / SILTSTONE Finely laminated, light yellow-green to brown aphanitic mudstone beds intercalated with very fine grained dark green siltstone beds; bedding from a few millimetres to 2 cm in thickness; unit shows evidence of "S" shaped, small scale folding and disrupted bedding by small scale micro-faults; bedding @ 40°-55° tca. 75.90 - 76.55 QUARTZ-PYRITE ZONE 0.5 mm wide wispy pyrite + sericite slips with 3-5% very fine pyrite and 0.5-1% disseminated pyrite in adjacent wall rock; grey-green, quite hard (silicified) and marked by 1 cm wide, light grey quartz breccia vein with 1% pyrite @ upper contact; in part intercalated with narrow lapilli-tuff interbeds < 0.5 metre wide. 87.60 - 87.80 Fault @ 32° tca: sericite + chlorite + quartz; buff-brown altered matrix cut by 10% white-grey late quartz veinlets throughout; upper contact is irregular white-pink 3 cm quartz vein on tight chlorite + sericite slip.	6687	74.00	75.00	1.00		Well laminated Mudstone / Siltstone Mudstone with 1 - 3% disseminated to wispy pyrite ± quartz Intercalated Mudstone / Lapilli Tuff Fault Zone Massive Mudstone/Siltstone	2.06	2.09		
			6688	75.00	75.85	0.85			0.03			
			6689	75.85	76.55	0.70			9.96	10.12		
			6690	76.55	77.55	1.00			0.03			
			6691	77.55	78.00	0.45			nil			
			6692	78.00	79.00	1.00			0.02			
			11563	79.00	80.00	1.00			0.01			
			11564	80.00	81.00	1.00			nil			
			11565	81.00	82.00	1.00			0.01			
			11566	82.00	83.00	1.00			0.02			
			11567	83.00	84.00	1.00			0.03			
			11568	84.00	85.00	1.00			0.02	0.02		
			11569	85.00	86.00	1.00			0.02			
			11570	86.00	87.00	1.00			0.02			
			11571	87.00	87.50	0.50			0.01			
			6693	87.50	88.00	0.50			0.01			
			6694	88.00	89.00	1.00			nil			
			6695	89.00	90.00	1.00			nil			
			6696	90.00	91.00	1.00			nil			
			6697	91.00	92.00	1.00			0.01			
6698	92.00	93.00	1.00		0.02							
6699	93.00	94.00	1.00		0.01							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-08

PAGE: 7 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
95.75	106.15	<p>LAPILLI-TUFF / ASH-TUFF Massive fine grained grey-brown to green, predominantly well sorted ash tuff with <= 1% angular trachytic clasts to 2 cm, light green to grey in colour; cut by 3% late white quartz veinlets up to 1 cm and by minor chlorite slips and chlorite breccia veins up to 1 cm wide.</p> <p>99.40 - 100.10 Fault @ 05° tca; tight chloritic slip sub-parallel to core axis, with 2-3 cm wide quartz and quartz breccia vein with angular quartz fragments up to 0.5 cm in a dark chlorite + sericite groundmass.</p> <p>102.87 - 103.20 Chloritic slip sub-parallel to core axis with white to pink brecciated quartz vein.</p>									
106.15	107.80	<p>BLEACHED GRAYWACKE Massive, fine grained with a bleached light green-white matrix; some lithic fragments are bright green (fuchsitic) and generally very fine grained (< 0.5 mm); contains a few well rounded pebble clasts up to 1 cm as well as minor jasper within matrix; upper and lower contacts are gradational with irregular, diffuse alteration front evident in surrounding tuffs.</p>									
107.80	112.15	<p>LAPILLI-TUFF Massive, dark green, chloritic ash matrix with 5-10% angular to sub-rounded lapilli clasts, light grey-green to black to pink, poorly sorted, 1 mm - 2 cm; cut by 3-5% white quartz veinlets @ 45° tca, 1-3 mm in width; locally weakly magnetic; lower contact sharp @ 70° tca and marked by 1-2 mm quartz vein.</p>									
112.15	115.50	<p>GRAYWACKE Light to medium green massive, undeformed graywacke with 1% pebble clasts up to 1 cm (avg. 3 mm); contains minor angular mudstone clasts and thin interbeds (<= 1 cm); lower contact is sharp and irregular.</p>	6700	113.00	114.00	1.00			nil		
			6701	114.00	115.00	1.00		Graywacke with mudstone interbeds and <0.5% wispy pyrite	nil		
			6702	115.00	115.50	0.50			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-09

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 2 1990	EASTING	8150.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10155.00
CLAIM No.	L 491663	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	October 30, 1990	DRILLED BY	Heath & Sherwood	LENGTH	124.00
COMPLETED	October 31, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 102 - 8170 zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
80.00		42
114.00		41

COMMENTS

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 3.30	CASING					
3.30 72.00	LAPILLI TUFF	86.00 91.80	85.65 Fault gouge @ 40° tca	93.65 94.25	0.60	11.25
	8.50 Fault @ 60° tca	91.80 93.70	LAPILLI TUFF			
	29.00 - 36.38 Hematitic		MUDSTONE / SILTSTONE			
	36.38 - 37.55 Fault @ 55° tca	93.70 94.20	Bedding @ 22° tca - 65° tca			
	37.55 - 38.60 Sericitic		QUARTZ - PYRITE ZONE			
	58.25 - 58.80 Mudstone	94.20 110.25	3 - 5% pyrite, 5% quartz			
72.00 74.75	MUDSTONE		MUDSTONE / SILTSTONE			
74.75 79.00	LAPILLI TUFF	110.25 124.00	107.55 Fault @ 45° tca- 50° tca			
	Trace pyrite		GRAYWACKE / MUDSTONE			
	76.70 Fault @ 35° tca					
79.00 80.50	ASH TUFF	124.00	E.O.H.			
80.50 83.10	LAPILLI TUFF					
83.10 85.00	ALTERED LAPILLI TUFF					
	5 - 10% Sericite					
	83.80 - 83.95 Quartz vein					
	84.00 Fault gouge @ 40° tca					
85.00 85.65	GRAYWACKE					
85.65 86.00	MUDSTONE					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-09

PAGE: 2 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	3.30	CASING									
3.30	36.38	<p>LAPILLI-TUFF Massive to weakly foliated @ 50° tca, dark grey-green to purple, consisting of 15-20% lithic clasts in a fine grained ash matrix (80-85%); clasts are angular to sub-rounded, from 2 mm to 8 cm (avg. 0.5 cm), poorly sorted, matrix supported, and consist of light grey to buff to pink, very fine to medium grained trachyte; matrix is fine grained, equigranular dark green to purple (where hematitic) and is comprised of 35% angular, light green trachytic clasts (0.5-1 mm) in a fine grained, greyish-white, feldspathic groundmass (60-65%); matrix also contains 1-3% finely disseminated magnetite in places; unit is strongly magnetic.</p> <p>8.50 - 8.57 Fault @ 60° tca: chlorite + quartz + ankerite; upper and lower contacts are sharp, tight chloritic slips; inter-slip material is dirty brown to pink, multiphase, quartz + ankerite veining.</p> <p>10.50 - 10.65 Broken rubble core with strong ankerite staining and moderate sericite development; unit is readily discernible by its dark green-purple matrix and pink clasts.</p> <p>22.00 - 29.00 Unit is transected by 1-2% late, barren, white to pink quartz veinlets (1-3 mm wide) @ 40°-70° tca.</p> <p>29.00 - 36.38 Unit is strongly hematitic with dark to reddish-purple alteration colours predominant; this section is cut by 3-5% white to pink quartz veinlets, 1-3 mm wide and at various orientations to core axis to give a stockworked appearance to the unit; this alteration is probably related to the strong fault zone @ 36.38 m, and becomes increasingly stronger towards this fault.</p>									
			6707	28.00	29.00	1.00		Hematized Lapilli Tuff with 1% late quartz	0.01	0.05	
			6708	29.00	30.00	1.00		Strongly hematized, weak to moderately foliated Lapilli Tuff with 3 - 5% quartz stockwork veining	nil		
			6709	30.00	31.00	1.00			nil		
			6710	31.00	32.00	1.00			0.01		
			6711	32.00	33.00	1.00			0.02		
			6712	33.00	34.00	1.00			0.01		
			6713	34.00	35.00	1.00			nil		
			6714	35.00	35.50	0.50			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-09

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
46.20	72.00	<p>LAPILLI-TUFF 5-10% angular trachytic clasts, up to 4 cm (avg. 1 cm), in a fine grained, medium to dark green trachytic ash matrix; clasts are generally fine grained light grey-green, buff or brown, floating in a very fine grained matrix; moderately to strongly magnetic, massive and undeformed.</p> <p>48.00 Fault @ 42° tca: tight sericite + chlorite slip boundaries with 0.5 cm wide, white to pink brecciated quartz.</p> <p>58.25 - 58.80 Massive, dark grey-green aphanitic mudstone interbed with sharp contacts @ 20° tca; lower contact of unit is sharp @ 10° tca with 1-2 cm, pink-white irregular quartz vein.</p>	11662	70.70	71.70	1.00			0.01		
72.00	74.75	<p>MUDSTONE Massive, dark green aphanitic mudstone with sharp contacts @ 10°-15° tca; cut by 1% late white to pink quartz veinlets (1-4 mm wide).</p>	11663	71.70	72.70	1.00			0.01		
			11664	72.70	73.90	1.20			nil		
			11665	73.90	75.00	1.10			nil		
74.75	79.00	<p>LAPILLI-TUFF - HETEROLITHIC Massive, consisting of 10% angular to sub-rounded dark green to brown coloured trachytic clasts, up to 3 cm, in a fine grained trachytic ash matrix; contains very minor zones with <= 0.5% disseminated pyrite; lower contact is sharp @ 20° tca.</p> <p>76.70 - 76.85 Fault @ 35° tca: upper and lower contacts are sharp, tight sericite + chlorite slips with minor irregular quartz adjacent to slips (0.5 to 1 cm wide); interstitial material is foliated sericitized tuff with very minor pyrite 1(<<0.5%).</p>	6721	75.00	76.00	1.00			0.01		
			6722	76.00	76.50	0.50			0.01		
			6723	76.50	77.00	0.50			0.01		
			6724	77.00	78.00	1.00			0.01		
			11829	78.00	79.00	1.00			0.02		
								Sericitic Tuff with fault and 0.5% pyrite			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-09

PAGE: 5 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
79.00	80.50	ASH-TUFF Massive, light to dark green, fine grained trachytic ash with <1% lapilli sized clasts; strongly magnetic; lower contact is gradational with coarser grained lapilli tuffs.	11830	79.00	80.00	1.00		< 0.5% quartz veinlets , 0.5% 1mm chlorite + hematite veinlets	0.01			
			11831	80.00	81.00	1.00			0.01			
80.50	83.80	LAPILLI-TUFF - HETEROLITHIC 80.50 - 83.10 Massive to weakly foliated, dirty green-brown matrix (1-3% sericite) with 15-20% angular trachytic clasts to 4 cm (avg. 1 cm). 83.10 - 83.80 Moderately deformed with 5% wispy and spotty sericite throughout matrix and cut by numerous, tight, chloritic slips.	11832	81.00	82.00	1.00		1% quartz + chlorite + hematite veinlets with trace pyrite in wall rocks < 0.5% chlorite + quartz + hematite veinlets	0.01			
			11833	82.00	83.00	1.00			0.01			
			6725	83.00	83.80	0.80			0.01			
83.80	84.35	FAULT ZONE Fault zone @ 40° tca. 83.80 - 83.95 Quartz Vein: vein boundaries are tight chlorite + sericite slip; vein material is massive bull-white quartz with 5% wispy chlorite + sericite stringers and chloritized wall rock fragments within vein. 84.00 0.5 cm wide mud gouge on sericite slip. 84.00 - 84.35 Well foliated, sericitized tuff with 1% irregular quartz masses and veinlets up to 1 cm.	6726	83.80	84.40	0.60		Fault zone with 15 cm quartz vein and sericitized Tuffs	nil			
84.35	85.00	SERICITIZED LAPILLI-TUFF Moderately well foliated, light yellow-green in colour with 5-10% pervasive and spotty sericite alteration throughout; clasts are angular, form 1-2% of unit and display strong sericite alteration; lower contact somewhat gradational.	6727	84.40	85.00	0.60		Sericitized Lapilli Tuff	nil			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-09

PAGE: 6 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
85.00	85.65	GRAYWACKE Massive, light green, very fine grained with 3-5% well rounded quartz grains (<= 0.5 mm) in a light green feldspathic matrix; contains minor irregular light green mudstone clasts; lower contact is a strong mud break, 0.5 cm wide @ 40° tca.	6728	85.00	85.65	0.65		Massive Graywacke	0.01		
85.65	86.00	MUDSTONE Massive, dark green to blackish, aphanitic mudstone; lower contact is very sharp and irregular with minor displacement evident on chlorite slip @ 35° tca.	6729	85.65	86.00	0.35		Mudstone	0.01	0.02	
86.00	91.80	LAPILLI-TUFF									
	86.00 - 89.50	Dirty brown-green fine grained matrix with 2-3% coarse angular trachytic clasts up to 5 cm; these clasts are dark green fine grained and buff to pink coloured porphyritic trachyte; this dirty, bleached zone grades into non-bleached, dark green lapilli tuffs.	6730	86.00	86.50	0.50		Dirty brown 'bleached' Lapilli Tuff	nil		
			6731	86.50	87.10	0.60		Mudstone interbed	nil		
			6732	87.10	88.00	0.90			nil		
	86.70 - 87.10	Dark green, massive, aphanitic mudstone interbed with sharp irregular contacts.	6733	88.00	89.00	1.00			nil		
			6734	89.00	89.50	0.50		Dirty brown 'bleached' Lapilli Tuff	nil		
			6735	89.50	90.00	0.50			nil		
			6736	90.00	91.00	1.00			0.01		
			6737	91.00	91.80	0.80			nil		
91.80	110.25	MUDSTONE / SILTSTONE Massive to well laminated with light yellow-green aphanitic mudstone beds (1 mm - 1 cm wide) intercalated with dark green, very fine grained siltstone beds; unit has very rhythmic layering with mudstone beds displaying convoluted bedding, flame structures and rip up clasts; bedding varies from 22° to 65° tca; in part interbedded with minor ash- and lapilli-tuff horizons up to 0.5 metres wide which display very sharp, but often irregular contacts.	6738	91.80	92.50	0.70		Massive laminated Mudstone / Siltstone	0.01		
			6739	92.50	93.00	0.50			0.02		
			6740	93.00	93.65	0.65		Laminated Mudstone	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-09

PAGE: 7 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
93.70 - 94.20	QUARTZ, PYRITE ZONE Light green to grey, very fine grained to aphanitic mudstone with 3-5% disseminated to weakly laminated pyrite; pyritic zones are somewhat silicified in places as shown by their relative hardness to the surrounding mudstone; cut by 5% quartz veining which occurs as 1) Blue-grey to white quartz and brecciated quartz veinlets parallel to bedding cleavage up to 1 cm wide with a "crack and seal" texture, and which are infilled by 5-10% pyrite and with chlorite. 2) Late cross-cutting milk- white quartz veinlets up to 3 mm wide at oblique angles.	6741	93.65	94.25	0.60		Pyritic zone (3 - 5% pyrite) in silicified Mudstone Intercalated Mudstone / Lapilli Tuff	11.42	11.08		
		6742	94.25	95.00	0.75			0.05			
		6743	95.00	96.00	1.00			0.02			
		6744	96.00	97.00	1.00			0.02			
		11802	97.00	98.00	1.00			0.01	0.01		
		11803	98.00	99.00	1.00			0.01			
		11804	99.00	100.00	1.00			0.01			
		11805	100.00	101.00	1.00			0.01			
		11806	101.00	102.00	1.00			0.01			
		11807	102.00	103.00	1.00			0.01			
		11808	103.00	104.00	1.00			0.01			
		11809	104.00	105.00	1.00			0.01			
		11810	105.00	106.00	1.00			0.02			
		11811	106.00	107.00	1.00			0.01			
		11812	107.00	107.50	0.50			0.01			
		6745	107.50	108.10	0.60			0.01			
		11813	108.10	109.00	0.90			0.02			
		11814	109.00	110.00	1.00			0.02	0.01		
		110.25 - 124.00	GRAYWACKE Massive, fine-medium grained, dark green graywacke; unit is well sorted and comprised of 60% lithic clasts (up to 1 mm), 20% quartz and 20% feldspar; lithic clasts include volcanics, quartz porphyry, mudstone and jasper; well sorted and contains <1% rounded, pebble- sized clasts, and is in part intercalated with mudstone beds up to 0.75 metres wide.	11815	110.00	111.00		1.00		0.01	
				11816	111.00	112.00		1.00		0.01	
11817	112.00			113.00	1.00		0.01				
11818	113.00			114.00	1.00		0.01				
11819	114.00			115.00	1.00		0.01				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-10

PAGE: 1 of 9

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 5-6 1990	EASTING	8050.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10100.00
CLAIM No.	L 491651	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	November 1, 1990	DRILLED BY	Heath & Sherwood	LENGTH	173.70
COMPLETED	November 3, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test magnetic low 100 m west of 102-8170 zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	Intersected '102' structure at 145.55 - 147.40m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
76.00		44
114.00		43
152.00		41

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	2.44	CASING	95.00	116.00	ALTERED LAPILLI TUFF	147.00	147.50	0.50	0.65
2.44	24.25	LAPILLI TUFF Weakly sericitic			Sericitic, trace pyrite				
		8.00 - 8.40 Fault @ 10° tca	116.00	138.30	108.45 - 108.70 Fault @ 15° tca				
		9.80 - 10.00 Fault @ 43° tca			ASH TUFF / LAPILLI TUFF				
		23.00 - 23.10 Fault @ 42° tca			Hematitic				
24.25	27.40	CONGLOMERATE	138.30	143.55	132.70 - 136.40 Fault @ 0° tca				
		26.15 - 27.40 Altered, 10% quartz veins	143.55	145.55	GRAYWACKE / CONGLOMERATE				
27.40	39.20	BLEACHED TUFF	145.55	147.40	ASH TUFF				
		Sericitic, quartz-chlorite veining, brecciated			FAULT ZONE @ 35° tca- 45° tca				
		39.20 - 39.21 Fault gouge @ 55° tca			Sericitic, 5% quartz veining				
39.20	67.00	LAPILLI TUFF	147.40	170.40	145.55 - 147.00 Fault gouge @ 45° tca				
		Hematitic			LAPILLI TUFF				
67.00	72.00	CONGLOMERATE	170.40	173.70	162.90 - 163.10 Mudstone, sericitic				
72.00	77.00	LAPILLI TUFF / ASH TUFF			ASH TUFF				
77.00	89.65	CONGLOMERATE							
89.65	95.00	ASH TUFF		173.70	E.O.H.				
		85.65 - 91.00 Fault @ 40° tca							
		93.15 - 93.65 Fault @ 26° tca, 10% white quartz veining							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-10

PAGE: 2 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
0.00	2.44	CASING									
2.44	24.25	LAPILLI-TUFF Massive to weakly foliated light greyish green to dark green; foliated @ 45° tca; consists of 10% angular clasts up to 3 cm (avg. 0.5 cm) of light brown to grey-green to pink trachytes; matrix is a fine grained trachytic ash with 1-2% pervasive sericite alteration; unit is weakly to moderately magnetic.									
	8.00 - 8.40	Fault @ 10° tca: sericite + chlorite + ankerite; tight chloritic slip with 1.5 cm wide open, vuggy quartz + ankerite vein and strong ankerite staining of wall rock.									
	9.80 - 10.00	Fault @ 43° tca: chlorite + sericite + quartz + ankerite; strong sericite + ankerite mud gouge @ 9.9 m with 1 cm wide irregular white quartz vein @ 10.0 m.									
	14.20 - 14.70	Dirty brown to green sericitized tuff with 3-5% wispy and spotty sericite in matrix as well as 2-3% chloritic sutures (<= 1/2 mm wide); section is also cut by 2-3% white to pink quartz veining up to 1 cm wide.	6746	14.20	14.80	0.60		Fault at 14.65m, sericitized Lapilli Tuff, 2-3% quartz veining	0.01	0.01	
	14.65 - 14.70	Fault @ 60° tca; strong sericite + ankerite shear with 1-2% irregular quartz.									
	15.00 - 15.50	Fault @ 10° tca; tight 1 mm wide, chlorite + sericite + ankerite slip.									
	23.00 - 23.10	Fault @ 42° tca: sericite + chlorite + quartz; upper and lower contacts are sharp sericitic slips; interstitial material is comprised of sericite + chlorite schist, a brecciated buff-white quartz veinlet 3 mm wide and a semi-massive 3-4 cm wide milk-white quartz vein with ankeritic staining.	6747	22.90	23.40	0.50		Fault zone with 3-4 cm quartz vein	nil		
			6748	23.40	24.20	0.80			0.03		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-10

PAGE: 3 of 9

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M	
24.25	27.40	CONGLOMERATE Coarse polymictic pebble-boulder conglomerate, massive, multi-coloured with 25% coarse sub-angular to moderately rounded clasts up to 8 cm (avg. 2 cm) in a fine grained light to dark green matrix; clasts are multi-textured from light brown aphanitic trachyte to spotted trachyte to green sericitized mafic (?) clasts; upper contact of unit is marked by sharp sericitic slip with 1 cm white-buff quartz vein; lower contact is obscured by late quartz veining.	6749	24.20	25.00	0.80			0.02			
			6750	25.00	26.00	1.00			0.01			
		26.15 - 27.40	Altered conglomerates.									
		26.20	Fault @ 47° tca: open, vuggy slip with 0.5 cm wide quartz + calcite + ankerite vein filling.		6751	26.00	26.50	0.50	Altered Conglomerates with 10% quartz	0.01		
		26.20 - 27.40	Cut by numerous irregular chloritic slips and chlorite breccia veinlets up to 0.5 cm wide, and by 10% brown to white quartz veins and masses up to 4 cm wide.		6752	26.50	27.50	1.00		0.02		
27.40	39.20	ALTERED - BLEACHED TUFF Moderately to strongly deformed with a strong "crushed" appearance that is in part pseudo-brecciated by 1-5% irregular chlorite and chlorite + quartz veinlets (1-2 mm) which creates a strong "crack and seal" texture; matrix varies from light green to brown with a variable amount of sericite alteration (0-10% of matrix); coarse lapilli clasts are still evident, although quite deformed and brecciated in places.	6753	27.50	28.00	0.50		Altered sericitized Lapilli Tuff	0.01			
			6754	28.00	28.50	0.50		Altered Lapilli Tuff with 8 cm pink quartz vein	nil			
			6755	28.50	29.00	0.50			0.01			
			6756	29.00	30.00	1.00			0.01			
			6757	30.00	31.00	1.00			0.01			
			6758	31.00	32.00	1.00			nil			
			6759	32.00	33.00	1.00			nil			
			6760	33.00	34.00	1.00			0.01			
			6761	34.00	35.00	1.00			nil			
			6762	35.00	36.00	1.00			nil			
		6763	36.00	36.60	0.60			nil				
		30.50 - 30.70	Fault @ 15° tca: tight sericite + chlorite slip with 0.5 cm wide of brecciated wallrock (brecciated by chlorite + quartz veinlets); minor coarse pyrite is evident along some of the chlorite + quartz slips.									

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-10

PAGE: 5 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
77.20	89.65	CONGLOMERATE Coarse, polymictic pebble-cobble conglomerate, consisting of 30-40% coarse angular to well rounded clasts up to 8 cm (avg. 2 cm) of salmon-pink coloured trachyte to dark green mafic volcanic clasts; massive, framework supported, poorly sorted, weakly magnetic, undeformed and unaltered.									
89.65	91.00	FAULT ZONE Fault Zone @ 40° tca of foliated, sericitized tuffs, brecciated tuffs and 10% quartz veinlets and masses.									
	89.65 - 90.30	Sericitized tuff; leading contact is marked by 1 cm quartz + chlorite vein; has a dirty mottled appearance with 10% spotty sericite and sericite slips.	6767	89.50	90.50	1.00	70	Fault zone	0.01		
	90.30 - 91.00	Cut by 10% irregular buff-brown to white quartz veins up to 2 cm wide and by a later cross-cutting quartz vein system 1-3 mm wide.	6768	90.50	91.10	0.60			nil		
91.00	95.00	ASH-TUFF Massive to moderately well foliated, fine grained grey-green ash-tuff consisting of a massive fine grained matrix which appears to be 70% trachyte fragments in a grey-white feldspathic (?) groundmass; contains 1% very fine grained, dark green, chloritized clasts with very diffuse boundaries due to alteration.									
	91.00 - 91.50	Brown-purple, with a mottled texture and chloritized clasts up to 1 cm, cut by 5% late quartz ± chlorite veinlets 1-3 mm wide.	6769	91.10	91.60	0.50		Mottled, altered Tuff with 5% quartz	nil		
	91.50	Fault @ 40° tca: sericite + chlorite + quartz; tight 1 mm sericite + chlorite slip with 3 mm wide weakly laminated quartz vein.	6770	91.60	92.50	0.90			nil		
	93.15 - 93.65	Fault @ 26° tca: sericite + quartz + ankerite; strongly sericitized, deformed zone with 10% white irregular quartz masses and veinlets centred on sericitic slips.	6771	92.50	93.00	0.50			nil		
			6772	93.00	94.00	1.00			0.01		
			6773	94.00	95.00	1.00					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-10

PAGE: 6 of 9

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
95.00	116.00	<p>BLEACHED LAPILLI-TUFF Upper contact of this unit is a very sharp (< 0.5 mm) tight chloritic slip @ 45° tca. This is a unit with a very distinctive light brown-green, very fine grained to aphanitic, sericitized (pervasive) matrix with some very large (5-10 cm) altered clasts which display diffuse, altered boundaries and a certain degree of brecciation; these clasts also show various degrees of sericite alteration from yellow-green fuchsitic coloured to pervasive matrix alteration; some clasts are quite coarse grained with white irregular feldspars (0.5 cm) in a sericitized groundmass; the rock has a very distinctive dirty, mottled texture; in places remnant bedding of intercalated ash horizons (<= 0.5 metre wide) are evident with bedding @ 30°-40° tca; typically non-magnetic, but bedding is defined by irregular fine hematite beds (<= 1 mm wide) which were probably primary magnetite beds; lower contact of unit is somewhat gradational and marked by a gradual colour change from light brown-green to purple hematized tuffs.</p>	6774	95.00	96.00	1.00		Bleached sericitized Tuffs	nil		
	102.70 - 102.90	Quartz breccia vein; 2-3 cm wide white to buff to pink quartz vein with 2-3% angular wall rock inclusions up to 1 cm which are pervasively sericitized; vein walls are marked by tight chloritic slips with minor calcite.	6775	102.60	103.10	0.50		Quartz breccia vein	nil		
			6776	103.10	104.00	0.90		Bleached Lapilli Tuff	nil		
			6777	104.00	105.00	1.00			0.01		
			6778	105.00	106.00	1.00			nil		
			6779	106.00	106.80	0.80			nil		
	106.90 - 107.10	Cut by two 1 cm quartz veins @ 106.90 and 107.10 which are milk-white to buff with sharp chlorite + sericite boundaries and very minor (<<0.5%) patchy pyrite.	6780	106.80	107.30	0.50		Bleached Tuff with 1 cm quartz vein and very minor blebby pyrite	0.01		
			6781	107.30	108.30	1.00			nil		
	108.45 - 108.70	Fault @ 15° tca: chlorite + sericite + quartz; 3-5 mm white quartz veinlet, a sharp chlorite + sericite slip; rubble core with 75% recovery.	6782	108.30	108.80	0.50	75	Quartz vein in sericitic Tuff	nil		
			6783	108.80	109.50	0.70			nil		
			6784	109.50	110.50	1.00			nil		
			6785	110.50	111.00	0.50		Sericitized Tuff with 5% white-pink quartz veins with < 0.5% pyrite	nil	nil	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-10

PAGE: 7 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check
116.00	138.30	<p>HEMATIZED ASH-TUFF / LAPILLI-TUFF Massive fine grained moderately well bedded ash with intercalated clast-rich horizons up to 0.75 metres wide; distinctive dark red-purple colour due to pervasive hematite alteration; matrix is very fine grained, consisting predominantly of 70% trachytic lithic clasts up to 1 mm in a aphanitic grey-white groundmass; matrix also contains sporadic altered magnetite grains (magnetite → hematite) up to 1-2% in places (<=0.5 mm in size) and also hematized magnetite beds up to 1 mm wide @ 20°-30° tca; lapilli-tuff horizons are heterolithic with 10-20% angular trachytic clasts from 1-2 mm to 2 cm in size; these lapilli beds display gradational contacts with ash-tuff; displays patchy, weak magnetism. Lower contact of unit is marked by a 2 cm brecciated pink-white quartz vein on a tight sericite slip.</p> <p>122.80 - 123.00 Fault @ 45° tca: sericite + quartz; 0.5 cm quartz vein in a tight sericite slip @ 122.85.</p> <p>122.85 - 123.00 Light grey-green with 5-10% pervasive sericite alteration.</p> <p>132.70 - 136.40 Fault sub-parallel to core axis; 1 cm wide quartz + chlorite vein running sub-parallel to core following a very irregular, tight chloritic slip.</p>								
138.30	143.55	<p>GRAYWACKE / CONGLOMERATE Massive to weakly bedded @ 20° tca; grey-green graywacke (60% lithics, 25% feldspar 15% quartz) with minor intercalated pebble rich conglomerate beds with gradational contacts and not over 0.5 metres wide; cut by 1% late white to pink quartz veinlets 1-3 mm wide; lower contact is very sharp @ 75° tca and marked by a 0.5 cm quartz vein with angular wallrock inclusions 1-3 mm in size.</p>								
143.55	145.55	<p>ASH-TUFF 143.55 - 144.70 Very fine grained, brown-green, massive ash-tuff with 1-2% late white quartz veinlets (1-2 mm).</p>	6786	143.55	144.55	1.00			nil	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-11

PAGE: 1 of 6

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 6 1990	EASTING	7900.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	10175.00
CLAIM No.	L 491651	SIGNED BY	<i>[Signature]</i>	ELEVATION	
STARTED	November 3, 1990	DRILLED BY	Heath & Sherwood	LENGTH	117.40
COMPLETED	November 5, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 102-7912 Gold Zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
76.00		42
114.00		39

COMMENTS No anomalous assays

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	3.40	CASING			97.00 - 97.35	Fault gouge @ 35° tca			
3.40	44.70	CONGLOMERATE / LAPILLI TUFF	99.90	103.80	BLEACHED TUFF				
		37.35 - 37.45 Fault @ 50° tca			10 - 15 % Sericite				
44.70	65.15	LAPILLI TUFF	103.80	117.40	5 - 10 % Quartz veinlets				
65.15	66.55	61.00 - 65.15 5 - 10% Sericite			MUDSTONE / GRAYWACKE				
66.55	75.50	SHEAR ZONE			116.50 - 117.40 3 - 5% Quartz veinlets				
		15 - 20% Sericite			116.90 - 116.92 Fault @ 45° tca				
75.50	76.50	ASH TUFF	117.40		E.O.H.				
		Sericitic, hematitic							
76.50	94.45	FAULT ZONE							
		Sericitic, hematitic, chloritic, < 0.5% pyrite							
		LAPILLI TUFF							
		79.00 - 79.02 Fault gouge @ 40° tca							
		82.30 - 82.31 Fault @ 20° tca							
		82.30 - 86.60 5 - 10% Sericite							
		86.60 - 94.45 10 - 15% Sericite							
		94.00 - 94.45 Fault breccia @ 50° tca							
94.45	99.90	MUDSTONE / GRAYWACKE							
		94.90 - 95.00 Fault gouge @ 20° tca							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-11

PAGE: 2 of 6

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
0.00	3.40	CASING									
3.40	44.70	COARSE HETEROLITHIC LAPILLI-TUFF / CONGLOMERATE Massive, dark green to black, with 5-30% angular to well rounded polymictic clasts from 0.2 to 5 cm (avg. 1 cm) in a fine grained equigranular matrix; clasts are quite variable from pink-red to grey to dark green, generally fine grained and appear to be mainly comprised of trachytic fragments, i.e. there are no quartz porphyry or jasper clasts evident; matrix is very fine grained grey-white and contains little to no visible quartz (possibly trachytic?); displays locally strong magnetics; lower contact is somewhat subjective as it is very difficult to distinguish the volcanic units from the sedimentary units.									
	18.80	Fault @ 20° tca: tight 1-2 mm wide sericite + chlorite slip with minor brecciated quartz within slip.									
	18.80 - 19.40	Cut by 5-10% irregular, white to pink quartz veins and masses.	6792	18.50	19.50	1.00		Fault zone with 5 - 10% irregular quartz masses in wall rock	0.01		
	31.40 - 33.55	Grades into a medium grained lapilli-tuff with 30% angular, heterolithic, trachytic clasts averaging 3 mm in size in a fine grained, grey-green matrix.	6793	19.50	20.00	0.50		1 - 2% quartz veining	0.01		
			6794	33.00	33.50	0.50			0.01		
	33.55 - 34.45	Rusty ankeritic, sericitized core interstitial to tight sericite + ankerite slips @ 10°-15° tca.	6795	33.50	34.50	1.00		Rusty ankeritic core	0.02	0.03	
			6796	34.50	35.00	0.50			nil		
			6797	35.00	36.00	1.00			0.01		
			6798	36.00	37.00	1.00			0.02		
	37.35 - 37.45	Fault @ 50° tca: chlorite + sericite + quartz + ankerite; very strongly deformed zone with strong mud breaks; interstitial material is strongly deformed, rusty, altered rock cut by wispy chlorite and sericite.	6799	37.00	37.50	0.50		Strong mud break + ankerite	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-11

PAGE: 3 of 6

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
44.70	65.15	<p>LAPILLI-TUFF Massive, undeformed and comprised of 10-15% angular clasts ranging from 1 mm to 2 cm (avg. 0.5 cm); these clasts are light grey to buff to pink, generally fine grained trachytes; matrix is fine grained dark grey-green and comprised of 50-60% fine lithics in a grey-white aphanitic groundmass; in part intercalated with minor ash-tuff horizons up to one metre wide which are massive, fine grained and contain <= 1% lapilli-sized clasts; contacts between units are gradational; locally strongly magnetic; cut by 1% late, pink-white quartz + calcite veinlets (1-3 mm wide) @ 25°-30° tca.</p> <p>47.53 Fault @ 40° tca; 2-3 mm wide, tight sericite slip with late calcite on slip face; weak sericite alteration for 1 cm into wallrock. 51.60 Fault @ 35° tca; tight sericite slip with calcite on slip face. 61.00 - 65.15 Becomes increasingly sericitized (light green) with an increasing lighter colour and 5-10% pervasive sericite alteration evident in matrix.</p>	6800	64.00	65.00	1.00		Weakly sericitized Lapilli Tuff	0.02		
65.15	66.55	<p>SHEAR ZONE Well foliated at 45° tca; rusty weathered, ankeritic with very rubbly core (70% recovery); original rock appears to be a fine grained ash-tuff with 15-20% wispy sericite and sericite slips throughout; contacts are somewhat gradational with moderate ankerite stain penetrating surrounding wallrock.</p>	6801	65.00	66.00	1.00	70	Rusty ankeritic shear zone	0.01		
66.55	75.50	<p>ASH-TUFF Massive, very fine grained, light green (sericitized) to purple (hematized); appears to be 60-70% very fine, trachyte clasts up to 0.5 mm in an aphanitic white groundmass; strongly magnetic where not hematized and cut by 5% late white to buff quartz veinlets.</p>	6802	66.00	67.00	1.00			0.02		
			6803	67.00	68.00	1.00			0.01		
			11642	68.00	69.00	1.00			0.01		
			11643	69.00	70.00	1.00			0.01		
			11644	70.00	71.00	1.00			0.01		
			11645	71.00	72.00	1.00			0.01		
			11646	72.00	73.00	1.00			0.01	0.01	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-11

PAGE: 4 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M		
75.50	76.50	FAULT ZONE Fault zone @ 35° tca: sericite + chlorite + quartz + hematite + calcite; upper contact marked by 1 cm buff-white quartz vein with sharp, chlorite + sericite slip boundaries.	11647	73.00	74.00	1.00		Weakly sericitized Ash Tuff	0.01				
			6804	74.00	75.00	1.00			0.01				
			6805	75.00	75.50	0.50			nil				
	75.50	Very dirty, mottled texture with crushed and deformed host rock being transected by very irregular wispy sericite, chlorite, hematite and quartz masses and veinlets, to give a highly variable colour; 40-50% sericite, 30% quartz, 10% hematite, 10% chlorite + calcite on slip faces; zone locally carries very minor, coarse blebby <<0.5 pyrite.	6806	75.50	76.50	1.00		Hematitic fault zone << 0.5% pyrite	0.04				
76.50	86.60	LAPILLI-TUFF	6807	76.50	77.00	0.50		Bleached Tuff with 5% quartz veining	0.03				
			6808	77.00	78.00	1.00			0.01				
			11648	78.00	79.00	1.00			nil				
			11649	79.00	80.00	1.00			0.02				
				79.00	Fault @ 40° tca; mud slip; very strongly deformed sericite + chlorite schist 2 cm wide with mud gouge on slip planes.	11650	80.00	81.00	1.00		nil		
				82.30	Fault @ 20° tca: chlorite + sericite + quartz + calcite; 3-5 mm wide fault with a 1-2 mm quartz + calcite veinlet.	11651	81.00	82.25	1.25		0.01		
				82.30 - 86.60	Light pink rock, with 60% pink lithic clasts (<=0.5 mm) and a very fine grained, yellow-white, sericitized groundmass with 5-10% wispy sericite evident.	11652	82.25	83.50	1.25		0.01		
						11653	84.50	85.50	1.00		0.02		
			11654	85.50	86.50	1.00		nil					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-11

PAGE: 5 of 6

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS							
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M			
86.60	94.45	BLEACHED LAPILLI-TUFF Sericitized, light grey-brown, lapilli-tuff contains 10-15% pervasive sericite alteration within matrix and in part penetrating lapilli clasts to give them weak, diffuse boundaries; cut by 5% late white quartz veinlets up to 5 mm and also by late quartz breccia veins with wallrock inclusions up to 1.5 cm.	6809	86.50	87.00	0.50		Sericitized Lapilli Tuff with 3 - 5% late quartz veining	0.05	0.07				
			6810	87.00	88.00	1.00			nil					
			6811	88.00	89.00	1.00			0.02					
			6812	89.00	90.00	1.00			nil					
			6813	90.00	91.00	1.00			0.01					
			6814	91.00	92.00	1.00			0.01					
			6815	92.00	93.00	1.00			nil					
			6816	93.00	94.00	1.00			0.02					
			6817	94.00	94.50	0.50			0.04	0.05				
			94.45	99.90	MUDSTONE / GRAYWACKE Massive, aphanitic, dark to light green mudstone with very minor intercalated graywacke interbeds which display sharp but irregular contacts.							Chloritic fault breccia		
94.00 - 94.45	Fault breccia @ 50° tca; white to pink brecciated quartz fragments to 1 cm within a strongly sheared chlorite + sericite groundmass; strong mud gouge on boundaries.													
94.90 - 95.00	Fault @ 20° tca; strong mud break with brecciated and crushed mudstone fragments.	6818				94.50	95.00	0.50		Strong mud break in Mudstone	0.02			
		6819				95.00	96.00	1.00			0.03			
		6820				96.00	97.00	1.00			0.02			
		6821				97.00	97.50	0.50			0.09		0.10	
		6822				97.50	98.00	0.50			nil			
		6823				98.00	99.00	1.00			0.01			
		6824				99.00	99.90	0.90			0.02			
		99.90				103.80	BLEACHED ASH-TUFF Highly altered, light brown ash-tuff with 10-15% pervasive sericite in very fine grained, crushed matrix; cut by 5-10% quartz, and quartz + chlorite veinlets up to 3 mm at all angles, and by numerous, tight sericitic slips, to give unit a pseudo--	6825	99.90		100.50		0.60	
			6826	100.50	101.00			0.50			0.01			
			6827	101.00	102.00			1.00			0.02			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-12

PAGE: 1 of 6

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 7-8 1990	EASTING	8000.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	9840.00
CLAIM No.	L 477299 / 491651	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	November 5, 1990	DRILLED BY	Heath & Sherwood	LENGTH	99.55
COMPLETED	November 7, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '99' structure, IP anomaly and 99-8030 Gold Zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	No anomalous assays				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45
76.00		42
96.00		40

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	1.80	CASING		99.55	E.O.H.				
1.80	11.95	GRAYWACKE							
11.95	14.20	MUDSTONE							
14.20	15.50	LAPILLI TUFF							
15.50	22.25	CONGLOMERATE							
22.25	23.33	ASH TUFF							
23.33	28.35	CONGLOMERATE							
28.35	43.50	ASH TUFF							
43.50	44.60	LAPILLI TUFF							
44.60	47.20	ALTERED ASH TUFF / MUDSTONE Sericitic, 0.5 - 1% pyrite							
47.20	54.65	ALTERED ASH - / LAPILLI TUFF Hematitic							
54.65	56.85	ALTERED ASH TUFF Sericitic, trace pyrite							
56.85	63.25	CONGLOMERATE							
63.25	99.55	COARSE LAPILLI - / BLOCK TUFF Strongly magnetic 69.00 - 77.40 5 - 10% quartz veining							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-12

PAGE: 4 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		40.90 - 41.05 Fault @ 33° tca: chlorite + quartz + calcite; tight chloritic slip @ 41.0 m bounded by pink-white, multiphase, quartz + calcite veining; minor chalcopyrite; lower contact of unit is a sharp 1-2 mm chlorite slip with minor amount of rock flour on slip face @ 75° tca.	6844	40.80	41.20	0.40		Fault zone	0.01	nil	
			6838	43.00	43.50	0.50			0.01		
43.50	44.80	LAPILLI-TUFF Massive, strongly magnetic, with 5-10% angular, red-pink, trachytic clasts (up to 2 cm) in a very fine grained, dark green ash matrix; cut by a few tight (<= 1 mm) sericite slips @ 80° tca and by 2% white quartz veinlets (1-2 mm) at 45° tca; lower contact of unit is faulted @ 50° tca.	6839	43.50	44.50	1.00		Hematite + sericite shear zone	0.01		
		44.60 - 44.80 Fault zone; well foliated purple-green (hematite + sericite) ash-tuff with sharp, tight sericite slip boundaries.	6840	44.50	45.00	0.50			0.02	0.01	
44.80	47.20	ASH-TUFF / MUDSTONE Very fine to fine grained, light grey-green, massive ash with intercalated, aphanitic mudstone beds from 2 mm-5 cm wide; matrix of ash is 40-50% pale green, sericitized fragments up to 1/2 mm in an aphanitic grey-white groundmass; unit contains 0.5%-1% disseminated pyrite throughout; very nondescript, massive unit, weakly sericitic with minor pyrite; lower contact of unit is faulted @ 70° tca by a 1.5 cm brecciated quartz ± calcite vein cemented by an aphanitic chlorite + sericite groundmass.	6841	45.00	46.00	1.00		Ash Tuff / Mudstone with 0.5% pyrite	0.03		
			6842	46.00	46.50	0.50			0.03		
			6843	46.50	47.20	0.70			0.01		
47.20	54.65	ASH-TUFF / LAPILLI TUFF (HEMATIZED) Massive, undeformed, intercalated ash- and lapilli-tuff in equal proportions with beds 0.5 - 1.0 metre wide; red-brown to purple with 30-40% fine to coarse (ash to lapilli size) fragments, hematized (purple) trachytic rock fragments, in a very fine grained light green to purple groundmass; ash-tuff is compositionally similar to the lapilli-tuff, but finer grained and in places well bedded @ 60° tca; unit is moderately to strongly magnetic.	6845	47.20	48.00	0.80			0.01		
			6846	48.00	49.00	1.00			0.01		
			6847	53.00	54.00	1.00			0.01		
			6848	54.00	54.60	0.60			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-13

PAGE: 1 of 5

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 10 1990	EASTING	8050.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	9845.00
CLAIM No.	L 500058 / 491651	SIGNED BY	<i>W. B. Heath</i>	ELEVATION	
STARTED	November 7, 1990	DRILLED BY	Heath & Sherwood	LENGTH	90.17
COMPLETED	November 8, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '99' structure and 99-8030 Gold Zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	No anomalous assays				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		43
76.00		43

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	4.50	CASING							
4.50	5.30	CONGLOMERATE							
5.30	14.40	ASH TUFF							
14.40	16.55	CONGLOMERATE							
		16.35 - 16.55 Fault @ 52° tca							
16.55	37.00	ASH TUFF							
37.00	45.50	ALTERED LAPILLI TUFF							
		Hematitic							
		40.40 - 40.85 Sericitic, 0.5% pyrite							
		41.50 - 42.50 Sericitic, 2 - 3% quartz							
45.50	47.00	ALTERED ASH TUFF							
		Sericitic							
47.00	49.20	CONGLOMERATE							
49.20	54.45	ASH TUFF							
54.45	90.17	COARSE LAPILLI - / BLOCK TUFF							
		5% white to pink quartz veinlets							
90.17		E.O.H.							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-13

PAGE: 2 of 5

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
0.00	4.50	CASING									
4.50	5.30	CONGLOMERATE Weakly foliated to massive with a moderate ankerite stain; 5% well rounded, polymictic clasts up to 2 cm in a fine grained graywacke matrix (70% rock fragments, 20% feldspar, 10% quartz and 1-2% spotty sericite); lower contact is faulted @ 10° tca by a tight chlorite + sericite + ankerite slip.									
5.30	14.40	ASH-TUFF Massive to well bedded, dark green-brown and generally quite fine grained, although the unit is in part intercalated with narrow (5-10 cm), clast-rich lapilli-tuff and conglomerate beds; bedding is defined by alternating light and dark green bands @ 50° tca which appears to be comprised of 60% very fine trachytic rock fragments in an aphanitic, dirty brown groundmass; very strongly magnetic; lower contact is a sharp chloritic slip @ 30° tca.									
		7.65 - 8.35 Fault @ 65° tca: sericite + chlorite + ankerite + quartz; extremely rusty weathered shear comprised predominantly of sericite schist with very minor, cross cutting quartz veinlets (1-3% recovery).	6865	7.60	8.50	0.90	65	Ankeritic shear with minor quartz	0.01	0.02	
		8.10 - 8.35 Rubbly, ground core (30-40% recovery).									
14.40	16.35	CONGLOMERATE Massive, coarse grained conglomerate with 30% angular to well rounded, poorly sorted, clasts up to 4 cm in a very fine grained, dark green graywacke matrix; undeformed, unaltered jasperoidal conglomerate; lower contact is strongly faulted.									
16.35	16.55	FAULT - MYLONITE ZONE Fault-mylonite zone @ 52° tca, schistose to well laminated (mylonitic) and consists of alternating bands (2-5 mm wide) of light green sericite, dark green chlorite and dirty brown sericite + ankerite (?).	6866	16.30	16.70	0.40		Fault - Mylonite zone	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-14

PAGE: 1 of 7

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 12 1990	EASTING	8100.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	9835.00
CLAIM No.	L 500058 / 491651	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	November 8, 1990	DRILLED BY	Heath & Sherwood	LENGTH	99.45
COMPLETED	November 10, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '99' structure 70 metres east of 99-8030 Gold Zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	No anomalous assays				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
76.00		44

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	2.13	CASING		99.45	E.O.H.				
2.13	6.55	GRAYWACKE / MUDSTONE							
6.55	18.40	ASH TUFF							
18.40	25.90	CONGLOMERATE							
25.90	28.55	ALTERED ASH TUFF Hematitic							
28.55	31.00	ASH TUFF							
31.00	35.50	LAPILLI TUFF							
35.50	44.75	ALTERED ASH TUFF Hematitic to sericitic							
44.75	46.85	COARSE LAPILLI TUFF							
46.85	60.00	ALTERED TUFF Bedding @ 60° tca , sericitic							
60.00	61.60	ALTERED TUFF Hematitic							
61.60	71.75	ALTERED LAPILLI TUFF Sericitic, 0.5% pyrite							
71.75	99.45	COARSE LAPILLI - / BLOCK TUFF							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-14

PAGE: 2 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	2.13	CASING									
2.13	6.55	GRAYWACKE / MUDSTONE Massive to well foliated, light grey to green fine grained graywacke with thin (2 mm - 0.5 cm) mudstone beds and rip-up clasts; bedding / foliation @ 60°-70° tca; moderate ankerite staining, especially at top of hole which is quite fractured and rubbly; lower contact of unit is rubbly core but appears to be faulted along a sericite slip plane @ 55° tca.									
	5.00 - 6.55	Strongly foliated to schistose with prominent sericite slips and pervasive sericite (10%) in matrix.	6889	4.00	5.00	1.00		Massive Graywacke with mudstone clasts	0.01		
	5.10 - 5.25	Fault @ 60° tca: sericite + quartz + ankerite; white to clear fractured quartz vein, 6-7 cm wide within sericite schist.	6890	5.00	5.50	0.50		Sericitic Graywacke with 7 cm quartz vein	nil		
	5.60 - 5.70	Milk-white to grey massive, weakly laminated quartz vein cut by numerous, tight sericite slips and bounded by tight (1 mm) sericite + chlorite + ankerite slip planes.	6891	5.50	6.00	0.50		10 cm laminated quartz vein in foliated Graywacke	0.01		
			6892	6.00	6.50	0.50		Well foliated sericitic Graywacke	0.01		
6.55	18.40	ASH-TUFF Massive, very fine grained, dark brown to green, in part weakly bedded @ 40° tca as defined by very narrow (<1 mm) irregular magnetite beds, and in part intercalated with narrow (up to 0.5 m), clast rich lapilli-tuff horizon with very gradational contacts; lower contact of unit is very gradational.									
	6.55 - 10.00	Stockwork of 5% white-pink-purple quartz veinlets (1 mm - 4 mm wide) which occasionally display a light brown alteration halo 1-2 mm wide; locally very minor, coarse clotty pyrite.	6893	6.50	7.00	0.50		Ash Tuff with 2% quartz veinlets	nil		
			6894	7.00	8.00	1.00			0.06		
			6895	8.00	9.00	1.00			0.03		
			6896	9.00	10.00	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-14

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS			
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au *M
35.50	44.55	<p>31.45 Fault @ 40° tea: sericite + chlorite; sharp, 1 cm wide sericite + chlorite slip and a prominent foliation developed for 0.5 metres on either side of slip; 5-10% wispy sericite + hematite alteration for up to 25 cm in wall rock.</p> <p>HEMATIZED ASH-TUFF Massive, very fine grained dark brown to purple to green (mottled, altered variable colouration), very soft with a white (sericite) to red-brown (hematite) streak; predominantly dark brown-purple but cut by 2-3% white-pink quartz veinlets which display irregular alteration (sericite) halos which produces dirty, mottled texture; in places white feldspar clots or masses up to 0.5 cm are prominent ("snowflake" texture) and may be confined to altered fragments with partially to completely obliterated margins; although pervasively sericitized and hematized, this unit is still strongly magnetic; lower contact is a fault.</p> <p>39.30 - 39.85 Fractured to pseudo-brecciated with "crack and seal" type texture due to fracturing by narrow (<= 1 mm) chloritic sutures; minor coarse pyrite on fracture planes.</p> <p>39.85 - 40.00 Fault @ 50° tea; well foliated to schistose tuff with numerous sericitic slips.</p> <p>FAULT ZONE Fault zone @ 40° tea; sericite + chlorite ± quartz; strongly deformed, laminated to schistose with 20-30% wispy sericite + chlorite and 2 stages of quartz veinlets:</p> <p>1) Parallel to schistosity; 2) Later cross-cutting quartz ± chlorite veinlets (1-2 mm).</p>	6900	31.00	32.00	1.00		Altered Lapilli Tuff with fault zone	0.02		
			6901	32.00	33.00	1.00		Massive Lapilli Tuff	nil		
			6902	33.00	34.00	1.00			0.01		
			6903	34.00	35.00	1.00			0.01		
			6904	35.00	35.50	0.50			nil		
44.55	44.75		6905	35.50	36.00	0.50			0.02		
			6906	36.00	37.00	1.00			0.01		
			6907	37.00	38.00	1.00			0.01	0.01	
			6908	38.00	39.00	1.00			0.01		
44.55	44.75		6909	39.00	39.50	0.50		Pseudo-brecciated Tuff	nil		
			6910	39.50	40.10	0.60		Pseudo-brecciated Tuff + fault zone	0.01	0.01	
			6911	44.00	44.55	0.55		Hematitic Ash Tuff with sericite alteration halos on veins	nil		
			6912	44.55	45.05	0.50		Fault zone	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-14

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
44.75	46.85	Contains 4 cm wide aphanitic pink feldspar (?) vein which is cut by sericite slips and late, cross-cutting quartz veinlets. COARSE HETEROLITHIC LAPILLI-TUFF This unit is quite distinctive, consisting of very poorly sorted, angular to well rounded clasts up to 10-15 cm (avg. 5 cm) in a fine grained red-purple, hematized matrix; clasts are dark red-purple to pink (porphyritic) to light green-brown (sericitized) trachyte; unit is non-magnetic; lower contact is sharp sericite slip @ 20° tca.	6913	45.05	46.00	0.95		Massive bleached Lapilli Tuff	nil		
			6914	46.00	46.90	0.90			0.01		
46.85	60.00	BLEACHED ASH-TUFF / LAPILLI-TUFF Light green-brown to red, very fine grained, well-bedded ash-tuff and fine grained lapilli-tuff, with bedding @ 60° tca; matrix is very fine grained altered, sericitized rock fragments in a bleached aphanitic sericitized groundmass; the unit is overall very massive, i.e. undeformed; where somewhat coarser it is comprised of 30-40% red trachyte clasts (1-2 mm) in a highly altered, sericitic groundmass; it is non-magnetic and in part contains light green, aphanitic, altered mudstone beds up to 5 cm wide; (this unit appears to be related to a facies change from coarse trachytes in north to sediments in south); lower contact is strong mud-break from 60.00 - 60.20 m.	6915	46.90	48.00	1.10		Bleached sericitized Tuff	0.02		
			6916	48.00	49.00	1.00			0.02		
			6917	49.00	50.00	1.00			0.01		
			6918	50.00	51.00	1.00			0.02		
			6919	51.00	52.00	1.00			0.01		
	52.55	Fault @ 30° tca: chlorite + quartz; 1 cm fractured to brecciated quartz vein with sharp chlorite slip and chlorite cementing vein fragments.	6920	52.00	53.00	1.00			nil		
			6921	53.00	54.00	1.00			0.01		
	53.45 - 53.50	Fault breccia @ 40° tca; brecciated, white-pink 1 cm quartz vein, with dark green, aphanitic chlorite groundmass.									
	54.15 - 55.00	70% core recovery; blocky, rubbly core due to 0.5 cm chlorite + sericite + quartz + calcite slip sub-parallel tca.	6922	54.00	55.00	1.00		Blocky core - subparallel fault	0.01	0.01	
			6923	55.00	56.00	1.00	70		0.01		
			6924	56.00	57.00	1.00			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-15

PAGE: 1 of 5

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 13 1990	EASTING	8200.00
TOWNSHIP	Teck	LOGGED BY	Mark Masson	NORTHING	9970.00
CLAIM No.	L 491663	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	November 10, 1990	DRILLED BY	Heath & Sherwood	LENGTH	102.75
COMPLETED	November 11, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '100' structure and low magnetic and IP anomalies	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	No anomalous assays				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45
76.00		43

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 0.60	CASING					
0.60 33.15	COARSE LAPILLI TUFF					
33.15 36.30	FAULT ZONE @ 40° tca					
36.30 72.70	LAPILLI TUFF Well foliated @ 50° tca					
72.70 92.00	63.45 - 63.52 Quartz + sericite, 0.5% pyrite ASH / LAPILLI TUFF					
92.00 98.50	ALTERED ASH TUFF Sericitic, 0.5% pyrite, ± quartz					
98.50 102.75	94.50 - 95.10 5% quartz veinlets with 0.5 - 1% pyrite in wallrocks ASH / LAPILLI TUFF Weakly altered					
102.75	E.O.H.					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-15

PAGE: 2 of 5

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	0.60	CASING									
0.60	33.15	COARSE MONOLITHIC LAPILLI-TUFF / BLOCK TUFF Very distinctive, massive, strongly magnetic, consisting of 15-20% coarse, angular to sub-rounded, very poorly sorted, dark red-pink, 0.1-10 cm trachyte clasts, in a fine grained dark green matrix of 15-20% fine grained, dark red trachyte rock fragments (<= 1 mm) in an aphanitic, chloritized groundmass.									
	3.70 - 4.20	Rubbly core due to dirty, open vuggy fault @ 15° tca; fault slips are open chloritic ± sericite with late white-pink quartz + calcite veining and cavity infilling.	6946	3.00	4.00	1.00		Foliated Tuff with fault zones	nil		
	4.50 - 4.55	Fault @ 30° tca; chlorite + sericite + quartz + calcite; 4-5 cm wide chlorite + sericite schist with a 0.5-1 cm wide white-pink, quartz + calcite veinlet in centre of schist.	6947	4.00	5.00	1.00			nil		
	5.10 - 5.30	Rubbly core due to chlorite + ankerite slip at 5° tca.	6948	5.00	6.00	1.00			nil		
	6.00 - 7.00	Strongly foliated @ 45° tca; clasts are notably fractured and broken white matrix has a dirty appearance due to an abundance of irregular chloritic sutures which gives matrix a micro-brecciated appearance.	6949	6.00	6.85	0.85		Strong, tight mud break	nil		
			6950	6.85	7.30	0.45			nil		
	7.00 - 7.05	Fault @ 35° tca; strong, tight chloritic slip with fault gouge.									
	9.80 - 9.85	Fault @ 45° tca; tight chlorite + sericite slips with 1-2 mm wide, white-pink quartz + calcite veinlets.									
	18.10	Fault @ 40° tca; strong, tight break with abundant calcite and minor boudinaged 1 mm quartz veinlets.									
	23.70 - 33.15	Increasing deformation in the form of brittle fracturing of both matrix and framework which are cut by two or three stages of 0.1-0.5 cm, white-pink quartz veins at 0°, 15° and 60° tca; matrix also contains abundant chloritic sutures which give rise to a weak, brecciated appearance.	6951	22.00	23.00	1.00			0.01		
			6952	23.00	23.50	0.50			nil		
			6953	23.50	24.50	1.00			nil		
			6954	24.50	25.50	1.00			0.01		
			6955	25.50	26.00	0.50			0.01	0.03	
			6956	26.00	27.00	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-16

PAGE: 1 of 7

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 14 1990	EASTING	8500.00
TOWNSHIP	Teck	LOGGED BY	W. Benham	NORTHING	10015.00
CLAIM No.	L 477419	SIGNED BY	<i>W. Benham</i>	ELEVATION	
STARTED	November 11, 1990	DRILLED BY	Heath & Sherwood	LENGTH	119.62
COMPLETED	November 13, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '100' structure, low magnetic and IP anomalies	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	No anomalous assays				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
76.00		42
114.00		40

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	2.13	CASING			64.70 - 68.20	1 - 2% pyrite			
2.13	12.77	COARSE LAPILLI TUFF			68.20 - 72.80	< 1% pyrite			
12.77	18.55	CONGLOMERATE			72.80 - 78.93	1 - 2% pyrite			
18.55	27.25	LAPILLI TUFF			78.93 - 81.72	2 - 3% pyrite, 3 - 5% quartz			
27.25	29.05	LAPILLI TUFF / CONGLOMERATE	81.72	93.90	ASH TUFF				
29.05	35.95	CONGLOMERATE			81.72 - 86.90	sericitic, 1% pyrite			
		Chloritic, carbonated, ± quartz, trace pyrite			86.90 - 93.90	weakly chloritic, hematitic			
		Well foliated @ 55° tca	93.90	97.00	CONGLOMERATE				
35.95	46.05	LAPILLI to ASH TUFF	97.00	106.40	ASH TUFF				
46.05	47.42	HEMATITIC TUFF	106.40	119.62	ASH TUFF to TUFF				
47.42	60.22	ALTERED CONGLOMERATE							
		Sericitic, silicified							
60.22	61.30	ASH TUFF		119.62	E.O.H.				
61.30	61.88	LAPILLI TUFF							
61.88	62.20	ALTERED LAPILLI TUFF							
		Silicified, sericitic, 1% pyrite							
62.20	81.72	ALTERED CONGLOMERATE							
		62.20 - 64.70 10 - 15% sericite, 3 - 5% pyrite, 10 - 15% grey quartz							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-16

PAGE: 3 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
27.25	29.05	LAPILLI-TUFF / CONGLOMERATE 0.25 to 5 cm red trachyte and feldspar-porphry clasts in a green tuffaceous matrix.									
29.05	35.95	CONGLOMERATE / SHEAR ZONE Rounded to stretched quartz, jasper, syenite, mafic volcanic, and trachyte pebbles in well foliated, carbonated, chloritic, graywacke matrix (30%); trace pyrite in matrix and some pebbles; moderately to well foliated @ 50-60° tca.									
		30.45 Banded, 30 cm quartz-carbonate-chlorite vein @ 70° tca.	11572	29.00	30.00	1.00			nil		
			11573	30.00	31.00	1.00			0.02		
			11574	31.00	32.00	1.00			nil		
		32.55 2 cm quartz-calcite-chlorite veins @ 60° tca.	11575	32.00	33.00	1.00			nil		
		33.50 0.5-2.0 cm grey quartz-carbonate vein @ 60° tca with trace pyrite.	11576	33.00	34.00	1.00			0.01		
		34.80 - 35.30 Chloritic fault zone @ 50° tca with 25% white, salmon pink, 0.5-1.5 cm quartz carbonate veining @ 40°-50° tca, trace pyrite.	11577	34.00	34.70	0.70			0.01		
			11578	34.70	35.40	0.70			nil		
		34.84 - 34.97 White quartz-carbonate-chlorite vein @ 45° tca.	11579	35.40	36.00	0.60			nil	nil	
35.95	46.05	LAPILLI-TUFF / ASH-TUFF Interbedded ash- to lapilli-tuff; 0.25 to 3 cm red to green trachytic clasts in tuffaceous matrix; 15-30 cm dark green ash-tuff units, weakly bedded @ 50°-55° tca; strongly magnetic, trace pyrite, harder in the down hole direction.									
		35.95 - 36.65 Dark green-brown, fine grained, brecciated with dark green-black chloritic matrix.	11580	36.00	36.80	0.80			0.01		
		37.37 - 37.55 Dark green-brown, fine grained, brecciated with dark green-black chloritic matrix.	11581	36.80	37.60	0.80			nil		
46.05	47.42	HEMATITIC TUFF Red to dark red, hematitic, strongly magnetic tuff; trace pyrite, 1% 0.1 mm quartz veinlets; upper contact sharp alteration front @ 55° tca; lower contact gradational.									
			11582	46.00	47.00	1.00			0.01		
			11583	47.00	47.50	0.50			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-16

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
47.42	60.22	ALTERED CONGLOMERATE									
	48.42 - 52.25	Green-brown-mauve, altered conglomerate; rounded to angular pebbles in an altered, hard "silicified" graywacke matrix; 3-5% pervasive sericite; 1-2%, 0.1-0.5 cm, quartz veinlets; trace fine to medium grained pyrite.	11584	47.50	48.50	1.00			nil		0.01
			11585	48.50	49.50	1.00			nil		
			11586	49.50	50.50	1.00			0.01		
			11587	50.50	51.30	0.80			nil		
			11588	51.30	52.25	0.95			nil		
	52.25 - 55.80	Bleached, sericitic altered section, yellow-green-brown-pink-purple; hard and siliceous; rounded to angular quartz grains in an altered sericitic matrix, with 10-15% sericite; <1%, 0.1-1 cm quartz veinlets; trace disseminated pyrite; upper and lower contacts gradational.	11589	52.25	53.00	0.75			nil		
			11590	53.00	54.00	1.00			nil		
			11591	54.00	55.00	1.00			nil		
			11592	55.00	55.80	0.80			0.01		
	55.80 - 60.22	Brown to green to purple, hard "silicified" sericitic to hematitic conglomerate with rounded to fractured angular pebbles in a quartz + sericite matrix; trace pyrite in matrix; pebbles consist of altered trachyte, porphyritic-syenite and quartz; 3-5% sericite in fractured matrix.	11593	55.80	56.50	0.70			nil		
			11594	56.50	57.50	1.00			nil		
			11595	57.50	58.50	1.00			nil		
			11596	58.50	59.50	1.00			nil		
			11597	59.50	60.20	0.70			0.01		
60.22	61.30	ASH-TUFF Green, with bleached, light-white to green fractures; fine grained, massive, trace pyrite; lower contact sharp @ 45° tca.	11598	60.20	61.20	1.00			nil		
61.30	61.88	LAPILLI-TUFF Dark green, mottled texture due to irregular 0.5-2 cm quartz- albite clots and veinlets; hard.	11599	61.20	61.70	0.50			0.01		
61.88	62.20	ALTERED LAPILLI-TUFF Hard, quartz-rich rock, weakly foliated @ 60° tca, fractured, cracked, 0.2 x 1.0 cm quartz fragments; 5-10% sericitic matrix; 1% disseminated pyrite.	11600	61.70	62.20	0.50			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-16

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
62.20	81.72	ALTERED CONGLOMERATE Sheared, sericitic, pyritic conglomerate with sub-rounded to sub-angular, quartz, jasper, fuchsite, trachyte, sycnite and mudstone pebbles, 0.25-20 cm in diameter in a hard, quartz rich, sericitic graywacke matrix; 5-15% sericite as wispy bands up to 0.5 cm wide and in fractures throughout the matrix, foliated @ 50°-60° tca.									
	62.30	2-3 cm broken fault gouge @ 50° tca.	11601	62.20	62.70	0.50			0.02		
	62.20 - 64.70	10-15% yellow to brown sericite bands @ 50°-60° tca with 3-5% finely disseminated pyrite; < 0.5% coarse pyrite in matrix; 10-15% dark grey to grey quartz-rich "lenses" and zones, 0.5-20 cm wide with 2-3% finely disseminated pyrite; 1-2% irregular veinlets and clots of white quartz-albite.	11602	62.70	63.20	0.50			0.02		
			11603	63.20	63.70	0.50			0.02		
			11604	63.70	64.20	0.50			0.02	0.01	
			11605	64.20	64.70	0.50			0.01		
	64.70 - 68.20	Altered conglomerate; hard; 1-2% finely disseminated pyrite; 3-5% sericite.	11606	64.70	65.20	0.50			0.01		
			11607	65.20	66.20	1.00			0.01		
			11608	66.20	67.20	1.00			0.01		
			11609	67.20	68.20	1.00			0.01		
	68.20 - 72.80	<1% disseminated pyrite; trace medium grained pyrite; softer, 3-5% sericite in matrix.	11610	68.20	69.20	1.00			0.01		
			11611	69.20	70.20	1.00			0.01		
			11612	70.20	71.20	1.00			0.01		
	71.84 - 71.95	White quartz-ankerite vein @ 45° tca with chlorite filled fractures; trace molybdenite (?) along fractures and vein contacts.	11613	71.20	72.20	1.00			0.01		
	72.80 - 78.93	2-3% white irregular quartz-albite clots in matrix; hard, 1-2% disseminated pyrite, <0.5% medium grained pyrite.	11614	72.20	72.80	0.60			0.01		
			11615	72.80	73.80	1.00			0.01		
	74.35	0.5 cm fault gouge @ 55° tca.	11616	73.80	74.80	1.00			0.02	0.01	
			11617	74.80	75.80	1.00			0.01		
			11618	75.80	76.80	1.00			0.02		
			11619	76.80	77.60	0.80			0.02		
			11620	77.60	78.10	0.50			0.02		
	78.12 - 78.93	Darker grey 3-5% white quartz albite, 5-10% quartz veining or flooding; 3-5% finely disseminated pyrite.	11621	78.10	78.80	0.70			0.02		
			11622	78.80	79.40	0.60			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-16

PAGE: 6 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M	
81.72	93.90	78.93 - 81.72 ASH-TUFF Lighter grey-brown, 5-10% pervasive sericite alteration; hard; 2-3% pyrite; 3-5% grey quartz flooding.	11623	79.40	80.10	0.70			0.03			
			11624	80.10	81.00	0.90			0.03			
			11625	81.00	81.75	0.75			0.02			
81.72	93.90	81.72 - 86.90 Light brown to yellow-green, hard, 10% pervasive sericite alteration; 3-5% 1 mm green chlorite spots and fracture fillings; trace to locally 1% disseminated pyrite over 5-10 cm.	11626	81.75	82.60	0.85			0.02			
			11627	82.60	83.40	0.80			nil			
			11628	83.40	84.40	1.00			0.01			
			11629	84.40	85.40	1.00			0.01			
			11630	85.40	86.40	1.00			0.02			
86.90	89.35	86.90 - 89.35 Light brown to pink-brown; softer than above section; 1-2%, < 1 mm green chlorite "spots"; trace pyrite.	11631	86.40	86.90	0.50			0.01	0.01		
			89.35 - 93.90 Pink, weakly hematitic, sericitic, 1-2% chlorite porphyroblasts.									
93.90	97.00	CONGLOMERATE Rounded to sub-rounded, 0.25 to 5.0 cm, syenite, mudstone, trachyte, quartz, mafic volcanic and fuchsitic pebbles in fine to medium grained, pink graywacke matrix; beds 30 to 80 cm thick, with fining in the down hole direction; weak to moderate alteration consisting of pervasive sericite and hematite.										
97.00	106.40	97.00 - 99.55 ASH-TUFF Fine-medium grained, pink to light brown tuff with some 5-10 cm wide lapilli-tuff beds, sericitic, hematitic.										
			97.00 - 99.55 3%, 0.1 to 15 cm, barren, white quartz + albite + ankerite veins and breccia zones.	11632	97.60	98.60	1.00			0.01		
			98.62 - 98.60 2-10 cm, quartz + carbonate breccia veins with 0.2 to 3 cm, angular, altered, sericitic tuff fragments in 45% quartz-ankerite matrix.	11633	98.60	99.60	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-17

PAGE: 1 of 6

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 14 1990	EASTING	8370.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10210.00
CLAIM No.	L 491663	SIGNED BY	<i>W. [Signature]</i>	ELEVATION	
STARTED	November 13, 1990	DRILLED BY	Heath & Sherwood	LENGTH	56.55
COMPLETED	November 14, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 102-8350 zone above AK-90-04	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	102-8350 Mineralized zone intersected at 24.25 - 32.58m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g/t
From	To		From	To		From	To		
0.00	2.50	CASING			34.95 - 36.00	sericitic	24.20	32.58	0.80
2.50	3.25	LAPILLI TUFF							
		Foliation @ 45° tea							
3.25	13.65	ASH TUFF - / LAPILLI TUFF			56.55	E.O.H.			
13.65	19.30	ALTERED LAPILLI TUFF							
		5 - 10% sericite					24.20	24.90	1.55
19.30	24.25	LAPILLI TUFF					24.90	28.00	0.21
		Weakly altered					28.00	32.58	1.08
24.25	32.58	QUARTZ - PYRITE ZONE							
		24.25 - 24.70 1% finely disseminated pyrite							
		24.70 - 24.90 Quartz breccia vein, 1 - 2% pyrite							
		24.90 - 26.50 1% pyrite							
		26.50 - 26.92 3 - 5% pyrite							
		26.92 - 31.35 Patchy 3 - 5% pyrite							
		31.35 - 31.45 Blue quartz vein, 1 - 3% pyrite							
		31.45 - 32.58 0.5% pyrite							
32.58	34.95	SYENITE / ALTERED TUFF							
		Hematitic, gradational contacts							
34.95	56.55	LAPILLI TUFF							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-17

PAGE: 4 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
	24.25 - 24.70	Upper contact of zone is very vague and appears to coincide with sharp, tight (<=0.5 mm) chlorite + quartz slip @ 40° tca; no pyrite is notable up hole; 0.5-1% very finely disseminated pyrite within sericitized lapilli tuff matrix and <=0.5%, <=0.5 mm, pyrite wormy sutures throughout; at 24.50 m there is a 2 cm wide grey-green sericite schist with 2-3% disseminated and blebby pyrite.	6995	24.20	24.70	0.50		Altered Lapilli Tuff with 1% disseminated and wormy pyritic sutures	1.13		
	24.70 - 24.90	Multiphase quartz breccia vein of fractured and brecciated light grey aphanitic siliceous inclusions, up to 0.5 cm wide, within later buff-white irregular quartz veins (1-3 mm) and as angular brecciated masses within very fine grained siliceous groundmass; some strongly sericitized lapilli clasts are still evident within the siliceous matrix; pyrite as very fine grains along irregular sericitic sutures; very finely disseminated pyrite in matrix and as coarse pyritic clots (<= 1 mm) with dark chloritic rims; overall pyrite content 1-2%.	6996	24.70	24.90	0.20		Quartz breccia vein, 1 - 2% disseminated and fracture filling pyrite	2.54	2.64	
	24.90 - 26.50	Pyritized lapilli-tuff, essentially undeformed, but sericite altered lapilli-tuff with 10% coarse, angular lapilli clasts within a light green, sericitized matrix; cut by <= 1% late white quartz veinlets; 0.5-1.0% pyrite as:	6997	24.90	25.50	0.60		Pyritized Lapilli Tuff with 1% pyrite as replacement and fine disseminations	0.38		
			6998	25.50	26.40	0.90			0.25		
	26.50 - 26.92	Very irregular but sharp contacts to anastomosing sericite + pyrite alteration zone with 3-5% very finely disseminated pyrite (dark grey) in sericite-schist groundmass; pyrite also replaces some clasts, as well as forming dense, dark grey masses of 3-5% pyrite in sericite schist.									
			1) Very fine grained pyrite within selective lapilli clasts with up to 10-15% of clast being replaced.								
		2) Finely disseminated pyrite within matrix, but preferentially located within patchy, strongly sericitic zones within matrix;									
			6999	26.40	27.00	0.60		Pyrite zone with 2 - 3% pyrite	0.24		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-17

PAGE: 5 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M		
32.58	34.95	26.92 - 31.35 Pyrite mineralization as very discreet but patchy zones where wispy to semi-massive sericite is developed within altered tuff; these zones are very irregular and contain 3-5% finely disseminated pyrite; very minor (<0.5%) pyrite as fine disseminations within the matrix of the unit.	7000	27.00	28.00	1.00		< 1% patchy pyrite in sericitized Tuff	0.04				
			7001	28.00	28.50	0.50			1.96	1.89			
		28.70 - 28.85	Fault @ 15° tca: chlorite + quartz; laminated shear with 1-2 mm white-pink quartz veinlets with interstitial aphanitic chlorite.	7002	28.50	29.00	0.50		Sericitic Tuff with fault, << 0.5% pyrite	0.47			
		29.95 - 30.05	Fault @ 25° tca: chlorite + quartz; sharp tight chloritic shear with narrow (1-2 mm) white-pink quartz veinlet.	7003	29.00	29.50	0.50		Sericitic Tuff	0.55			
				7004	29.50	30.10	0.60		Sericitic Tuff with 5% quartz and 0.5% disseminated pyrite and chlorite	1.21			
		31.35 - 31.45	1-2 cm wide, blue-grey, brecciated quartz vein with wispy irregular, sericite and 3-5% pyrite in breccia and along vein wall; wall rock for 25 cm symmetrically around vein is cut by numerous sericite + pyrite sutures with 3-5% pyrite; overall pyrite content 1-3%.	7005	30.10	31.10	1.00		0.5 - 1% patchy pyrite in sericitic Tuff	1.30	1.30		
				7006	31.10	31.68	0.58		1 - 3% pyrite with blue gray quartz vein	1.04			
					7007	31.68	32.58	0.90		Sericitized Tuff with < 0.5% pyrite in sericite sutures	0.96		
					7008	32.58	33.50	0.92		Red altered unit (Syenite ?)	0.07		
			7009	33.50	34.50	1.00			0.02				
			7010	34.50	35.00	0.50		Lower contact, gradational	0.01				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-18

PROPERTY	Amalgamated Kirkland	DATE LOGGED	Nov. 15-16 1990	EASTING	8370.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10185.00
CLAIM No.	L 491663	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	November 14, 1990	DRILLED BY	Heath & Sherwood	LENGTH	77.90
COMPLETED	November 15, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 102-8350 Gold Zone above AK-90-04 and below AK-90-17	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	102-8350 zone intersected at 61.00 - 67.70m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45
76.00		44

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH in metres	AVERAGE Au g- /t
From	To		From	To		From	To		
			77.90		E.O.H.	61.00	67.70	6.70	1.67
0.00	3.50	CASING							
3.50	14.50	ASH TUFF - / LAPILLI TUFF							
14.50	17.75	CONGLOMERATE							
17.75	19.15	ASH TUFF - / LAPILLI TUFF							
19.15	20.40	CONGLOMERATE				62.00	63.00	1.00	2.09
20.40	49.10	ASH TUFF - / LAPILLI TUFF				64.90	67.70	2.80	3.14
49.10	50.20	FAULT ZONE @ 30° tca							
50.20	60.50	SERICITIC LAPILLI TUFF							
60.50	63.60	PYRITE - QUARTZ ZONE							
		60.50 - 61.00 0.5 - 1% pyrite				67.20	67.70	0.50	16.40
		61.00 - 63.00 3 - 4% pyrite, 5% quartz							
		63.00 - 63.60 0.5% pyrite							
63.60	64.80	SERICITIC TUFF / LAPILLI TUFF							
64.80	66.15	SYENITE							
		0.5 - 2% coarse pyrite							
66.15	76.65	SERICITIC LAPILLI TUFF							
		67.40 - 67.55 Sericite, quartz, pyrite zone @ 50° tca,							
		1 - 2% pyrite							
76.65	77.90	LAPILLI TUFF							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-18

PAGE: 4 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au * M	
60.50	63.60	52.50 - 60.10 Less altered, well foliated @ 40°-45° tca, wispy to spotty sericite, with more diffuse, patchy alteration and some primary textures still evident, i.e. lapilli clasts with spotty sericite within well foliated, sericitic tuffs; unit is cut by 1%, 1-3 mm wide, late, white quartz veinlets	7019	52.00	53.00	1.00			0.03			
			7020	53.00	54.00	1.00			0.02			
			7021	54.00	55.00	1.00			0.02			
			7022	55.00	56.00	1.00			0.02			
			7023	56.00	57.00	1.00			0.02			
			7024	57.00	58.00	1.00			0.02			
			7025	58.00	59.00	1.00			0.03			
		60.10 - 60.45	Fault zone @ 25° tca: sericite + chlorite; cut by numerous, tight chlorite + sericite slips with weak mud gouge on slip planes, and by 1-2 mm wide chlorite + quartz stringers; pseudo brecciated texture.	7026	59.00	59.90	0.90			0.03		
				7027	59.90	60.40	0.50			0.01		
		PYRITE QUARTZ ZONE Moderately deformed and altered (5-10% sericite) lapilli-tuff with at least 3 types of pyrite mineralization:										
		1) Pyrite replacement of certain lapilli clasts;										
		2) Disseminated pyrite;										
		3) Stringer pyrite										
		Upper contact of pyrite zone is very abrupt with no pyrite evident further up hole from zone. Total pyrite content is 0.5 - 1%.										
		60.50 - 61.00 Upper, leading edge of sulphide zone is coincident with a quartz breccia and 3 cm wide chlorite breccia veinlets; pyrite as very fine grained stringers and minor disseminations.	7028	60.40	61.00	0.60			0.04			
								0.5 - 1% pyrite in sericitic Lapilli Tuff				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-18

PAGE: 5 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
63.60	64.80	61.00 - 63.00	7029	61.00	62.00	1.00		3 - 4% pyrite, 5% quartz veinlets in sericitized Tuff	0.18	1.92		
												7030
		63.00 - 63.60	7031	63.00	63.60	0.60		Sericitized Lapilli Tuff with 0.5% pyrite	0.10			
		SERICITIC TUFF / LAPILLI-TUFF										
		63.60 - 64.40	7032	63.60	64.40	0.80		Altered Tuff - no pyrite	0.05			
64.40 - 64.80	7033	64.40	64.90	0.50		Sericitic Lapilli Tuff - no pyrite	0.07					
64.80		Fault @ 40° tca; sharp, tight chlorite slip with a 0.5 cm quartz + chlorite + sericite veining and alteration in adjacent wall rock.										
64.80	66.15	RED ALTERED ROCK? (SYENITE ?) Massive, fine grained, red-brown with micro-fractured, aphanitic red-brown matrix; very fine wispy sericite on fracture planes and interstitial to white-black clots?; 5% very irregular, <= 0.5 mm, dark black crystals (?) and irregular white quartz clots with black chloritic rims; sporadic coarse, subhedral pyrite, locally up to 0.5% and sericitic slips (shear zones) which contain 1-2% pyrite.										

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-19

PAGE: 1 of 5

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 17 1990	EASTING	8425.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10205.00
CLAIM No.	L 491663	SIGNED BY	<i>W. B...</i>	ELEVATION	
STARTED	November 15, 1990	DRILLED BY	Heath & Sherwood	LENGTH	71.20
COMPLETED	November 16, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 102-8425 Gold Zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		46

COMMENTS 102-8425 zone intersected at
34.00 - 40.10m

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 1.22	CASING			34.00 40.10	6.10	0.12
1.22 34.00	LAPILLI TUFF					
34.00 34.90	FAULT ZONE			42.00 42.50	0.50	0.10
	60% recovery					
34.90 44.62	PYRITE - QUARTZ ZONE			48.50 49.50	1.00	0.20
	34.90 - 35.20 1 - 2% pyrite, 10% quartz					
	35.20 - 35.85 0.5 - 1% pyrite			54.20 54.60	0.40	6.30
	35.85 - 36.60 3 - 4% pyrite, 10 - 15% quartz breccia zones					
	36.60 - 39.00 0.5 - 1% pyrite					
	39.00 - 40.05 2 - 3% pyrite					
	40.05 - 44.62 0.5% pyrite					
44.62 48.45	SYENITE					
48.45 71.20	SERICITIC LAPILLI TUFF / TUFF					
	54.20 - 54.55 quartz + pyrite zone @ 55° tca					
	3 - 4% pyrite, 80% quartz, 10 - 15% sericite, chlorite, carbonate gangue					
71.20	E.O.H.					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-19

PAGE: 3 of 5

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
	34.90 - 35.20	Highly sericitic and deformed (no primary textures preserved), with 1-2% very finely disseminated pyrite throughout; cut by 10% irregular white-grey quartz ± chlorite veinlets and masses; lower contact is a strong 1 cm wide sericite + pyrite schist with disrupted quartz fragments included within it; down hole side of schist is marked by a 1 mm chlorite + quartz veinlet @ 60° tca.	7043	34.90	35.25	0.35		Strongly deformed sericite + pyrite schist bands (2mm - 1cm wide), overall pyrite 1 - 2%	0.15		
	35.20 - 35.85	Altered lapilli-tuff; strongly sericitized, foliated (47° tca) lapilli-tuff (primary clasts preserved) with 0.5-1% disseminated pyrite as <=0.5 mm subhedral grains and as very fine pyrite + sericite slips, <= 1 mm wide.	7044	35.25	35.85	0.60		Lapilli Tuff, 0.5 - 1% pyrite	0.08		
	35.85 - 36.60	10-15% white-grey quartz breccia zones up to 10 cm wide; fractured, brecciated and boudinaged quartz vein material within an altered wall rock + sericite pyrite groundmass; 3-4% total pyrite.	7045	35.85	36.60	0.75		Quartz breccia veins, 3 - 4% pyrite in sericite schist	0.24		
	36.60 - 39.00	Altered lapilli tuff, light yellow-green, sericitized, with primary trachytic clasts; altered but not strongly deformed; 0.5% disseminated subhedral pyrite throughout and as dark grey pyrite + sericite shears up to 2 mm wide that contain up to 20-25% pyrite; some clasts also display pyrite replacement; 0.5-1% pyrite.	7046	36.60	37.00	0.40		Pseudo-brecciated Tuff with 2 - 3 % pyrite 0.5 - 1% disseminated and veinlet pyrite in undeformed, sericitic Lapilli Tuffs	0.11		
			7047	37.00	37.50	0.50			0.02		
			7048	37.50	38.00	0.50			0.02		
			7049	38.00	39.00	1.00			0.02		
	39.00 - 40.05	2-3% sulphide stringers up to 2 mm wide and 10% irregular white quartz veinlets; lower end of Pyrite Zone is marked by a sharp, 1-2 mm wide, sericite + pyrite shear proximal to a series of small (1-3 mm) <i>en echelon</i> quartz veinlets.	7050	39.00	39.60	0.60		2 - 3% disseminated pyrite and 10% quartz veining 1 - 2% pyrite in altered Lapilli Tuff	0.33	0.27	
			7051	39.60	40.10	0.50			0.16		
			7052	40.10	41.00	0.90			0.04		
	40.05 - 44.62	Bleached, sericitized lapilli-tuff with <=0.5% disseminated pyrite in matrix and minor pyritic slips, generally less than 1-2 mm wide.	7053	41.00	41.40	0.40		Sericitized Lapilli Tuff with 0.5% disseminated pyrite 1 - 2% pyritic shears and veinlets along narrow quartz veinlets, 3 - 5% quartz veining	0.04		
			7054	41.40	42.00	0.60			0.08		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-19

PAGE: 4 of 5

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M		
44.62	48.45	44.20 - 44.60 Series of tight chlorite + sericite + quartz + pyrite (10%) shears up to 1 cm wide (at 44.25 m and 44.60 m); interstitial host rock contains <= 0.5% disseminated pyrite.	7055	42.00	42.50	0.50		0.5% pyrite along tight slips and vein boundaries	0.10				
			7056	42.50	43.45	0.95		0.5 - 1% pyrite + 2 - 3% quartz veining	0.04				
			7057	43.45	44.20	0.75		< 0.5% disseminated pyrite in sericitized Tuff	0.01				
			7058	44.20	44.65	0.45		1% pyrite in < 1 cm wide, tight chlorite + sericite + quartz shears	0.04				
				RED ALTERED ROCK (SYENITE (?)) Lower contact of unit is sharp and irregular, and appears to be intrusive, with moderate sericite at contact zone.									
				44.60 - 45.90	Massive, fine to medium grained (altered tuff ?) and displays a very gradational change from yellow-green and sericitic @ 44.60 m to red-pink @ 45.90 m.	7059	44.65	45.30	0.65	Bleached sericitized syenite? possibly Tuff	0.03		
				45.90	Tight sericite + chlorite slip @ 65° tca with 2 cm wide, irregular patchy quartz veining symmetrically around slip.	7060	45.30	45.90	0.60		0.01		
				45.90 - 48.45	Massive, fine grained, red-purple, cut by a <i>en echelon</i> system of small wispy quartz veinlets (tensional) @ 45° tca; contains irregular white quartz (albite?) blebs and masses, up to 2 cm, with black chloritic rims.	7061	45.90	46.80	0.90	Massive red Syenite	0.01		
						7062	46.80	47.50	0.70	Syenite	0.01		
				7063	47.50	48.00	0.50		0.01				
				7064	48.00	48.50	0.50	Sericitized Syenite at contact	0.01				
48.45	71.20	BLEACHED LAPILLI-TUFF / TUFF Massive, light brown (bleached) to green, with 10-15% coarse trachytic clasts up to 3-4 cm, which quite frequently have altered, diffuse boundaries which fade into a light brown very fine to aphanitic bleached groundmass; a majority of the clasts are 0.1-5 cm, medium grained, black-white salt and pepper textured trachytes which gives											
				7065	48.50	49.50	1.00	Bleached Lapilli Tuff	0.18	0.21			
				7066	49.50	50.50	1.00		0.04				
				7067	50.50	51.50	1.00		0.02				
				7068	51.50	52.50	1.00		0.01				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-20

PAGE: 2 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au* M
0.00	1.50	CASING									
1.50	32.30	<p>LAPILLI-TUFF / HETEROLITHIC LAPILLI-TUFF Massive to moderately well foliated with prominent clast elongation @ 45°-50° tca; light grey to dark grey-green, with 5-25%, 0.2-5 cm (avg. 1 cm), angular to sub-rounded, light buff pink to dark green to purple, aphanitic to porphyritic trachytic clasts; matrix of 15-20%, <1 mm lithic clasts in a very fine grained, grey-white groundmass; variable from clast rich to clast poor lapilli-tuffs, and in part intercalated with <= 0.5 m ash-tuff horizons; bedding defined by alternating ash-tuff and lapilli-tuff beds and <= 0.5 mm magnetite layers @ 40°-50° tca; weakly magnetic except proximal to magnetite beds.</p> <p>3.85 Fault @ 35° tca: sericite + ankerite; tight sericite slip with 1-2 cm wide ankerite stain in wall rock.</p> <p>5.15 - 5.25 Fault @ 40° tca: sericite + ankerite; well foliated to schistose zone with strong ankerite staining.</p> <p>9.00 - 9.15 Fault @ 45 deg. tca: sericite + chlorite + ankerite; ankeritic, rusty stained sericite + chlorite schist with minor vuggy calcite infilling.</p> <p>9.15 - 15.00 Ash-tuff, fine grained, massive to well bedded @ 50° tca; contacts with lapilli- tuff are quite gradational.</p> <p>At approximately 21 metres the tuffs become notably hematized with sporadic patchy purple colour; in places hematite is seen to be replacing magnetite beds within ash-tuff which also become moderately to strongly sericitized with 5-10% wispy spotty sericite.</p> <p>23.75 - 24.50 Bleached, silicified zone, light green strongly sericitized and cut by a dirty buff brown, 15 cm wide quartz + ankerite vein which is fractured and rehealed by light brown quartz + ankerite veining; walls are irregular and some what diffuse.</p>									
			7075	23.00	23.70	0.70		Hematized Ash Tuff	nil		
			7076	23.70	24.50	0.80		Sericitized Tuff with 15 cm quartz + ankerite vein	0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-20

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
	40.20 - 44.55	Light to dark green, weakly sericitized and stockworked by 5% late, barren, 0.1-0.5 cm wide, white quartz veinlets.									
	44.15 - 44.25	Fault @ 50° tca: sericite + chlorite; sharp, tight, sericitic slips with rock flour and minor, <= 1 mm, white quartz veinlets.									
	44.55 - 45.85	Pervasively hematized lapilli-tuff, dirty brown-purple, moderately well foliated @ 50° tca.									
	45.85 - 45.90	Fault @ 40° tca: sericite + chlorite + quartz; strong, tight mud break with a 1-2 cm wide white-pink quartz vein with sharp chloritic boundaries.									
	45.90 - 68.85	Quite variable in colour from dirty brown to light green, with 5-25% angular, average 1 cm, trachyte clasts (heterolithic) in a fine grained ash matrix of 5-25% lithic clasts in a very fine groundmass; weak to moderate sericite, as fine spots and irregular wisps throughout.									
	54.00 - 54.10	Massive, barren, white-brown quartz + ankerite vein with sericite + chlorite suturing.	7078	53.80	54.20	0.40		10 cm barren, white quartz vein	0.02		
	62.10 - 62.30	Fault @ 45° tca; contacts of fault are sharp tight sericitic slips; interstitial 20% sericitized host rock and 80% white to pink to brown quartz which in turn has been pseudo-brecciated by sericitic sutures and by a later, cross-cutting quartz + chlorite + calcite veinlets which have smeared pyrite on some of the slip faces (< 0.5% total pyrite)	7079	61.50	62.00	0.50		Moderately sericitic Lapilli Tuff	0.01		
			7080	62.00	62.45	0.45		10 cm buff, brown-pink, quartz vein	0.01	0.01	
			7081	62.45	63.00	0.55		Lapilli Tuff	0.01		
	68.85	Fault @ 40° tca: sericite + chlorite + quartz; 0.5 cm white buff quartz veinlet on sharp chlorite + sericite slips; adjacent wall rock up to 2 cm from vein is cut by numerous chloritic slips.									
	68.85 - 73.25	Dirty red-brown (purple hues), moderately sericitized lapilli-tuff, with 5-10% angular trachytic clasts up to 2 cm (avg. 0.5 cm), which are both hematized (purple) and sericitized (light green), in a very fine grained grey-white matrix.	7082	72.00	73.00	1.00		Weakly hematized Lapilli Tuff	0.01		
			7083	73.00	73.50	0.50		Weakly sericitic Lapilli Tuff	0.05		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-20

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
78.50	81.60	73.25 - 75.00 Sericitized tuff; upper contact is quite gradational with a lighter colour (dirty brown → light green) from 73.25 - 74.00 m until the matrix becomes completely altered to a green-white colour at 74.50 m; lapilli clasts are still evident throughout although many are strongly bleached to a light buff; cut by 1-2%, white, 1-3 mm quartz veinlets.	7084	73.50	74.00	0.50		Moderately - strongly sericitic tuff Sericitized Tuff with 1% quartz veins	0.01			
			7085	74.00	74.50	0.50			0.03			
			7086	74.50	75.00	0.50			0.01			
		75.00 - 78.50	Altered tuff (?); massive, light grey-green, with a patchy mottled texture due to irregular alteration fronts within the matrix; locally matrix contains 5-7% subhedral to lath shaped, dark green amphibole (augite ?) crystals up to 1 mm, in a very fine grained, grey-white groundmass; these "augites" have been chloritized where the groundmass contains 3-5% spotty sericite alteration; unit also contains what appear to be relict lapilli clasts which frequently display diffuse altered boundaries.	7087	75.00	76.00	1.00		Sericite + chlorite altered unit with 5% augite	0.02		
				7088	76.00	77.00	1.00			0.01		
				7089	77.00	78.00	1.00			0.01		
		78.00 - 78.50	Increasingly sericitic and contains <= 0.5% disseminated pyrite.	7090	78.00	78.50	0.50		Sericitized Lapilli Tuff with < 0.5% disseminated pyrite	0.03		
		PYRITE ZONE Lower contact is a sharp, tight chlorite + sericite slip @ 60° tca.										
		78.50 - 79.60	Strongly foliated to weakly schistose @ 50°-55° tca; yellow-green matrix is pervasively sericitized with 0.5% disseminated pyrite; locally relict lapilli clasts are still evident and the dark grey ones are partially replaced by pyrite; cut by 5% irregular white quartz veins up to 3 cm wide.									
				78.80 - 78.90	2-3 cm blue-grey silicified zone with 2-3% finely disseminated pyrite; up hole side of this zone is fractured and white buff quartz vein with sericite + pyrite sutures within vein.	7091	78.50	79.00	0.50		Sericitic Tuff with 5% quartz veining and 2 - 3% pyrite	1.11

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-20

PAGE: 6 of 7

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
81.60	85.30	79.60 - 81.60	Less strongly deformed, massive to weakly foliated, with 5% angular clasts (dark green to buff) in a strongly sericitized (yellow-green) matrix; pyrite as:	7092	79.00	79.60	0.60		Sericitic Tuff with 2% quartz veining and 2 - 3% disseminated pyrite	2.85	2.50
		1) Up to 5-10% pyrite as replacement within clasts.	7093	79.60	80.10	0.50		Sericitic Lapilli Tuff with 1% pyrite	2.77	3.11	
		2) 0.5-1%, fine disseminated pyrite in matrix.	7094	80.10	81.00	0.90		Sericitic Tuff with 2% quartz veining and 1 - 2% pyrite	1.37	1.41	
		3) Pyritic stringers, <= 1 mm wide, along wispy, sericitic sutures.									
		80.65	1 cm blue-grey quartz vein with 1% pyrite on vein walls.								
		80.75 - 81.60	Cut by 1-2% black, <= 1-2 mm wide, chlorite ± quartz veinlets and fractures @ 15° tca.	7095	81.00	81.60	0.60		Sericitic Lapilli Tuff 0.5% pyrite	0.12	
		SYENITE									
		81.60 - 81.90	Strongly sericitized, yellow-green, with 5% fine black subhedral crystals up to 0.5 mm (augite ?) in an aphanitic, sericitized groundmass.	7096	81.60	82.40	0.80		Sericitized Syenite with 5% quartz, quartz + chlorite veining	0.08	
		81.90 - 82.30	Grades into red-brown coloured syenite with 3-5% black subhedral crystals (augite ?); cut by 5% irregular quartz and quartz + chlorite veinlets sub-parallel to core axis.								
		82.30 - 85.20	Massive, red-brown, very fine grained syenite, micro-fractured and infilled with wispy sericite (< 0.5 mm wide). Cut by 2-3% barren white quartz veinlets.	7097	82.40	83.00	0.60		Massive Syenite, 2 - 3% quartz veins	0.06	
		7098	83.00	84.00	1.00			0.02	0.06		
		7099	84.00	84.90	0.90			0.02			
		7100	84.90	85.30	0.40		Weakly sericitic Syenite	0.02			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-21

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	Nov. 20-21 1990	EASTING	8600.00
TOWNSHIP	Teck	LOGGED BY	M. Mason	NORTHING	10174.00
CLAIM No.	L 477419	SIGNED BY	<i>[Signature]</i>	ELEVATION	
STARTED	November 17, 1990	DRILLED BY	Heath & Sherwood	LENGTH	117.70
COMPLETED	November 19, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test '102' structure, low magnetic and IP anomalies	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	Mineralized '102' structure intersected at 69.00 - 98.95m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		44
76.00		42
114.00		41

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 3.40	CASING	93.50 96.50	SYENITE	69.00 98.95	29.95	0.88
3.40 25.00	ASH TUFF		93.50 - 94.30 Sericitic, 2 - 5% pyrite	including		
25.00 28.50	LAPILLI TUFF	96.50 98.90	LAPILLI TUFF	69.00 74.00	5.00	0.75
28.50 44.70	COARSE LAPILLI TUFF		Weakly to moderately sericitic	including		
44.70 58.35	LAPILLI TUFF	98.90 102.75	ASH TUFF - / LAPILLI TUFF	69.60 70.60	1.00	1.49
58.35 69.10	LAPILLI TUFF	102.75 117.70	GRAYWACKE	72.90 73.50	0.60	2.28
	Hematitic		1 - 2% sericite, < 0.5% pyrite			
69.10 74.00	PYRITE - QUARTZ ZONE		113.70 - 117.50 2 - 3% blue grey to white quartz veinlets, trace pyrite	82.00 86.00	4.00	0.67
	Sericitic, silicified			including		
	1 - 2% pyrite, 1% quartz veining			83.00 83.20	0.20	7.05
74.00 82.55	LAPILLI TUFF	117.70	E.O.H.	85.00 86.00	1.00	1.08
	Weakly sericitic			90.50 98.95	8.45	2.25
82.55 92.80	COARSE LAPILLI TUFF			including		
	Weakly to moderately sericitic			90.50 92.00	1.50	1.24
	83.10 0.5 cm blue quartz vein @ 60° tca with 2% pyrite			92.00 96.00	4.00	3.94
	92.05 - 92.60 Silicified, 2 - 3% pyrite			92.00 92.70	0.70	12.87
92.80 93.50	SERICITIC LAPILLI TUFF			95.50 96.00	0.50	9.84
	0.5% pyrite			96.00 98.95	2.95	0.46
				98.55 98.95	0.40	2.25

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-21

PAGE: 3 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
44.70	58.35	44.70 Fault @ 50° tca: sericite + chlorite + quartz; strong, tight slip with 0.5 cm quartz ± ankerite vein on slip wall.									
		44.60 - 44.85 Strongly foliated around fault and contains 10% wispy sericite.									
		LAPILLI-TUFF Massive to weakly foliated, dark grey-brown to purple (where hematitic) with 15-20% angular trachyte clasts up to 2 cm (avg. 0.5 cm) in a fine ash matrix; predominant (30%) clast type is a light brown to buff trachyte, with remainder as heterolithic, dark green to pink trachyte; weak to non-magnetic; lower contact of unit is sharp @ 35° tca (bedding) and marked by a 10 cm wide ash-tuff bed.									
58.35	69.10	55.75 - 55.95 Fault @ 60° tca: sericite + chlorite + quartz; strongly foliated to schistose shear zone with strong sericite alteration; contacts are sharp slip planes with 0.5 cm wide buff-pink quartz veining.									
		LAPILLI-TUFF Massive, dark green to purple (hematitic), with 5-15% angular to sub-rounded, buff-brown to pink to dark green, trachytic clasts up to 4-5 cm (avg. 2 cm); moderately to strongly magnetic; patchy, hematized zones to lower contact.	7108	65.00	66.00	1.00			Massive Lapilli Tuff	0.01	
	7109	66.00	67.00	1.00			nil				
	7110	67.00	68.00	1.00			nil				
	7111	68.00	69.00	1.00			nil				
69.10	74.00	BLEACHED PYRITIC ZONE Upper contact of bleached zone is some what gradational but appears to coincide with a sharp, dark grey, hairline crack @ 25° tca, with smeared pyrite and chlorite.									
		69.10 - 70.35 Light yellow-green to grey-brown lapilli- tuff, bleached but weakly deformed and quite hard; 0.5-1% finely disseminated pyrite throughout matrix; < 1%, irregular white quartz veinlets; matrix is highly altered to an aphanitic, sericitized mass, which is locally	7112	69.00	69.60	0.60			Bleached Lapilli Tuff with 0.5% pyrite 1% disseminated pyrite	0.18	
	7113	69.60	70.10	0.50			1.54	1.44			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-21

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
	70.35 - 70.50	very soft or quite hard and possibly silicified. Grey-brown, very fine grained silicified zone with 1-2% disseminated and wispy pyrite; contacts are diffuse and seem to be quite irregular.	7114	70.10	70.60	0.50		Silicified Tuff with 2% pyrite Sericitic Tuff with 0.5 - 1% pyrite	1.49		
	70.50 - 71.60	Massive, moderately sericitized (10% spotty and wispy sericite) tuff with 0.5 - 1% disseminated pyrite; cut by 1%, < 0.1 cm wide chlorite + quartz ± hematite sutures.	7115	70.60	71.10	0.50			0.01		
			7116	71.10	71.60	0.50			0.11		
	71.60 - 72.00	Quartz breccia vein; very irregular buff-white to grey quartz vein with angular wall rock clasts up to 1.5 cm; this vein has in turn been fractured and brecciated by later quartz + pyrite ± chlorite which forms brecciated quartz fragments in a fine quartz + pyrite groundmass; 2-3% total pyrite.	7117	71.60	72.00	0.40		Quartz breccia vein, 2 - 3% pyrite	0.08		
	72.00 - 72.45	Massive, weakly to moderately sericitized tuff with ≤ 0.5% disseminated pyrite.	7118	72.00	72.45	0.45		Massive Lapilli Tuff, < 0.5% pyrite	0.04		
	72.45 - 72.90	Cut by 3% white, irregular quartz veins and quartz + chlorite sutures, with 1-2% disseminated pyrite.	7119	72.45	72.90	0.45		Silicified Tuff with 1 - 2% pyrite	0.88		
	72.90 - 73.40	Quartz breccia vein; massive white to grey quartz vein which is fractured and brecciated by numerous < 0.5 mm sericite + pyrite sutures; 2% total pyrite content.	7120	72.90	73.50	0.60		Quartz vein, 2% pyrite	2.19	2.37	
	73.40 - 74.00	Light yellow-green, massive, sericitized lapilli-tuff, with ≤ 0.5% pyrite; sericite alteration is notably less by 74.0 m.	7121	73.50	74.00	0.50		Sericitized Lapilli Tuff with 0.5 % pyrite	0.58		
74.00	82.55	LAPILLI-TUFF - HETEROLITHIC									
	74.00 - 75.50	Weakly sericitized with patchy, diffuse sericite alteration fronts evident within matrix, giving patchy, mottled texture.	7122	74.00	75.00	1.00		Moderately sericitized Lapilli Tuff	0.02		
			7123	75.00	75.60	0.60			0.13		
	75.50 - 82.55	Massive, dark green to red-brown lapilli-tuff with 10-15% angular trachyte clasts up to 2 cm (avg. 1 cm), in a fine grained ash matrix of 25%, ≤ 1 mm lithics in an aphanitic groundmass; locally weakly magnetic.	7124	75.60	76.00	0.40		Massive Lapilli Tuff	0.01		
			7125	76.00	77.00	1.00			0.04		
			7126	77.00	78.00	1.00			0.02		
			7127	78.00	79.00	1.00			0.04		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-21

PAGE: 5 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
82.55	92.80	COARSE LAPILLI-TUFF (HETEROLITHIC) Massive, light green to green-brown, coarse lapilli-tuff, with 10-15% angular to sub-rounded, very poorly sorted, light brown to red (porphyritic) to green, trachyte clasts up to 5 cm (avg. 2 cm); weakly to moderately sericitic with 3-5% wispy and spotty sericite.	7128	79.00	80.00	1.00			0.41			
			7129	80.00	81.00	1.00			0.05			
			7130	81.00	82.00	1.00			0.02			
			7131	82.00	82.50	0.50			0.25			
			83.10	0.5 cm wide white-blue quartz vein @ 60° tca with smeared 1-2% pyrite + chlorite ± molybdenite along hairline fracture planes on vein walls and within the vein.	7132	82.50	83.00	0.50			0.02	
					7133	83.00	83.20	0.20		0.5 cm quartz vein with 1 - 2% pyrite	7.06	7.03
					7134	83.20	84.00	0.80			0.05	
					11656	84.00	85.00	1.00			0.02	
					11657	85.00	86.00	1.00			1.15	1.00
					11658	86.00	87.00	1.00			0.02	
					11659	87.00	88.00	1.00			0.02	
					11660	88.00	89.00	1.00			0.07	
					11661	89.00	90.00	1.00			0.01	
					7135	90.00	90.50	0.50		Massive Lapilli Tuff	0.04	
			90.55 - 90.60	Light green, chlorite + pyrite slip face @ 25° tca with 5% smeared pyrite; down hole side of slip is a 1 cm irregular white-grey quartz vein with 1% disseminated pyrite in sericitized wall rock; 0.3 mm smeared flake of NATIVE GOLD on face of 2 mm pyrite bleb.	7136	90.50	90.75	0.25		1 cm quartz vein with 1 - 2% pyrite	7.10	7.13
					7137	90.75	91.50	0.75			0.07	
					7138	91.50	92.00	0.50			0.04	
			92.05 - 92.60	Patchy, diffuse silicified zones @ 92.05 - 92.15 and @ 92.5 - 92.60 m, with 2-3% disseminated pyrite and pyrite + sericite veinlets which are later cut by barren 1-2 mm white quartz veinlets.	7139	92.00	92.70	0.70		Patchy quartz + pyrite zones in Lapilli Tuff, 1% pyrite	12.89	12.84

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-21

PAGE: 6 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
92.80	93.50	SERICITIZED LAPILLI-TUFF Moderately well foliated, light green sericitized matrix with 5% angular, dark grey to green trachyte clasts with selective pyrite replacement (< 0.5% total pyrite); matrix is very fine grained, highly sericitic and contains 1% subhedral augite (?) crystals; upper contact of unit is gradational; lower contact sharp @ 50° tca.	7140	92.70	93.50	0.80		Pyrite replacement of clast in sericitized Tuff	1.02		
93.50	96.50	SYENITE									
	93.50 - 94.30	Light yellow-green due to pervasive sericitization of matrix which is very fine to aphanitic; contains 2-3% black, anhedral crystals (altered to chlorite) up to 1 mm.	7141	93.50	94.00	0.50		Sericitic Syenite with 1 - 2% pyrite and silicified zone @ 93.55 with 3 - 5% pyrite	0.89		
	93.50 - 93.62	Well foliated @ 40°-50° tca, sericitized and contains 2-3% disseminated pyrite.									
	93.55	1 cm dark grey silicified zone with 5% very fine pyrite.									
	94.40	Sericite alteration becomes very weak and gradation into massive light red-brown syenite, with 2-3% irregular, white quartz clots up to 0.75 cm.	7142	94.00	94.50	0.50		Weakly sericitized Syenite with <0.5% pyrite	0.89		
	94.30 - 96.30	Massive, very fine grained, light red-brown with very thin sericite sutures (micro-fractured) in an aphanitic groundmass; cut by 2-3% buff-white, quartz veinlets up to 0.5 cm wide with bleached yellow-green 0.2- 0.5 cm wide alteration halos; << 0.5% pyrite along dark chloritic vein contacts.	7143	94.50	95.50	1.00		Massive Syenite with four 0.1 to 1.0 cm quartz veins, one with pyrite and a green sericitic halo	0.13		
			7144	95.50	96.00	0.50		Four 0.5 to 1.0 cm quartz veins, two with pyrite and green sericitic halos. (All three may be the same folded vein)	10.79	8.88	
	96.30 - 96.50	Light brown, weakly sericitic with strong sericite at very sharp lower contact @ 32° tca.	7145	96.00	96.50	0.50		Lower sericitic contact of Syenite	0.36		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 1 of 9

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 22 1990	EASTING	8825.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10380.00
CLAIM No.	L 500057 / 477419	SIGNED BY	<i>W. Heath</i>	ELEVATION	
STARTED	November 19, 1990	DRILLED BY	Heath & Sherwood	LENGTH	155.30
COMPLETED	November 21, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test IP and low magnetic anomalies	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	Source at the geophysical anomalies was intersected at 114.00 - 147.90 m				

DEPTH	AZIMUTH	DIP
Collar	161	45
38.00		44
76.00		42
114.00		38
152.00		38

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 1.52	CASING			81.50 82.50	1.00	0.42
1.52 45.30	LAPILLI TUFF					
45.30 58.80	COARSE LAPILLI TUFF Moderately sericitic			93.60 94.00	0.40	0.36
58.80 59.40	FAULT ZONE					
59.40 71.65	ASH TUFF Sericitic					
71.65 114.00	LAPILLI TUFF Strongly foliated, moderately to strongly sericitic					
	82.00 - 82.20 Fault gouge with quartz + ankerite vein					
	93.70 - 93.85 Schistose zone with 1 cm brecciated quartz vein, 1% pyrite					
114.00 147.90	ALTERED LAPILLI TUFF Moderately to strongly foliated, sericitic, chloritic and silicified; 40% , 0.15 - 6.50 m wide, silicified zones with 1 - 5% disseminated pyrite.					
147.90 155.30	LAPILLI TUFF / GRAYWACKE Weakly sericitic					
155.30	E.O.H.					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 2 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	1.52	CASING									
1.52	45.30	LAPILLI TUFF Dark grey to green, massive to moderately well foliated (40° tca) with 10-15% angular trachyte clasts up to 2 cm (avg. 1 cm) is a fine grained grey-green matrix; although heterolithic, approximately 70% of clasts are light grey, fine grained to spotted trachyte; weakly to moderately magnetic, with local zones of hematization.									
	5.10	Fault @ 35° tca: chlorite + sericite + ankerite; strong, tight shear (2 cm wide) with moderate of mud gouge on slip planes; strong ankeritic stain.									
	14.40	Fault @ 35° tca: chlorite + sericite + ankerite + quartz; tight, sharp chloritic slip with 0.5 cm wide quartz + ankerite + sericite schist.									
	15.00	Fault @ 45° tca: chlorite + sericite + quartz ± calcite; 1 cm wide, sharp, tight schist with irregular white-pink quartz ± calcite veinlet.									
	18.10 - 18.60	1 mm wide specularite vein @ 10° tca.									
	31.80 - 32.10	Series of buff-white quartz veinlets up to 3 mm wide @ 37° tca with light brown, alteration halos up to 0.5 cm wide.									
	40.50 - 42.30	Gradually becomes light green and contains 5-10% wispy and spotty sericite.									
	42.30 - 42.70	Cut by 5-10% white-brown, very irregular, quartz ± calcite stringers and masses and by numerous chloritic sutures which gives a pseudo-brecciated appearance.	7633	42.00	43.00	1.00			nil		
	42.70 - 43.70	Dark green, chloritic and very strongly foliated to schistose @ 40° tca and contains 10-15% very tight chlorite + sericite slips.									
	43.65 - 43.70	Fault @ 40° tca; strong chlorite + sericite + mud break, 1.5 cm wide with narrow white quartz + calcite veinlets interstitial to slip planes.	7634	43.00	44.00	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 3 of 9

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		43.70 - 45.30									
		Weakly-moderately foliated, moderately sericitic with 5-10% wispy and spotty sericite throughout.	7635	44.00	45.00	1.00				0.01	
45.30	58.80	COARSE, HETEROLITHIC LAPILLI-TUFF Upper contact is marked by a 0.5 cm quartz + chlorite vein @ 15° tca; light pale brown, with 15% coarse, angular to sub-rounded, multi-coloured trachyte clasts up to 5 cm (avg. 1-2 cm), in a very fine grained, pale brown, moderately sericitic matrix; non-magnetic; lower contact is strongly faulted, rubbly core.									
		56.50 - 58.80									
		Becomes increasingly deformed and sericitized and cut by 1% barren white irregular quartz veinlets and masses.	7524	58.00	58.80	0.80		Sericitized Lapilli Tuff		0.01	
		57.35									
		Fault @ 40° tca; 1 cm, white, barren quartz vein on sharp chloritic slips.									
58.80	59.40	FAULT ZONE Fault zone @ 50° tca; strongly deformed sericite schist with strong, talcose slip planes throughout, and 1-2% irregular white quartz veinlets; quite rubbly with approximately 65% recovery.	7525	58.80	59.40	0.60	65	Sericite / Talc Schist, fault zone		nil	
59.40	71.65	ASH-TUFF Massive to well foliated dark grey-green; mottled brown where unit displays diffuse, patchy sericite alteration fronts; tuff is fine grained, with 10%, <= 1 mm, black lithic clasts in a pale to dark green aphanitic groundmass; contains 5% wispy, spotty sericite alteration; minor, intercalated lapilli-tuff horizons up to 0.5 metres wide.									
		61.00									
		Fault @ 20° tca; tight chloritic slip with a 2-3 mm wide white quartz veinlet and 2-3 cm of buff-brown sericite alteration on wall rock.	7526	59.40	60.00	0.60		Ash Tuff		0.01	
			7527	60.00	60.90	0.90				nil	
			7528	60.90	61.30	0.40				0.01	
			7529	61.30	62.00	0.70				nil	
			7530	62.00	63.00	1.00				0.04	0.09
			7531	63.00	64.00	1.00				nil	
			7532	64.00	65.00	1.00				nil	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 4 of 9

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
71.65	114.00	65.30 - 65.50	Fault zone @ 35° tca; highly foliated to schistose zone with strong sericite mud break and minor narrow (1-2 mm) brecciated quartz stringers.	7533	65.00	66.00	1.00	95	Numerous strong mud breaks	0.02	nil	
				7534	66.00	67.00	1.00			0.01		
		65.80 - 65.90	Fault @ 40° tca; very strong mud break with 1-2 cm white-pink quartz vein with numerous chloritic sutures.									
		67.00 - 67.30	Fault zone, moderately deformed, sericitized, with 2% white brecciated quartz masses with dark green, chloritic interstitial material; contacts are tight sericitic slips @ 45° tca.	7535	67.00	67.50	0.50	70		0.01		
				7536	67.50	68.00	0.50			0.02		
				7537	68.00	69.00	1.00			nil		
				7538	69.00	70.00	1.00			nil		
		70.40 - 70.50	Fault @ 35° tca; strong sericite + talc slip planes and schists with 1 cm wide white-pink quartz vein.	7539	70.00	71.00	1.00	70		nil		
				7540	71.00	71.65	0.65			0.01		
				LAPILLI-TUFF								
				Massive to strongly foliated, buff-brown to dark green, with 10% angular trachyte clasts up to 2 cm (avg. 0.5 cm); moderately to strongly sericitized and cut by numerous late, cross-faults.								
		72.00	Fault @ 25° tca; sharp, tight chlorite slip with 1-2 mm white-pink quartz veinlet.	7541	71.65	72.75	1.10	60		Foliated Lapilli Tuff		nil
				7542	72.75	73.00	0.25			nil		
				7543	73.00	73.50	0.50			nil		
		73.50 - 74.30	Rubby, broken core; strongly foliated tuff with numerous strong chlorite + sericite ± talc slip planes throughout.	7544	73.50	74.50	1.00	60		Rubby, broken, shear zone		0.01
				7545	74.50	75.50	1.00					0.01
				7546	75.50	76.50	1.00					0.01
		7547	76.50	77.50	1.00	0.01						
76.00	Fault @ 40° tca; strong sericite + chlorite + talc shear with 1 cm white-pink quartz vein.											
77.00 - 86.50	Massive, less deformed with only patchy zones of sericite alteration proximal to tight cross-faults.	7548	77.50	78.50	1.00	60	0.01					
		7549	78.50	79.50	1.00		0.02					
		7550	79.50	80.50	1.00		0.05					
		7551	80.50	81.50	1.00		0.03					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 5 of 9

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
	82.00 - 82.20	Fault @ 27° tca; strong mud break with minor late white-brown quartz ± ankerite vein, 2-3 mm wide.	7552	81.50	82.50	1.00			0.35	0.48		
			7553	82.50	83.00	0.50			0.02			
			7554	83.00	84.00	1.00			0.01			
			7555	84.00	85.00	1.00			0.01			
			7556	85.00	86.00	1.00			nil			
	86.50 - 88.80	Dirty grey-brown, quite soft (sericitic); micro-fractured by numerous chlorite ± quartz stringers up to 1 mm wide.	7557	86.00	86.50	0.50			0.01	0.01		
			7558	86.50	87.50	1.00			0.01			
			7559	87.50	88.00	0.50			nil			
			7560	88.00	89.00	1.00			nil			
			7561	89.00	90.00	1.00			nil			
			7562	90.00	91.00	1.00			0.01			
			7563	91.00	92.00	1.00			nil			
	92.40 - 92.70	Series of broken, fragmented white-buff to pink quartz breccia veins up to 2 cm, cemented by dark green chloritic groundmass.	7564	92.00	92.40	0.40			nil			
			7565	92.40	92.90	0.50			Quartz breccia veins	0.01		
	93.70 - 93.85	Well laminated to schistose, with 1 cm wide pseudo-brecciated quartz vein, rehealed by sericite + pyrite stringers; 1% disseminated pyrite.	7566	92.90	93.60	0.70			0.01			
			7567	93.60	94.00	0.40			Laminated to schistose zone with 1% pyrite	0.37	0.35	
	95.00 - 95.15	Fault @ 15° tca; 3 mm wide chlorite breccia slip sub-parallel to core axis.	7568	94.00	94.95	0.95			Foliated Lapilli Tuff - minor pyrite	0.09		
			7569	94.95	95.50	0.55			Foliated Tuff, moderately sericitic	0.01		
	96.50 - 114.00	Massive, undeformed heterolithic lapilli- tuff with 1% late, barren irregular white quartz veinlets; local zones of hematization.	7570	95.50	96.00	0.50			0.01			
7571			96.00	96.50	0.50			0.01				
114.00	Fault @ 70° tca; strong, tight (0.5 cm) mud break with gravelly fault gouge.	7572	112.00	113.00	1.00			0.01				
		7573	113.00	114.00	1.00			0.01				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 6 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
114.00	147.90	ALTERED, DEFORMED LAPILLI-TUFF - PYRITE ZONE Moderately to strongly deformed, altered (sericitic) and cut by numerous chlorite, sericite, sericite + pyrite ± quartz stringer veinlets and fault slips which locally give rubbly broken core.									
	114.00 - 117.00	Moderately well foliated (@ 50° tca) lapilli- tuff with strongly sericitized matrix; 1-2% barren, white irregular quartz veinlets with no pyrite.	7574	114.00	114.85	0.85		Sericitized, deformed Lapilli Tuff	0.02		
	114.90 - 115.05	Grey-blue silicified zone with 1-2% very fine disseminated pyrite.	7575	114.85	115.30	0.45		Silicified zone with 1 - 2% pyrite	0.02		
			7576	115.30	116.00	0.70			0.01		
			7577	116.00	116.50	0.50			0.01		
			7578	116.50	117.00	0.50			0.01		
	117.00 - 117.80	Strongly foliated and sericitic, cut by numerous sharp, dark grey slips which appear to be sericite + finely smeared pyrite ± molybdenite (?); 2-3% disseminated and wormy pyrite.	7579	117.00	118.00	1.00		Sericitized Tuff with 2 - 3% pyrite	0.01		
			7580	118.00	118.50	0.50			0.01		
	117.80 - 118.50	Moderately deformed, strongly sericitic, with 0.5% finely disseminated pyrite.									
	118.50 - 118.65	Strong tight (2 mm) dark grey mud break with sericite + smeared pyrite @ 70° tca, 2% total pyrite.	7581	118.50	119.00	0.50		Sericitized Tuff with strong mud break and 0.5 - 2% pyrite	0.01	0.01	
	118.90	Fault @ 30° tca; strong, tight mud break with blue-grey smeared sulphides.	7582	119.00	119.50	0.50			0.01		
	119.55 - 120.00	Strongly deformed and sericitized tuff with a very strong, tight blue-grey mud slip @ 15° tca; this break appears to be sericite & pyrite ± molybdenite; 0.5 cm grey-white quartz vein parallel to slip, fractured by narrow sericite + pyrite sutures; 3-5% pyrite.	7583	119.50	120.00	0.50	85	3 - 5% pyrite with strong mud break Sericitized Tuff with 1% quartz and 0.5% disseminated pyrite	0.01		
			7584	120.00	120.90	0.90	90		0.01		
	120.90 - 121.20	Strongly deformed with 5% pyrite and strong, blue-grey sericite + pyrite slips @ 45° and 10° tca; 0.5 cm wide buff-white quartz vein with 2-3% wormy, dendritic pyrite.	7585	120.90	121.20	0.30		5% pyrite in strongly deformed Tuff Sericitized Tuff with < 0.5 % pyrite Sericitic Lapilli Tuff	0.01		
			7586	121.20	122.20	1.00			0.01		
			7587	122.20	122.90	0.70			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 7 of 9

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
122.90 - 123.50		Blue-grey irregular silicified zones with brecciated wall rock fragments to 0.5 cm, with 2-3% very finely disseminated pyrite.	7588	122.90	123.50	0.60	95	2 - 3% pyrite in blue gray silicified zones in strongly deformed Tuff	0.06	0.04	
123.40		2 mm wide sericite + pyrite + talc schist @ 30° tca.									
123.50 - 124.30		Strongly foliated to schistose to laminated (sericite + chlorite + quartz) zone with numerous blue-grey slips and irregular white quartz veins; 2% total pyrite as disseminations and pyritic veinlets (sutures).	7589	123.50	124.30	0.80	95	Foliated to schistose zone with 2% pyrite	0.01		
			7590	124.30	124.75	0.45				0.01	
124.75 - 127.50		Strongly deformed and rubbly with 70-80% total recovery due to very high abundance of strong sericite ± talc ± fuchsite ± quartz schists throughout this section; sericite schist contains 5-10% white to blue-grey quartz veinlets and 3-5% disseminated pyrite.	7591	124.75	126.00	1.25	70	Rubbly core, sericite schist, 2% pyrite Strong sericite + quartz schist, 5% pyrite Rubbly, busted, ground core with 2 - 3% pyrite and 3% blue-white quartz veining	0.01		
			7592	126.00	126.50	0.50	80			0.01	
			7593	126.50	127.50	1.00	70			0.01	
127.50 - 128.30		Less strongly deformed, primary textures still evident, but contains some tightly confined pyritic, silicified zones.	7594	127.50	128.00	0.50		Sericitized Lapilli Tuff with pyritic silicified zones, 3 - 5% pyrite	0.01		
127.70		2-3 cm wide dark grey silicified zone with 3-5% disseminated pyrite.									
128.15 - 128.30		Fractured, grey-white silicified zone with 2-3% disseminated pyrite.	7595	128.00	128.30	0.30			0.01		
128.30 - 129.30		Massive to moderately foliated, moderately sericitized lapilli-tuff with approximately 0.5% stringer pyrite.	7596	128.30	129.30	1.00			0.01		
129.30 - 135.80		Dark grey silicified zone; primary texture of lapilli tuff maintained locally; however, matrix is light grey, very hard and notably silicified with 1-3% disseminated pyrite; leading edge of this zone is a very sharp hairline pyrite + sericite suture; 2-3% irregular white quartz masses and blebs throughout.	7597	129.30	130.00	0.70		Silicified Tuff with 2% pyrite	0.01	0.01	
			7598	130.00	130.85	0.85				0.01	
			7599	130.85	131.80	0.95		Moderately silicified with 1 - 2% pyrite Silicified zone with 2 - 3% pyrite	0.01		
			7600	131.80	132.50	0.70				0.01	
			7601	132.50	133.00	0.50			0.01		
			7602	133.00	134.00	1.00			0.01		
			7603	134.00	134.80	0.80			0.01		
			7604	134.80	135.50	0.70			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-22

PAGE: 8 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
135.80 - 138.15		Highly foliated (@ 50° tca) sericitized lapilli-tuff with 10-15% heterolithic clasts (including some jasper) up to 1 cm (avg. 0.4 cm) buff-brown to grey to fuchsitic altered; matrix is light green, very fine grained with <= 0.5% disseminated pyrite; minor dark grey pyrite + quartz zones up to 3 cm wide centred on a sharp sericite + pyrite slip.	7605	135.50	136.00	0.50				0.01		
			7606	136.00	136.50	0.50			Sericitized Tuff with 1% disseminated pyrite and pyrite + quartz veins	0.01		
			7607	136.50	137.35	0.85			Sericitized Tuff with 0.5% pyrite	nil		
			7608	137.35	138.15	0.80			Sericitic Tuff with quartz + pyrite zones @ 137.80 m (3 cm wide)	0.01		
			7609	138.15	138.45	0.30			Silicified zone with 3 - 5% pyrite	0.02	0.02	
			7610	138.45	139.00	0.55				0.01		
			7611	139.00	140.00	1.00				0.01		
			7612	140.00	140.70	0.70				0.01		
140.70		Sharp chlorite + quartz slip @ 60° tca.										
140.70 - 142.10		Light grey, very fine grained tuff with faint pyrite bands (bedding), 0.5 mm wide at 10°-15° tca, and spaced 0.1-1 cm apart; matrix contains 0.5% disseminated pyrite; lower contact is truncated by a tight (1 mm) sericite slip @ 70° tca.	7613	140.70	141.40	0.70			Ash Tuff with banded pyrite beds? and 0.5% disseminated pyrite	0.02		
			7614	141.40	142.10	0.70				0.01		
142.10 - 143.40		Massive, dark grey, fine grained tuff with weak, spotty sericite alteration and << 0.5% pyrite; weakly silicified.	7615	142.10	142.60	0.50				0.01		
			7616	142.60	143.40	0.80				0.02		
143.40		Sharp, dark grey, sericite + pyrite slip @ 40° tca.										
143.40 - 145.45		Dark grey-white strongly silicified zone; matrix is fine grained grey-white very hard and contains 1-2% disseminated pyrite; 3-5% white, massive to brecciated quartz veins up to 5-6 cm; relict lapilli tuff is still evident locally.	7617	143.40	144.00	0.60			Highly silicified zone with 3 - 4% pyrite	0.01	0.02	
			7618	144.00	144.50	0.50			Silicified zone, 2 - 3% pyrite	0.02		
			7619	144.50	145.00	0.50				0.02		
			7620	145.00	145.45	0.45				0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-23

PAGE: 1 of 9

PROPERTY	Amalgamated Kirkland	DATE LOGGED	November 26 1990	EASTING	8250.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10145.00
CLAIM No.	L 491663	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	November 21, 1990	DRILLED BY	Heath & Sherwood	LENGTH	191.70
COMPLETED	November 25, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To undercut hole AK-90-07	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	The '102' structure was intersected at 129.70 - 168.00m				

DEPTH	AZIMUTH	DIP
Collar	341	55
38.00		55
76.00		55
114.00		54
152.00		54
190.00		50

SUMMARY LOG

ASSAY SUMMARY

INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 1.20	CASING		157.45 - 157.52	141.85 142.35	0.50	0.19
1.20 22.50	LAPILLI TUFF		3 cm quartz - pyrite vein @ 60° tca, 2 - 3% pyrite			
22.50 23.15	FAULT ZONE @ 30° tca		168.00 - 185.65			
23.15 37.00	LAPILLI / ASH TUFF		Weakly sericitic, 0.5% white quartz veining with trace pyrite			
	Hematitic, sericitic		185.65 - 191.70			
37.00 75.70	LAPILLI TUFF		Very weakly sericitic			
75.70 90.70	COARSE LAPILLI TUFF					
90.70 104.50	LAPILLI TUFF	191.70	E.O.H.			
104.50 114.40	COARSE LAPILLI TUFF					
114.40 118.70	LAPILLI / ASH TUFF					
118.70 122.60	LAPILLI TUFF					
122.60 129.70	ASH TUFF					
129.70 131.10	FAULT ZONE @ 50° tca					
131.10 191.70	GRAYWACKE					
	131.10 - 168.00		Sericitic, 2 - 3% chlorite + quartz veinlets, 0.5% pyrite			
	141.85 - 142.10		Fault @ 30° tca, 3 cm quartz vein, trace chalcopyrite			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-23

PAGE: 4 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
		gradational.									
		89.35 Fault @ 55° tca; sharp chloritic slip with 0.5 mm quartz veinlet.									
		87.35 - 89.85 Moderately sericitized, with 15% wispy and spotty sericite.									
90.70	104.50	LAPILLI-TUFF Massive, dark grey-green, with 5-15% angular, light grey to buff to green trachyte clasts, up to 3 cm (avg. 1 cm); matrix is fine to very fine grained of 10-15% lithic clasts (including minor jasper) in an aphanitic, grey-white, groundmass; moderately magnetic; lower contact gradational.									
104.50	114.40	COARSE, HETEROLITHIC LAPILLI-TUFF Massive, dark green with 15-25% coarse, angular to well rounded trachyte clasts, up to 7 cm (avg. 5 cm), in a very fine grained, dark green matrix; this unit appears quite similar to conglomerate, but no quartz is visible in the matrix and all the clasts, although variable in colour and texture, appear to be trachyte; locally strongly magnetic; gradational contacts.	7636	114.00	114.50	0.50		Massive, coarse Lapilli Tuff	0.01		
114.40	118.70	LAPILLI-TUFF / ASH-TUFF Massive, dark grey to green, intercalated ash- and lapilli-tuff beds up to 1.5 metres wide with both sharp and gradational contacts; ash-tuff beds are massive to weakly laminated @ 50° tca and display irregular light brown, mottled texture due to diffuse sericite alteration fronts proximal to late white quartz veinlets up to 0.5 cm wide.									
		115.75 - 115.90 Series of irregular quartz + chlorite veinlets up to 0.5 cm wide with pink-brown soft mineral (altered feldspar?) and minor blebby chalcopyrite.	7637	114.50	115.00	0.50		Lapilli Tuff	0.03		
			7638	115.00	116.00	1.00			0.04		
			7639	116.00	117.00	1.00			0.03		
			7640	117.00	118.00	1.00			0.01		
			7641	118.00	118.70	0.70		Ash Tuff with weak sericite bleaching	0.03		
			7642	118.70	119.40	0.70			0.05	0.03	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-23

PAGE: 5 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
118.70	122.60	HETEROLITHIC LAPILLI-TUFF Massive to moderately well foliated, with 15% angular to sub-rounded, buff-brown to pink to grey, fine grained to spotted trachyte clasts, up to 3 cm (avg. 1 cm); matrix is a dark green, chloritic and very fine grained ash-tuff.									
		119.70 - 120.35 Fault zone @ 20° tca; very irregular, chlorite + sericite slips @ 20° tca with 15% white-pink quartz veinlets parallel to slip planes and 5% extensional ladder veinlets @ 90° to slips; host rock is strongly sericitized and cut by numerous quartz + chlorite, <= 1 mm veinlets.	7643	119.40	120.35	0.95		Sericitic fault zone	0.02		
			7644	120.35	121.00	0.65		Foliated Lapilli Tuff	0.03		
		121.10 - 121.55 Fault zone @ 25° tca; contacts are sharp sericite slips; interstitial material is comprised of 25% white to buff quartz veinlets and irregular masses within highly sericitized lapilli-tuff.	7645	121.00	121.60	0.60		Sericitic fault zone with 25% quartz	0.02		
		122.00 - 122.60 Moderately to strongly foliated @ 20°-25° tca; moderately sericitized with 10-15% wispy and spotty sericite.	7646	121.60	122.00	0.40		Massive Lapilli Tuff	0.01		
			7647	122.00	122.60	0.60		Foliated Tuff	0.01		
122.60	129.70	ASH-TUFF Massive to moderately well bedded, very fine grained, well sorted, light grey-green; very strongly magnetic with 5%, < 0.5 mm black magnetite disseminated throughout a grey-white, aphanitic ground mass; bedding @ 10°-15° tca; unit is also intercalated with minor lapilli-tuff beds up to 50 cm wide.	7648	122.60	123.20	0.60		Ash Tuff with 5% magnetite	0.01		
			7649	123.20	124.00	0.80			0.01		
			7650	124.00	125.00	1.00			0.02		
			7651	125.00	126.00	1.00			0.01		
			7652	126.00	127.00	1.00			0.01		
			7653	127.00	128.00	1.00			0.04	0.02	
			7654	128.00	129.00	1.00			0.01		
			7655	129.00	129.70	0.70			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-23

PAGE: 6 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
129.70	131.10	FAULT ZONE Fault zone @ 50° tca: sericite + chlorite + quartz ± gouge; leading contact of zone is a strong sharp mud break approximately 1 mm wide.									
	129.70 - 130.15	Strongly foliated to schistose zone of predominantly sericite + chlorite with 5% boudinaged quartz veinlets up to 0.5 cm wide.	7656	129.70	130.15	0.45		Sericitized fault zone	0.02		
	130.15 - 130.70	Light pink-brown, possible silicified (very hard) ash-tuff?	7657	130.15	130.70	0.55		silicified ? zone	0.01		
	130.70 - 131.10	Moderately to strongly foliated, with 15-20% wispy and spotty sericite throughout, and 3% boudinaged quartz veinlets.	7658	130.70	131.20	0.50			0.02	0.03	
131.10	168.00	GRAYWACKE Massive, moderately well sorted, light grey-green, with 30% fine lithics, including jasper, in a grey-white groundmass of quartz + feldspar in roughly equal proportion and 3-5% pervasive, spotty sericite; as a whole this unit contains 1-2% light green, aphanitic mudstone clasts up to 5 cm randomly scattered throughout; characteristically weak to non-magnetic; contains 0.5% pervasively disseminated pyrite, and 2-3% quartz ± chlorite veinlets, up to 2-3 cm. Pyrite mineralization in this unit is very limited and scattered, as 0.5 - 2 mm wide pyritic veinlets with no visible preferred orientation. (<0.5% of total unit); the numerous 1-3 mm chlorite ± quartz veinlets throughout locally produce a pseudo-brecciated, "crack and seal" texture.	7659	131.20	132.00	0.80		Massive Graywacke	0.01		
			7660	132.00	133.00	1.00			0.01		
			7661	133.00	133.50	0.50			0.02		
			7662	133.50	134.50	1.00			0.01		
			7663	134.50	135.50	1.00			0.02		
			7664	135.50	136.50	1.00			0.01		
			7665	136.50	137.50	1.00			0.02		
			7666	137.50	138.00	0.50			0.02		
			7667	138.00	139.00	1.00			0.01		
			7668	139.00	140.00	1.00			0.01		
			7669	140.00	141.00	1.00			0.01		
			7670	141.00	141.85	0.85			0.02		
	141.85 - 142.10	Fault @ 30° tca; leading contact is a sharp chlorite slip, weakly talcose; 3 cm wide white quartz vein with chloritic walls and minor sericitized wall rock clasts, as well as very minor, blebby chalcopyrite.	7671	141.85	142.35	0.50			Fault zone with 3 cm quartz vein	0.20	0.18
			7672	142.35	143.00	0.65		0.01			
			7673	143.00	144.00	1.00		0.01			
			7674	144.00	145.00	1.00		0.02			
			7675	145.00	146.00	1.00		0.02			
			7676	146.00	147.00	1.00		0.03			
			7677	147.00	148.00	1.00		0.02			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-23

PAGE: 7 of 9

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
	148.10 - 148.40	< 1 mm wide, <= 1% pyritic stringers . 1 mm wide chlorite ± quartz slip @ 60° tca with a 2 mm wide pyrite veinlet @ slip contact.	7678	148.00	148.50	0.50		Graywacke with 5% white quartz veining and 1% stringer pyrite	0.02		
	148.35		7679	148.50	149.00	0.50			0.02		
	150.05 - 150.30	Series of barren white quartz veins 1-3 cm wide within moderately sericitic graywacke.	7680	149.00	150.00	1.00			0.04		
			7681	150.00	150.50	0.50			0.02	0.01	
			7682	150.50	151.50	1.00			0.02		
			7683	151.50	152.30	0.80			0.03		
	152.35 - 152.60	3-4 cm quartz + chlorite breccia vein, white-buff quartz with angular wall rock fragments, as well as wall rock fragments in a dark green chlorite groundmass.	7684	152.30	152.70	0.40		Quartz breccia vein	0.02		
			7685	152.70	153.50	0.80			0.02		
			7686	153.50	154.00	0.50			0.02		
			7687	154.00	155.00	1.00			0.02		
			7688	155.00	156.00	1.00			0.04		
			7689	156.00	157.00	1.00			nil		
			7690	157.00	157.40	0.40			0.02		
			7691	157.40	157.80	0.40			0.03		
	157.45 - 157.52	3 cm wide white to grey quartz vein @ 60° tca, centred on a sharp sericite slip, with 2-3% sub-euhedral pyrite.	7692	157.80	158.50	0.70		Quartz + pyrite vein	0.02		
	157.52 - 157.80		7693	158.50	159.00	0.50			0.03	0.03	
		Sericitic with 0.5% disseminated pyrite.	7694	159.00	160.00	1.00			0.02		
			7695	160.00	161.00	1.00			0.02		
			7696	161.00	161.60	0.60			0.02		
			7697	161.60	162.10	0.50			0.07	0.04	
			7698	162.10	163.00	0.90			0.02		
			7699	163.00	163.85	0.85			0.02		
			7700	163.85	164.35	0.50			0.02		
			7701	164.35	165.00	0.65			0.02		
		7702	165.00	166.00	1.00			0.02			
		7703	166.00	167.00	1.00			0.02			
		7704	167.00	168.00	1.00			0.03			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-23

PAGE: 8 of 9

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS			
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au*M
168.00	185.65	GRAYWACKE Weakly sericitic, with 0.5% white quartz veins with trace pyrite along vein contacts; local chlorite + pyrite filled fractures.	7705	168.00	169.00	1.00			0.04		
			7706	169.00	170.00	1.00			0.02		
			7707	170.00	171.00	1.00			0.03	0.02	
			7708	171.00	172.00	1.00			0.02		
			7709	172.00	173.00	1.00			nil		
			7710	173.00	174.00	1.00			0.02		
			7711	174.00	175.00	1.00			0.02		
			7712	175.00	176.00	1.00			0.03		
			7713	176.00	177.00	1.00			0.03		
			7714	177.00	178.00	1.00			nil		
			7715	178.00	179.00	1.00			0.02		
			7716	179.00	180.00	1.00			0.02		
			7717	180.00	181.00	1.00			0.02	0.03	
			7718	181.00	182.00	1.00			0.02		
185.65	191.70	GRAYWACKE Massive with no quartz veining or pyrite mineralization; very weakly sericitic.	7719	182.00	183.00	1.00			0.01		
			7720	183.00	184.00	1.00			0.01		
			7721	184.00	185.00	1.00			0.02		
			7722	185.00	186.00	1.00			0.01		
			7723	186.00	187.00	1.00			0.02		
			7724	187.00	188.00	1.00			0.03		
			7725	188.00	189.00	1.00			0.02	0.05	
			7726	189.00	190.00	1.00			0.02		
			7727	190.00	191.00	1.00			0.02		
			7728	191.00	191.70	0.70			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-24

PAGE: 1 of 6

PROPERTY	Amalgamated Kirkland	DATE LOGGED	Nov. 27-28 1990	EASTING	8190.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10140.00
CLAIM No.	L 491663	SIGNED BY	<i>W.B.</i>	ELEVATION	
STARTED	November 25, 1990	DRILLED BY	Heath & Sherwood	LENGTH	151.00
COMPLETED	November 27, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To undercut hole AK-90-08	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	The 102 - 8170 gold zone was intersected at 136.25 - 140.00m				

DEPTH	AZIMUTH	DIP
Collar	341	55
38.00		55
76.00		54
114.00		53
151.00		52

SUMMARY LOG

ASSAY SUMMARY

INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 1.20	CASING			136.25 140.00	3.75	2.74
1.20 36.10	COARSE LAPILLI TUFF					
36.10 64.15	LAPILLI TUFF			including		
	47.80 - 49.60 Fault @ 0 - 10° tca			136.25 138.50	2.25	0.34
	53.70 - 56.70 Fault @ 0 - 10° tca			and		
64.15 126.75	COARSE LAPILLI TUFF			138.50 140.00	1.50	6.35
	92.20 - 92.35 Silicified zone					
	96.50 - 96.70 2 - 3% pyrite in brecciated quartz calcite zone					
126.75 136.25	SERICITIC LAPILLI TUFF					
136.25 136.50	FAULT ZONE @ 40° tca					
136.50 151.00	GRAYWACKE					
	136.50 - 143.00 Moderately to weakly sericitic, 1 - 2% 0.1 to 4 cm white quartz veins, 0.5% pyrite along vein contacts					
	143.00 - 151.00 Weakly sericitic					
151.00	E.O.H.					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-24

PAGE: 2 of 6

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
0.00	1.20	OVERBURDEN - CASING DRIVEN TO 4.0 M									
1.20	36.10	COARSE, MONOLITHIC LAPILLI-TUFF Very recognizable unit which is massive, dark green to dark purple (hematitic) and comprised of 5-25% coarse, angular to sub-rounded red-pink trachyte clasts up to 7 cm (avg. 1-3 cm), in a fine grained lithic / ash tuff matrix; matrix of 15-25% lithic clasts (predominantly pink-red), up to 1 mm, in an aphanitic groundmass; the pink-red clasts are fine grained to porphyritic and form 75% of the clasts in the framework and matrix; moderately to strongly magnetic; cut by 1-2% late, barren, pink quartz ± calcite veins up to 3-4 cm wide; lower contact of unit is quite gradational from 31.50 - 36.10 m. 11.60 - 12.10 Rubbly core due to open chlorite + hematite slips @ 15° tca.									
36.10	64.15	HETEROLITHIC LAPILLI-TUFF Massive, dark grey-green, with 5-15% angular, heterolithic, trachytic clasts up to 3 cm (avg. 1 cm), variable in colour and texture, in a very fine grained dark green-grey matrix; intercalated very fine ash-tuff horizons, <= 0.5 metres wide, well bedded @ 20° tca, but with irregular convoluted contacts with lapilli-tuff horizons; moderately magnetic. 47.80 - 49.60 Fault @ 10°-15° tca; sericite + chlorite + quartz + calcite; very highly deformed, schistose zone comprised of 75% wispy and spotty sericite and tight chloritic slips with 25% irregular white-pink quartz + calcite ± chlorite veinlets throughout; contacts are strong, sharp sericite slips with minor mud gouge and talc. 53.70 - 56.70 Fault @ 0°-10° tca; as above. 56.70 - 63.00 Hematized dark red-purple. 63.00 - 64.15 Series of low angle (10°-15° tca), tight chloritic slips with narrow, pink quartz + calcite veinlets.	7729	46.00	47.00	1.00			0.01		
			7730	47.00	47.80	0.80			nil		
			7731	47.80	48.80	1.00		Cross fault	nil		
			7732	48.80	49.70	0.90			nil		
			7733	49.70	50.50	0.80			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-24

PAGE: 3 of 6

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
64.15	126.75	COARSE, HETEROLITHIC LAPILLI-TUFF Dark grey-green, massive, with 10-20% coarse, angular to sub-rounded, trachyte clasts up to 10 cm (avg. 2-3 cm) in a fine grained, dark grey-green matrix; clasts are very variable from dark grey-green to pink to brown, but all appear to be trachyte; looks very much like a conglomerate, but matrix contains no visible quartz, and framework is trachyte; locally moderately magnetic.									
	85.90 - 86.95	Fault zone @ 35°-40° tca: chlorite + sericite + fault gouge; strong mud break centred @ 86.50 - 86.60 m with strong fault gouge; surrounding unit is strongly foliated to schistose (sericite + chlorite) with minor boudinaged quartz veinlets.	7734	85.00	85.90	0.90		Massive coarse Tuff	0.01		
			7735	85.90	86.90	1.00		Fault zone	nil		
			7736	86.90	87.90	1.00		Massive Tuff	nil		
			7737	87.90	88.50	0.60			nil		
			7738	88.50	89.00	0.50			nil		
	86.95 - 110.00	1-2% multiple quartz ± calcite veinlets up to 1 cm wide (2-3 generation), generally barren, but may contain minor chalcopyrite in places.	7739	89.00	90.00	1.00		Massive Lapilli Tuff with 1 - 2% quartz veinlets	nil	0.01	
			7740	90.00	91.00	1.00			0.01		
			7741	91.00	92.00	1.00			nil		
	92.20 - 92.35	Light grey-brown, very fine grained silicified zone with very gradual diffuse contacts; little to no visible sulphides.	7742	92.00	92.50	0.50		Silicified zone	nil		
			7743	92.50	93.00	0.50			nil		
			7744	93.00	94.00	1.00			nil		
			7745	94.00	94.50	0.50			nil		
			7746	94.50	95.50	1.00			nil		
			7747	95.50	96.40	0.90			0.01		
	96.50 - 96.70	Pyritic zone, 2-3 cm wide, bleached (grey-white) with 2-3% disseminated pyrite in a grey-white quartz + calcite groundmass on the up hole side of a 1 cm quartz breccia vein with included wall rock fragments which have 1-2% pyrite; down hole side of quartz vein is a bleached (grey-white) tuff with pyritic stringers and blebs; very little disseminated pyrite; this zone appears to be coincidental with a contact between coarse lapilli-tuff and a finer ash- /lapilli-tuff horizon; lower contact of zone is very sharp, tight chloritic slip @ 55° tca.	7748	96.40	96.80	0.40		Sulphide zone with 2 - 3% pyrite + quartz breccia vein	0.03		
			7749	96.80	97.50	0.70			0.01		
			7750	97.50	98.00	0.50			0.02	0.03	
			7751	98.00	99.00	1.00			0.02		
			7752	99.00	100.00	1.00			0.01		
			7753	100.00	101.00	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-24

PAGE: 5 of 6

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au *M
136.50	151.00	GRAYWACKE Massive, light grey-green fine grained, moderately well sorted graywacke of 40% lithics (including jasper), 30% feldspar and 30% quartz; 1-3% pervasive, spotty sericite and 1% light green aphanitic, mudstone clasts up to 3-4 cm; weak to non-magnetic; pyrite mineralization as narrow, discreet veinlets up to 2 mm wide, pyritic boundaries on quartz veins and a <= 0.5% disseminated pyrite.									
	136.50 - 143.00	Moderately to weakly sericitic, hard silicified, brecciated; 3-5%, 0.1-1.5 cm wide white to grey quartz ± chlorite ± pyrite veinlets at 0° to 55° tca (avg. 20°); 0.5-1.0% pyrite along vein contacts and disseminated in graywacke adjacent to the veins.									
	136.50 - 137.00	3% chlorite ± quartz veinlets with no pyrite.	7770	136.50	137.00	0.50		Graywacke with 0.5% pyrite	0.20		
	137.10 - 137.25	0.3-1.0 cm grey quartz + chlorite + pyrite vein @ 15° to 0° to 55° tca; 5% quartz, 35% pyrite, 10% chlorite.	7771	137.00	137.50	0.50		Graywacke with narrow quartz + pyrite veins	0.61		
	137.25 - 137.85	0.2-1.5 cm quartz + chlorite vein @ 5°-10° tca; 20% chlorite, 80% quartz, < 0.5% pyrite in chlorite along vein contacts.	7772	137.50	138.50	1.00		Quartz + chlorite breccia + pyritic veinlet	0.24		
	137.90 - 138.20	Chlorite + grey quartz + calcite breccia zone @ 15°-20° tca with 1% disseminated pyrite.									
	138.20 - 138.85	Fractured with 3% 1-2 mm quartz veinlets.	7773	138.50	139.00	0.50			7.44	5.63	
	138.47	1.5 mm pyrite veinlet @ 70° tca.									
	138.82 - 139.00	0.2-1.0 cm blue grey quartz + ankerite vein @ 15°-20° tca; 3-5% disseminated pyrite in vein and 1% disseminated pyrite in wall rock over widths of 1-2 cm.									
	139.00 - 139.50	0.1 to 0.5 cm quartz + carbonate vein @ 55°-65° tca with 0.5% pyrite; 1% finely disseminated pyrite in graywacke.	7774	139.00	140.00	1.00			6.31	6.19	
	139.50 - 143.30	1-2% white quartz + carbonate veinlets, 0.01 - 1.5 cm wide, with trace of pyrite.	7775	140.00	141.00	1.00			0.05		
	141.35 - 141.40	1 cm white-buff quartz vein with pyritic margins up to 2 mm wide.	7776	141.00	141.50	0.50		Graywacke with < 0.5% pyrite + quartz vein	0.03		
			7777	141.50	142.00	0.50			0.02		
			7778	142.00	143.00	1.00			nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-25

PAGE: 1 of 7

PROPERTY	Amalgamated Kirkland	DATE LOGGED	Nov.29 - Dec.3 1990	EASTING	8125.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10150.00
CLAIM No.	L 491663	SIGNED BY	<i>W.S.</i>	ELEVATION	
STARTED	November 27, 1990	DRILLED BY	Heath & Sherwood	LENGTH	142.90
COMPLETED	November 30, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 102 - 8170 zone	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	The zone was intersected at 102.65 - 104.50m				

DEPTH	AZIMUTH	DIP
Collar	341	55
38.00		54
76.00		53
114.00		50

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 3.80	CASING	104.50 132.35	SILTSTONE / MUDSTONE	102.65 106.00	3.35	1.30
3.80 22.40	ASH TUFF	132.35 142.90	114.80 - 115.85 Sericitic graywacke, 0.5% pyrite	including		
22.40 22.60	SILTSTONE		LAPILLI TUFF			
22.60 23.10	COARSE LAPILLI TUFF		135.50 - 135.60 Silicified, 2 - 3% pyrite	103.90 104.40	0.50	8.01
23.10 23.95	SILTSTONE		136.10 - 136.70 Siltstone with 30% quartz + sericite veinlets, 0.5% pyrite			
23.95 27.50	COARSE LAPILLI TUFF					
27.50 32.85	ASH TUFF	142.90	E.O.H.			
32.85 68.60	LAPILLI TUFF					
68.60 86.30	LAPILLI TUFF					
	Sericitic					
86.30 94.10	LAPILLI TUFF					
	Weakly sericitic					
94.10 102.65	ASH TUFF					
	Hematitic					
102.65 104.50	QUARTZ - PYRITE BRECCIA ZONE					
	102.65 - 103.40 Fault zone, trace pyrite					
	104.10 - 104.25 Brecciated quartz vein, 3 - 5% pyrite					
	104.40 - 104.50 Fault breccia					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-25

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
68.60	86.30	SERICITIZED LAPILLI-TUFF Pale green, with 2-3% black and white, salt and pepper textured clasts which often display very diffuse, altered boundaries; possibly matrix rather than clasts?; matrix of unit is pervasively sericitized, very fine grained to aphanitic mush, and is cut by 1-2% late, white quartz veinlets 1-3 mm wide. Contacts of unit are sharp but are not deformed or faulted and surrounding units are only weakly sericitized.	7787	68.60	69.10	0.50		Sericitized Lapilli Tuff	0.01		
			7788	69.10	70.00	0.90			0.02		
			7789	70.00	71.00	1.00			0.01		
			7790	71.00	72.00	1.00			0.02	0.01	
			7791	72.00	72.80	0.80			0.02		
		72.90 - 73.00 Fault @ 20° tca: sericite + quartz; sharp, tight sericite slip @ 72.90 m with 2 cm buff-white quartz vein on down hole side of slip.	7792	72.80	73.60	0.80		Sericitized Tuff with faulting and quartz veins	0.01		
		73.30 - 73.40 Fault @ 25° tca: sericite + quartz ± ankerite; 1-2 cm quartz + ankerite vein on sharp sericite slip.	7793	73.60	74.30	0.70			0.01		
			7794	74.30	75.00	0.70			0.01		
			7795	75.00	76.00	1.00			0.01		
			7796	76.00	77.00	1.00			0.02		
			7797	77.00	78.00	1.00			0.01		
			7798	78.00	79.00	1.00			0.01		
			7799	79.00	80.00	1.00			0.02		
			7800	80.00	80.50	0.50			0.02		
		80.90 - 81.40 Quartz + chlorite vein with angular wall rock inclusions and very minor chalcopyrite.	7801	80.50	81.50	1.00		Quartz + chlorite breccia vein	0.02	0.01	
			7802	81.50	82.00	0.50			0.01		
			7803	82.00	83.00	1.00			nil		
			7804	83.00	84.00	1.00			0.01		
			7805	84.00	84.60	0.60			0.01		
			7806	84.60	85.10	0.50			0.04		
			7807	85.10	86.00	0.90			nil		
			7808	86.00	86.50	0.50			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-25

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS				
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au*M	
86.30	94.10	HETEROLITHIC LAPILLI-TUFF Massive to weakly foliated, light grey-green, with 10-20% angular, light brown to grey-green spotty, trachyte clasts, up to 3 cm (avg. 0.5 cm), with sericite alteration; matrix is dark grey-green, very fine grained ash-tuff with minor spotty sericite; typically weakly magnetic; lower contact is very sharp @ 40° tca.	7809	86.50	87.50	1.00	Massive Lapilli Tuff	0.01				
			7810	87.50	88.50	1.00		nil				
			7811	88.50	89.50	1.00		0.02				
			7812	89.50	90.00	0.50		nil				
			7813	90.00	91.00	1.00		nil				
94.10	102.65	ASH-TUFF Massive to weakly bedded @ 50° tca; dark grey-green to purple where hematitic; very fine grained, strongly magnetic and cut by 1% late white irregular quartz veinlets; lower contact is sharp and irregular.	7814	100.00	101.00	1.00	Massive Ash Tuff	nil	nil			
			7815	101.00	102.00	1.00		0.01				
			7816	102.00	102.65	0.65		nil				
102.65	104.50	PYRITE QUARTZ BRECCIA ZONE										
			102.65 - 103.40	Fault zone @ 20° tca: sericite + chlorite + quartz; strongly foliated to schistose sericite + chlorite + quartz veinlets + laminated mudstone with some very minor, dark grey pyritic bands.	7817	102.65	103.40	0.75	Fault zone with quartz + minor pyrite	0.25		
			103.40 - 104.40	Well bedded, yellow-green mudstone with abundant micro-faulting which disrupts bedding @ 15° tca.	7818	103.40	103.90	0.50	Laminated Mudstone	0.04		
			104.10 - 104.15	Brecciated, buff-white quartz vein, fragments up to 1 cm with 3-5% very fine grained pyrite within sericitized, interstitial groundmass of altered mudstone.	7819	103.90	104.40	0.50	Pyrite Zone, 3 - 5% pyrite in quartz breccia vein and Mudstone	7.70	8.32	
			104.15 - 104.25	Very fine (<< 0.5 mm) pyritic veinlets and stringers and 2% disseminated pyrite in aphanitic, yellow-green mudstone bed.								
	104.40 - 104.50	Fault @ 40° tca: strong mud gouge and fault breccia rubble with weak ankeritic stain.	7820	104.40	104.90	0.50	Fault gouge + Siltstone	0.12				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-25

PAGE: 6 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
104.50	132.35	SILTSTONE / MUDSTONE Very fine-grained, dark green siltstone with minor, yellow-green mudstone beds @ 20°-30° tca which are frequently disrupted and display convoluted bedding and flame structures; intercalated lapilli-tuff horizons up to 1 metre wide which display gradational contacts and frequently include siltstone clasts; these lapilli-tuff horizons are grey-green and contain 5% light grey to dark green, angular trachyte clasts up to 2-3 cm (avg. 0.5 cm).	7821	104.90	105.50	0.60		Massive Siltstone 1% quartz carbonate veins, trace pyrite at 105.85 m	0.02		
			7822	105.50	106.00	0.50			0.15		
			7823	106.00	107.00	1.00			0.02		
			7824	107.00	108.00	1.00			0.01		
			7825	108.00	109.00	1.00			0.02		
			7826	109.00	110.00	1.00			0.02		
		106.00 - 114.80 0.5 to 1% 0.1 - 1 cm grey white irregular quartz carbonate veinlets and fracture fillings	7827	110.00	111.00	1.00			0.01		
			7828	111.00	112.00	1.00			nil		
			7829	112.00	113.00	1.00			nil		
			7830	113.00	114.00	1.00			0.01	0.01	
			7831	114.00	114.80	0.80			0.02		
		114.80 - 115.85 Massive fine grained graywacke interbedded with 2% spotty sericite and <0.5% disseminated pyrite.	7832	114.80	115.30	0.50			nil		
			7833	115.30	116.00	0.70			0.01		
			7834	116.00	117.00	1.00			nil		
			7835	117.00	118.00	1.00		0.01			
			7836	118.00	119.00	1.00		0.01			
			7837	119.00	120.00	1.00		0.01			
			7838	131.00	132.00	1.00		0.01			
		132.20 - 132.35 Fault @ 30° tca: sericite + quartz; 3 cm wide, barren white-buff quartz vein on a sharp sericitic slip.	7839	132.00	132.50	0.50		nil			
								Massive to laminated Mudstone / Siltstone with minor intercalated Lapilli Tuff horizons			
								Siltstone at fault contact			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-26

PROPERTY	Amalgamated Kirkland	DATE LOGGED	December 4 1990	EASTING	8600.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10155.00
CLAIM No.	L 477419	SIGNED BY	<i>W. Heath</i>	ELEVATION	
STARTED	November 30, 1990	DRILLED BY	Heath & Sherwood	LENGTH	160.68
COMPLETED	December 2, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To undercut hole AK-90-21	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	The '102' structure was intersected at 120.60 - 149.80m				

DEPTH	AZIMUTH	DIP
Collar	341	55
38.00		54
76.00		52
114.00		52
152.00		50

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 6.00	CASING		136.00 - 136.60 Sericitic, 2% blue gray quartz veinlets, trace pyrite	120.00 123.00	3.00	1.84
6.00 18.00	LAPILLI TUFF / ASH TUFF Hematitic		142.65 - 143.35 0.5 - 1% pyrite	including		
18.00 42.30	ASH TUFF		144.15 - 144.80 Quartz + calcite + pyrite veinlets	120.45 122.35	1.90	3.89
42.30 77.00	LAPILLI TUFF 42.30 - 48.00 Sericitic	148.70 149.80	144.80 - 145.50 1% pyrite	and		
	48.00 - 77.00 Hematitic		CONGLOMERATE 1 - 2% pyrite, 10% quartz veinlets	120.45 121.20	0.75	7.12
77.00 103.60	LAPILLI TUFF Chloritic to hematitic	149.80 160.68	LAPILLI TUFF Sericitic	139.50 142.00	2.50	0.10
103.60 120.60	LAPILLI TUFF Hematitic, sericitic		156.35 Fault, quartz vein, 0.5% pyrite			
120.60 122.85	QUARTZ PYRITE ZONE	160.68	E.O.H.	148.00 149.80	1.80	0.28
	120.60 - 121.00 Quartz-pyrite vein with 3% pyrite, trace chalcopyrite					
	121.00 - 121.80 Sericitic, 0.5% pyrite					
	121.80 - 122.30 Contact zone, silicified, 1 - 2% pyrite					
122.85 148.70	MUDSTONE / GRAYWACKE 122.30 - 122.85 1% pyrite, 2 - 3% quartz veinlets					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-26

PAGE: 4 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
103.60	120.60	HETEROLITHIC LAPILLI-TUFF									
		103.60 - 109.60 Massive, dark red-green, weakly hematitic with 15-20% angular to sub-rounded, heterolithic, trachyte clasts up to 5 cm (avg. 2 cm); 35% of clasts are fine grained, red-pink syenitic rock.	7848	111.00	112.00	1.00		Sample lost; not assayed			
		112.40 - 115.30 Moderately sericitic, light green with 5% wispy sericite.	7849	112.00	113.00	1.00		Weakly sericitic Tuff	0.01		
			7850	113.00	114.00	1.00			0.01		
			7851	114.00	115.00	1.00			0.03		
		115.30 - 118.35 Weakly hematitic, dirty red-brown and virtually undeformed.	7852	115.00	116.00	1.00			0.01		
			7853	116.00	117.00	1.00			0.01		
			7854	117.00	118.00	1.00			0.02		
			7855	118.00	118.50	0.50			0.02		
		118.35 - 120.60 Light grey, moderately sericitized and weakly foliated @ 35° tca.	7856	118.50	119.50	1.00			0.02		
			7857	119.50	120.00	0.50			0.01		
			7858	120.00	120.45	0.45			0.31		
120.60	122.85	QUARTZ + PYRITE ZONE									
		120.60 - 121.00 Buff-white to blue-grey vein quartz fragments within a fractured and sericitized lapilli-tuff, containing 2-3% pyrite and minor chalcopyrite; pyrite finely disseminated within wall rock adjacent to veins and as <= 1 mm pyritic veinlets and fracture fillings within matrix and quartz veins.	7859	120.45	121.20	0.75		Quartz + pyrite vein with 2 - 3% pyrite and minor chalcopyrite	7.63	6.60	
		121.00 - 121.80 5-10% wispy sericite, 0.5% disseminated pyrite and minor pyritic stringers.	7860	121.20	121.65	0.45		Sericitized Tuff with 0.5% disseminated pyrite + minor pyrite stringers	1.00		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-26

PAGE: 5 of 7

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
122.85	148.70	121.80 - 122.30	Contact zone between lapilli-tuff and silicified and pyritic mudstone; buff- white to grey fractured and brecciated quartz veins and silicified mudstone with 1-2% disseminated and stringer pyrite on fracture planes and on sericitic vein boundaries; prominent foliation @ 50° tca.		7861	121.65	122.35	0.70		Silicified contact zone with 1 - 2% pyrite	2.40	2.19
		122.30 - 122.85	Well laminated mudstone with minor (<0.5%) disseminated pyrite and 0.5-1% pyritic stringers on quartz vein boundaries and on tight sericitic slips; lower contact is a sharp sericite slip with 1 cm white quartz vein @ 55° tca.		7862	122.35	123.00	0.65		Laminated Mudstone with 0.5 - 1% pyrite and 2 - 3% quartz veinlets	0.42	
		MUDSTONE / GRAYWACKE										
		122.85 - 124.60	Yellow-green mudstone, laminae 1-3 mm thick, very irregular convoluted with bedding @ 55° tca; up to 15 cm thick graywacke/tuff interbeds.		7863	123.00	123.50	0.50			0.02	
					7864	123.50	124.00	0.50			0.02	
					7865	124.00	124.65	0.65			0.01	
		124.60 - 126.30	Intercalated mudstones, graywacke and lapilli-tuff with very irregular flame structures and convoluted bedding; moderately sericitic.		7866	124.65	125.40	0.75			nil	
					7867	125.40	126.40	1.00		Intercalated zone of mixing	0.01	
		126.30 - 139.00	Predominantly a massive light grey-green, fine grained graywacke consisting of 50% lithics, 30% feldspar and 20% quartz, up to 1 mm; weakly sericitic with <= 1% angular mudstone chips up to 1-2 cm; locally, < 0.5% disseminated pyrite.		7868	126.40	127.00	0.60		Massive Graywacke with < 0.5% disseminated pyrite	0.02	
					7869	127.00	127.50	0.50			0.01	
					7870	127.50	128.00	0.50			0.02	
		136.00	Fault @ 40° tca; strong, 1 cm mud break with blue-grey gouge (smearred pyrite?) on slip planes.		7871	128.00	129.00	1.00			0.01	
					7872	129.00	130.00	1.00			0.01	
					7873	130.00	131.00	1.00			0.01	
			7874	131.00	132.00	1.00			0.02			
			7875	132.00	133.00	1.00			0.02	0.02		
			7876	133.00	134.00	1.00			0.04			
			7877	134.00	135.00	1.00			0.02			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-26

PAGE: 6 of 7

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS		
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check
			7878	135.00	135.50	0.50			0.02	
			7879	135.50	136.50	1.00		Foliated Graywacke with 2% silicified veinlets and very minor pyrite	0.02	
	136.00 - 136.60	Moderately foliated with 5-10% wispy and spotty sericite and 2% blue-grey silicified veinlets up to 2 mm wide with very minor, pyrite.	7880	136.50	137.00	0.50			0.02	
			7881	137.00	138.00	1.00			0.02	
			7882	138.00	138.90	0.90			0.02	
	139.00 - 142.55	Intercalated with yellow-green, sericitic mudstone interbeds up to 20 cm wide, frequently sheared due to tight sericite ± talc slips; moderately deformed; 2-3% milk-white quartz veinlets up to 1 cm and minor fuchsitic clasts.	7883	138.90	139.50	0.60			0.02	
			7884	139.50	140.40	0.90			0.12	0.22
			7885	140.40	141.00	0.60			0.03	
	142.55	Fault @ 50° tca; strong sericite + talc shear 5 cm wide with buff-white quartz veinlets up to 1 cm.	7886	141.00	142.00	1.00			0.09	
			7887	142.00	142.65	0.65			0.02	
	142.55 - 148.70	Massive grey-green, fine grained graywacke with 1-2% angular mudstone clasts up to 5 cm.	7888	142.65	143.35	0.70		Graywacke with 0.5 - 1% disseminated pyrite	nil	
			7889	143.35	144.15	0.80			0.01	
	144.30	1-2 cm white-grey quartz + calcite + pyrite vein, @ 32° tca, with 1-2% pyrite.	7890	144.15	144.80	0.65		Graywacke with 2 quartz + calcite + pyrite veinlets	0.01	
	144.70	2 cm wide, open vuggy quartz + calcite vein with 1-2% euhedral pyrite on vein wall and as cavity fillings.								
			7891	144.80	145.50	0.70		Massive Graywacke with 1% disseminated pyrite	0.02	
			7892	145.50	146.00	0.50			0.01	
			7893	146.00	147.00	1.00			0.02	
			7894	147.00	148.00	1.00			0.02	
			7895	148.00	148.70	0.70			0.20	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-27

PAGE: 1 of 5

PROPERTY	Amalgamated Kirkland	DATE LOGGED	December 5 1990	EASTING	7900.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	9890.00
CLAIM No.	L 491651	SIGNED BY	<i>W. B.</i>	ELEVATION	
STARTED	December 2, 1990	DRILLED BY	Heath & Sherwood	LENGTH	130.10
COMPLETED	December 4, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test IP anomaly at 9950N and Magnetic low at 10000N	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	No anomalous assays				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45
76.00		44
114.00		43

SUMMARY LOG

ASSAY SUMMARY

INTERVAL		DESCRIPTION	INTERVAL		DESCRIPTION	INTERVAL		LENGTH	AVERAGE
From	To		From	To		From	To		
0.00	1.55	CASING	123.70	130.10	ASH TUFF				
1.55	10.90	LAPILLI TUFF Hematitic			123.70 - 124.80	Sheared at 65° tca, 5 - 10% quartz veinlets and masses, 0.5% finely disseminated pyrite			
10.90	17.20	LAPILLI TUFF Chloritic							
17.20	35.80	ASH TUFF 23.70 - 25.10 10% quartz - calcite veins, < 0.5% pyrite		130.10	E.O.H.				
35.80	40.00	LAPILLI TUFF Hematitic							
40.00	49.50	ASH TUFF Sericitic 44.00 - 49.50 5% quartz - calcite veinlets, <0.5% pyrite							
49.50	123.70	COARSE LAPILLI TUFF / BLOCK TUFF 113.70 - 123.70 Moderately sericitic							

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-27

PAGE: 2 of 5

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au ³ M
0.00	1.55	CASING									
1.55	10.90	HETEROLITHIC LAPILLI-TUFF Massive, dark green to purple where hematitic, with 5-10% angular to sub-rounded predominantly fine grained to porphyritic red trachyte, and dark green to grey aphanitic trachyte clasts up to 3 cm (avg. 1 cm), in a very fine grained ash matrix; jasper is evident within the matrix; narrow ash horizons, up to 15 cm, with distinct magnetite beds @ 60° tca; strongly magnetic; lower contact marked by sharp chlorite slip @ 35° tca. 5.55 - 6.00 Fault @ 15° tca; chlorite + ankerite + rubbly core; open, dirty chlorite slip with a strong ankerite staining.									
10.90	17.20	MONOLITHIC LAPILLI-TUFF Dark green massive, with dark green, black spotted, angular trachyte clasts up to 4 cm (avg. 1 cm) in a light green, aphanitic matrix; strongly magnetic and moderately chloritic. 17.00 - 17.20 Fault @ 45° tca; chlorite + sericite + quartz + calcite; dirty, irregular white-pink quartz / calcite veinlets on sharp chlorite + sericite slips.									
17.20	35.80	ASH-TUFF Massive, dark green very fine grained and strongly magnetic; very nondescript, but in places contains minor scattered lapilli clasts; lower contact very sharp and irregular. 23.70 - 25.10 10% white-pink quartz + calcite veins up to 1 cm in a moderately foliated, sericitized ash-tuff; <0.5% disseminated pyrite.	7911	23.00	23.50	0.50		Ash Tuff	0.01		
			7912	23.50	24.00	0.50		Sericitized Ash Tuff with quartz + calcite veinlets and < 0.5% pyrite	nil		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-27

PAGE: 3 of 5

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
35.80	26.30 - 26.80	Pink quartz + calcite breccia vein with angular wall rock fragments up to 2 cm, sub-parallel to core axis.	7913	24.00	24.50	0.50			0.01			
			7914	24.50	25.10	0.60			nil			
			7915	25.10	26.00	0.90			nil			
			7916	26.00	27.00	1.00			0.01			
		28.00	Fault @ 50° tca; 0.5 cm pink quartz + calcite vein with strong chlorite slip boundaries.									
				7917	35.00	35.50	0.50		Ash Tuff	nil	0.01	
			LAPILLI-TUFF Massive, purple-red (hematitic), with 5-20% angular, 75% bright red (syenite ?), fine grained to porphyritic and 25% buff-brown to dark green trachytic clasts, 0.1-5 cm in size, in a very fine grained hematized matrix, with predominantly red trachyte fragments; locally crudely bedded @ 60° tca with minor ash tuff horizons.									
		36.10 - 36.30	Fault @ 45° tca; strong, rubbly sericite schist with 2 cm quartz + ankerite vein.	7918	35.50	36.00	0.50	95	Hematized Tuff with fault	0.01		
				7919	36.00	36.50	0.50			0.01		
				7920	36.50	37.00	0.50			0.01		
	37.30	Patch of coarse blebby pyrite proximal to a tight chloritic fracture.	7921	37.00	38.00	1.00		Minor blebby pyrite in hematitic Tuff	0.01			
			7922	38.00	39.00	1.00		Massive hematized Tuff	0.04	0.02		
			7923	39.00	40.00	1.00			0.01			
40.00	49.50	ASH-TUFF										
	40.00 - 44.00	Moderately sericitized, light green massive to weakly bedded, with up to 5%, <= 3 mm dark grey to green to red lapilli clasts; quite soft and pervasively sericitized but is virtually undeformed.	7924	40.00	41.00	1.00		Sericitized Tuff	0.01			
			7925	41.00	42.00	1.00			0.01			
			7926	42.00	43.00	1.00			0.01			
	44.00 - 49.50	Dark green, chloritic ash-tuff.	7927	43.00	44.00	1.00			0.01			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-27

PAGE: 4 of 5

INTERVAL		DESCRIPTION	SAMPLE				DESCRIPTION	ASSAYS				
FROM	TO		No.	FROM	TO	Length		% Rec	Au, g/t	Au, Check	Au* M	
49.50	123.70	45.85 - 47.75 5% white-pink quartz + calcite veins up to 3 cm wide, with weak sericite alteration halos and <= 0.5% pyrite in wall rock. 46.90 - 49.50 Gradational zone from ash-tuff to coarse lapilli-tuff.	7928	44.00	45.00	1.00			0.01			
			7929	45.00	45.80	0.80			nil			
			7930	45.80	46.30	0.50			0.01			
			7931	46.30	46.90	0.60			0.02			
			7932	46.90	47.50	0.60			0.04			
			7933	47.50	48.00	0.50			0.03	0.03		
			7934	48.00	49.00	1.00			0.02			
			7935	49.00	50.00	1.00			0.04			
		7936	50.00	51.00	1.00			0.01				
		COARSE MONOLITHIC LAPILLI-TUFF / BLOCK-TUFF		Massive, dark green to red-black, very poorly sorted, with 5-25% dark red angular to well rounded trachytic (syenitic?) clasts from 1 mm to 7 cm in size, in a fine ash matrix of similar composition; very strongly magnetic; 1-2% white-pink quartz ± calcite veinlets up to 1 cm throughout; minor ash-tuff horizons up to 1 metre, with similar composition to the lapilli-tuffs, but finer grained.								
		79.50 - 82.50		Fault @ 5°-10° tca; tight chlorite slip sub-parallel to core axis with sporadic quartz + calcite veining parallel to slip plane.								
		91.00 - 91.70		Fault @ 10° tca; tight chlorite + sericite slip with irregular, white-pink quartz + calcite + sericite.								
		105.50		Fault @ 45° tca; sharp, strong chlorite + sericite slip with minor, 1-2 mm quartz veinlets on adjoining wall rock.								
		113.70 - 123.70		Moderately deformed with 5-10% wispy sericite and numerous quartz + chlorite stringers as a stockwork; prominent foliation @ 45° tca; local patchy hematized areas are still preserved within the altered sericitic tuffs.								
		7937	111.00	112.00	1.00			nil				
		7938	112.00	113.00	1.00			0.01				
		7939	113.00	113.50	0.50			0.02				
		7940	113.50	114.00	0.50			0.01				
		7941	114.00	115.00	1.00			0.01				
		7942	115.00	116.00	1.00			0.01				
		7943	116.00	117.00	1.00			0.08	0.03			
		7944	117.00	118.00	1.00			0.01				

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 1 of 8

PROPERTY	Amalgamated Kirkland	DATE LOGGED	December 6 1990	EASTING	7350.00
TOWNSHIP	Teck	LOGGED BY	M. Masson	NORTHING	10170.00
CLAIM No.	L 491183	SIGNED BY	<i>[Signature]</i>	ELEVATION	
STARTED	December 4, 1990	DRILLED BY	Heath & Sherwood	LENGTH	122.40
COMPLETED	December 6, 1990	SURVEYED BY		UNITS	metres
PURPOSE	To test 101-7290 gold zone (West Boundary)	CORE LOCATION	K.L. Warehouse	CORE SIZE	NQ
COMMENTS	The 102 - 7290 zone was intersected at 44.00 - 46.00m				

DEPTH	AZIMUTH	DIP
Collar	341	45
38.00		45
76.00		44
114.00		43

SUMMARY LOG				ASSAY SUMMARY		
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au g/t
0.00 5.50	CASING	64.70 115.00	GRAYWACKE	44.00 46.00	2.00	1.89
5.50 10.60	BLEACHED LAPILLI TUFF		Trace to 2% pyrite			
	Sericitic		69.10 - 69.60	including		
10.60 13.45	CONGLOMERATE / GRAYWACKE		1 - 2% white to blue gray quartz veins, 1% pyrite			
13.45 21.60	BLEACHED LAPILLI TUFF		71.80 - 72.90	44.70 45.20	0.50	4.03
	Sericitic		73.40 - 74.30			
21.60 24.40	CONGLOMERATE		2 - 3% blue gray quartz veins, 1% pyrite			
	Sericitic		93.80 - 93.90			
24.40 26.15	ASH TUFF		Shear zone, 3% blue gray quartz veins, < 0.5% pyrite			
26.15 28.30	CONGLOMERATE / GRAYWACKE		101.80 - 102.15			
28.30 44.75	ASH / LAPILLI TUFF		Shear zone, 25 - 30% gray quartz veining, 1% pyrite, sericitic			
	Hematitic	115.00 118.60	CONGLOMERATE			
44.75 45.20	PYRITIC LAPILLI TUFF	118.60 120.00	GRAYWACKE			
	1% pyrite, sericitic		2 - 3% blue gray quartz veinlets, 1 - 2% pyrite			
45.20 50.70	ASH / LAPILLI TUFF	120.00 122.40	LAPILLI TUFF			
	Weakly hematitic					
50.70 55.80	LAPILLI TUFF		E.O.H.			
	Weakly chloritic	122.40				
55.80 64.70	MUDSTONE / SILTSTONE					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 2 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
0.00	5.50	CASING									
5.50	10.60	BLEACHED LAPILLI-TUFF Massive, light buff-brown with 5% black subhedral, chloritic lath shaped crystals up to 2 mm and irregular, anhedral crystal aggregates up to 5 cm as spots and irregular masses, with irregular diffuse boundaries and may represent bleached lapilli clasts; highly altered and bleached matrix with 5-10% wispy sericite within a very fine grained buff-brown groundmass; local relict lapilli clasts up to 1 cm; usually non-magnetic; trace pyrite.	7961	5.50	6.00	0.50		Bleached Lapilli Tuff	0.01		
			7962	6.00	7.00	1.00			0.01		
			7963	7.00	8.00	1.00			0.01		
			7964	8.00	9.00	1.00			0.01		
			7965	9.00	10.00	1.00			0.02		
			7966	10.00	10.60	0.60			0.02		
10.60	13.45	PEBBLE CONGLOMERATE / GRAYWACKE Interbedded, with gradational contacts, very poorly sorted, mixed zone of lapilli fragments and conglomerate pebbles fragments within a moderately sericitized graywacke matrix; dirty mottled texture in places due to irregular, patchy sericite alteration of matrix.	7967	10.60	11.40	0.80		Sericitic Pebble Conglomerate	0.02		
			7968	11.40	12.40	1.00			0.02		
		12.90 - 13.05 Shear zone @ 70° tca; strongly foliated to schistose sericite + chlorite + ankerite + quartz.	7969	12.40	13.10	0.70		Foliated to sheared Conglomerate with fault at 12.90 m	0.01	0.01	
			7970	13.10	14.00	0.90		Sericitized Graywacke + Tuff	0.02		
13.45	21.60	BLEACHED LAPILLI-TUFF Massive, light buff-brown with 5% black subhedral, chloritic lath shaped crystals up to 2 mm and irregular, anhedral crystal aggregates up to 5 cm as spots and irregular masses, with irregular diffuse boundaries and may represent bleached lapilli clasts; highly altered and bleached matrix with 5-10% wispy sericite within a very fine grained buff-brown groundmass; local relict lapilli clasts up to 1 cm; usually non-magnetic; trace pyrite.	7971	14.00	15.00	1.00		Bleached Lapilli Tuff	0.01		
			7972	15.00	16.00	1.00			0.01		
			7973	16.00	17.00	1.00			0.01		
			7974	17.00	18.00	1.00			0.02		
			7975	18.00	19.00	1.00			0.01		
			7976	19.00	20.00	1.00			0.01		
			7977	20.00	21.00	1.00			0.02		
			7978	21.00	21.60	0.60			0.02		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 3 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
21.60	24.40	PEBBLE CONGLOMERATE 21.60 - 22.90 Moderately sericitized with 5-10% wispy sericite interstitial to pebble framework and some sericite alteration of mafic clasts. 22.90 - 24.40 15% well rounded, polymictic pebbles up to 4 cm in a fine grained sericitized graywacke matrix; lower contact is sharp and somewhat irregular.	7979	21.60	22.50	0.90		Sericitized Conglomerate	0.02		
			7980	22.50	23.00	0.50			0.03		
			7981	23.00	23.50	0.50			0.02	0.01	
			7982	23.50	24.40	0.90			0.02		
24.40	26.15	ASH-TUFF Massive to well bedded @ 40° tca, red-brown very fine grained with very minor, light grey lapilli clasts up to 0.5 cm; very massive, hard and undeformed; 1% quartz + chlorite veinlets up to 0.5 cm; lower contact sharp @ 45° tca.	7983	24.40	25.00	0.60		Massive to well bedded Ash Tuff	0.02		
			7984	25.00	25.50	0.50			0.01		
			7985	25.50	26.15	0.65			0.01		
26.15	28.30	CONGLOMERATE / GRAYWACKE Dark grey-green, moderately foliated graywacke with 5% wispy sericite and 2% quartz + chlorite veinlets up to 0.5 cm. Lower contact of unit is somewhat gradational.									
		26.15 - 27.00 Fine polymictic conglomerate with moderately well-rounded pebbles up to 2 cm.	7986	26.15	27.00	0.85		Pebble Conglomerate - sericitized	0.01		
			7987	27.00	27.50	0.50		Graywacke with 2% quartz + chlorite veinlets	nil		
			7988	27.50	28.30	0.80			nil	nil	
28.30	44.75	ASH-TUFF / LAPILLI-TUFF Light red-brown, alternating, fine grained and well bedded @ 45° tca, ash-tuff and massive lapilli-tuff beds up to 0.75 metres wide; moderately hematitic and weakly magnetic.	7989	28.30	29.00	0.70			nil		
			7990	29.00	30.00	1.00			0.01		
			7991	30.00	31.00	1.00			nil		
			7992	31.00	32.00	1.00			nil		
		32.70 Fault @ 70° tca; 2 cm sericite schist with narrow (1-2 mm) white quartz veinlets.	7993	32.00	33.00	1.00		Hematized Ash + Lapilli Tuff	0.01		
			7994	33.00	34.00	1.00			0.01		

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 4 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
			7995	34.00	35.00	1.00			nil		
			7996	35.00	36.00	1.00			0.01		
			7997	36.00	37.00	1.00			0.02		
			7998	37.00	38.00	1.00			0.02		
			7999	38.00	39.00	1.00			0.01	0.01	
			8000	39.00	40.00	1.00			0.01		
			11701	40.00	41.00	1.00			0.02		
		41.00 - 41.25 Shear zone @ 70° tca; strongly foliated, sericitized tuffs with sharp, tight sericite slip boundaries and minor white quartz adjacent to slip planes.	11702	41.00	41.50	0.50			Ash Tuff with shear zone at 41.00m	0.02	
			11703	41.50	42.00	0.50			Hematitic Ash Tuff	0.02	
			11704	42.00	43.00	1.00				0.02	
			11705	43.00	44.00	1.00				0.02	
			11706	44.00	44.70	0.70				0.75	
44.75	45.20	PYRITIC LAPILLI TUFF Light grey-brown, massive with 5% angular buff-grey, trachytic clasts up to 1 cm in a massive, aphanitic groundmass; upper contact is marked by a sharp sericite slip @ 70° tca; 1 % very finely disseminated pyrite.									
		44.80 2 cm wide sericite + quartz schist with 1-2% very fine disseminated pyrite.	11707	44.70	45.20	0.50			Pyritic Lapilli Tuff, 1 - 2% pyrite	4.31	3.75
45.20	50.70	ASH-TUFF / LAPILLI-TUFF Weakly hematitic, intercalated ash- and lapilli-tuff beds up to 0.5 metres wide, usually with gradational contacts; light grey-brown to purple (hematitic); very strongly magnetic due to 1% disseminated to bedded magnetite throughout.									
		45.20 - 47.00 Moderately sericitized, with irregular patchy sericite alteration which gives unit a dirty, mottled texture; 2-3% barren white-pink quartz veins.	11708	45.20	46.00	0.80			Sericitized Tuff with 2 - 3% quartz veins	1.54	
			11709	46.00	47.00	1.00			Weakly hematitic Ash Tuff	0.03	

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 5 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
50.70	55.80	LAPILLI-TUFF Massive to weakly foliated, grey-green, with 5-10% angular, buff-brown to dark green, trachytic clasts in equal proportions, in a fine grained ash matrix; moderately to strongly magnetic and weakly chloritic; lower contact is somewhat gradational. 54.50 - 55.80 Moderately well foliated and sericitized with patchy diffuse alteration fronts. 54.50 - 55.20 10% white quartz ± chlorite veinlets with some very minor, coarse subhedral pyrite.	11710	47.00	48.00	1.00			0.02		
			11711	48.00	49.00	1.00			0.01		
			11712	49.00	50.00	1.00			0.03		
			11713	50.00	50.70	0.70			0.01		
			11714	50.70	51.50	0.80			0.01		
			11715	51.50	52.00	0.50			0.01		
			11716	52.00	53.00	1.00			0.01		
			11717	53.00	54.00	1.00			0.02	0.02	
			11718	54.00	55.00	1.00			0.01		
			11719	55.00	55.80	0.80			0.01		
55.80	64.70	MUDSTONE / SILTSTONE Intercalated aphanitic, yellow-green mudstone with fine grained, dark green siltstone giving pronounced laminated or striped appearance; mudstone laminations from a few millimetres to 20 cm and typically disrupted, convoluted beds often cut by distinct micro-faults. 58.40 - 59.30 Numerous, tight sericitic slips @ 70° tca; barren, white quartz ± chlorite veinlets up to 1 cm wide. 62.36 - 62.55 Fault zone @ 70° tca: sericite + chlorite + quartz; semi-massive white quartz vein with sericitic fractures and sharp sericite + chlorite slip planes on vein boundaries; lower contact gradational. 64.00 - 64.70 Moderately sericitized, with 1% dark grey quartz + chlorite stringers up to 3 mm wide.	11720	55.80	56.50	0.70			0.01		
			11721	56.50	57.00	0.50			0.01		
			11722	57.00	58.00	1.00			0.01		
			11723	58.00	58.40	0.40			0.01		
			11724	58.40	59.40	1.00			0.01		
			11725	59.40	60.00	0.60			0.01	0.02	
			11726	60.00	61.00	1.00			0.01		
			11727	61.00	62.00	1.00			0.01		
			11728	62.00	62.60	0.60			0.01		
			11729	62.60	63.10	0.50			0.01		
		11730	63.10	64.00	0.90			0.02			
		11731	64.00	64.70	0.70			0.01			

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 6 of 8

INTERVAL		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M	
64.70	115.00	GRAYWACKE Massive, fine grained, light green graywacke of 40% lithics, 35% feldspar, 25% quartz grains, all <= 1 mm in size; minor, angular mudstone clasts, fuchsitic clasts and minor pervasive disseminated pyrite. 69.10 - 69.60 1-2%, grey-white to blue, 1-3 mm quartz veinlets, with 1% disseminated pyrite in matrix and on vein boundaries. 71.80 - 72.90 1-2%, blue-grey, <= 1 mm, quartz veinlets and very minor disseminated pyrite. 73.40 - 74.30 Stockwork of 2-3%, of blue-grey, 1-2 mm quartz veinlets, with 1% disseminated pyrite; upper contact sharp chlorite slip @ 70° tca; lower contact is a 1 cm chlorite + quartz slip @ 50° tca. 77.25 - 77.57 Shear zone; weakly foliated, sericitized graywacke with 1-2% white quartz veinlets; contacts are strong sharp sericite + quartz slips @ 60° tca.	11732	64.70	65.50	0.80		Graywacke with 1 - 2% quartz stringers	nil			
			11733	65.50	66.00	0.50				0.01		
			11734	66.00	67.00	1.00				0.02		
			11735	67.00	68.00	1.00				0.01		
			11736	68.00	69.00	1.00				0.02		
			11737	69.00	69.60	0.60			Graywacke with 2% quartz veinlets and 1 - 2% pyrite	0.02		
			11738	69.60	70.50	0.90				0.01		
			11739	70.50	71.00	0.50				0.01		
			11740	71.00	71.80	0.80				0.02		
			11741	71.80	72.50	0.70			1 - 2% narrow blue-gray quartz veinlets	0.01		
			11742	72.50	73.00	0.50				0.02		
			11743	73.00	73.40	0.40				0.02		
			11744	73.40	74.40	1.00			2 - 3% quartz stockworking	0.01	0.01	
			11745	74.40	75.00	0.60				0.01		
			11746	75.00	76.00	1.00				0.01		
			11747	76.00	77.00	1.00				0.01		
			11748	77.00	77.60	0.60			Foliated Graywacke with 2% white quartz	0.02		
			11749	77.60	78.30	0.70				0.01		
			11750	78.30	79.00	0.70				0.03		
			11751	79.00	80.00	1.00			Massive Graywacke	0.02		
11752	80.00	81.00	1.00				0.01					
11753	81.00	82.00	1.00				0.01					
11754	82.00	83.00	1.00				0.01					
11755	83.00	84.00	1.00				0.01					
11756	84.00	85.00	1.00				0.01					

**BATTLE MOUNTAIN (CANADA) INC.
DIAMOND DRILL LOG**

HOLE: AK-90-28

PAGE: 7 of 8

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS			
FROM	TO		No.	FROM	TO	Length	% Rec	DESCRIPTION	Au, g/t	Au, Check	Au*M
			11757	85.00	86.00	1.00			0.01		
			11758	86.00	87.00	1.00			0.01		
			11759	87.00	88.00	1.00			nil		
			11760	88.00	89.00	1.00			0.01	0.01	
			11761	89.00	90.00	1.00			0.01		
			11762	90.00	90.50	0.50			0.01		
	90.60 - 90.80	7 cm wide quartz + chlorite breccia vein with strong sericite alteration of wall rock and 0.5% disseminated pyrite on vein margin.	11763	90.50	91.00	0.50			0.02	0.02	
			11764	91.00	92.00	1.00			0.01		
			11765	92.00	93.00	1.00			0.01		
			11766	93.00	93.60	0.60			0.01		
	93.80 - 93.90	Shear zone @ 60° tca; well foliated, sericitic graywacke with 3%, < 1 mm, blue quartz veinlets and < 0.5% pyrite; contacts are sharp, tight sericite + chlorite slips.	11767	93.60	94.00	0.40			0.04		
			11768	94.00	95.00	1.00			0.01		
			11769	95.00	96.00	1.00			0.01		
			11770	96.00	97.00	1.00			0.02		
			11771	97.00	98.00	1.00			0.01		
			11772	98.00	99.00	1.00			0.01		
			11773	99.00	100.00	1.00			0.02		
			11774	100.00	101.00	1.00			nil		
			11775	101.00	101.50	0.50			nil		
	101.80 - 102.15	Shear zone: sericite + quartz + pyrite; upper contact is a strong sharp chlorite + sericite slip @ 37° tca; lower contact is a 1 cm chlorite breccia vein with angular wall rock clasts up to 2 mm; 25-30% white-grey quartz, with interstitial, sericitic graywacke containing 0.5-1% disseminated pyrite.	11776	101.50	102.15	0.65			nil		
			11777	102.15	103.00	0.85			nil		
			11778	103.00	104.00	1.00			nil	0.01	
			11779	104.00	104.60	0.60			0.01		
			11780	104.60	105.60	1.00			nil		
			11781	105.60	106.00	0.40			nil		
			11782	106.00	107.00	1.00			nil		
			11783	107.00	107.50	0.50			nil		

**ASSAY CERTIFICATES
AND
PROOF OF EXPENDITURES**

BATTLE MOUNTAIN (CANADA) INC.
 390 BAY STREET, SUITE 2910,
 TORONTO, ONTARIO M5H 2Y2

002233

November 21 19 90

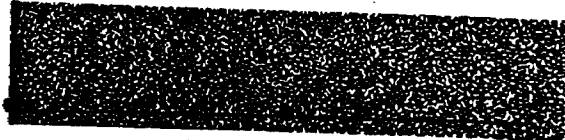
PAY Five Thousand Two Hundred & Six 03 /100 DOLLARS \$ 5,206.03

TO Swastika Laboratories,
 P.O. Box 10,
 Swastika, Ontario,
 POK 1T0

BATTLE MOUNTAIN (CANADA) INC.



Canadian Imperial Bank of Commerce
 MAIN BRANCH-COMMERCE COURT
 TORONTO, ONTARIO M5L 1G9



⑈002233⑈ ⑆00002⑈0101⑈ 13⑈46113⑈

NOT NEGOTIABLE / NON NÉGOCIABLE

BATTLE MOUNTAIN (CANADA) INC.

DETACH & RETAIN THIS STATEMENT

002233

DATE	DESCRIPTION	AMOUNT
Nov. 21'90	Invoice # 23583 - Nov. 05'90	\$ 619.65 ✓
	# 23587 - Nov. 05'90	34.42 ✓
	# 23620 - Nov. 07'90	608.17 ✓
	# 23629 - Nov. 08'90	1,354.05 ✓
	# 23648 - Nov. 09'90	611.12 ✓
	# 23654 - Nov. 12'90	172.12 ✓
	# 23679 - Nov. 14'90	803.25 ✓
	# 23690 - Nov. 15'90	550.00 ✓
	# 23696 - Nov. 16'90	252.45 ✓
		<u>\$ 5,206.03</u>

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 POK 1T0

INVOICE

NO: 23629
 DATE: 11-08-90
 PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

SHIP TO:

Same

75 JU 28
 104 779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
* 43	1		Au Assays 1AT			9.750	419.25
43	1		Sample Handling			3.000	129.00
			Cert#0W-1709-RA1				
* 39	1		Au Assays 1AT			9.750	380.25
39	1		Sample Handling			3.000	117.00
			Cert#0W-1718-RA1				
105 704 779	1		Au Assays 1 AT			9.750	48.75
	1		Sample Handling			3.000	15.00
			Cert#0W-1710-RA1				
* 31	1		Au Assays 1 AT			9.750	302.25
31	1		Sample Handling			3.000	93.00
			Cert#0W-1724-RA1				
			-10% Discount				(150.45)
TOTAL							1,354.05

COMMENTS

W. J. [Signature]
 Drillers

* 113 samples = \$1296.68

NOV 21 1990

APPROVED FOR PAYMENT

[Signature]

Ch # 2223 = 5206.03

A/c 75-JV-28/104-779 = 1296.68

75-JV-28/105-779 = 59.37
1354.05

Receipt
 * Expenditures claimed 0W 1724
 31 samples * 395.25
 8 39.52
8 355.73



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1724-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: W. BENHAM

Date: NOV-08-90
Copy 1. HOLD COPY 567-4840
2. FAX # 567-6448

We hereby certify the following Assay of 31 SPLIT CORE samples submitted NOV-06-90 by M. MASSON.

Sample Number	Au g/tonne	Au check g/tonne
6746	0.01	0.01
6747	Nil	
6748	0.03	
6749	0.02	
6750	0.01	
6751	0.01	
6752	0.02	
6753	0.01	
6754	Nil	
6755	0.01	
6756	0.01	
6757	0.01	
6758	Nil	
6759	Nil	
6760	0.01	
6761	Nil	
6762	Nil	
6763	Nil	
6764	Nil	
6765	Nil	
6766	0.01	0.01
6767	0.01	
6768	Nil	
6769	Nil	
6770	Nil	
6771	Nil	
6772	Nil	
6773	0.01	
6774	Nil	
6775	Nil	
6776	Nil	

AK9b-10

Au was determined using 1 AT fusions

Certified by Donna Jordan

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23679

DATE: 11-14-90

PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

SHIP TO:

RECEIVED NOV 19 1990
 Same

75 JV 28 104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
15	1		Au Assays 1 AT Fusions			9.750	146.25
15	1		Sample Handling Cert#0W-1753-RA1			3.000	45.00
27	1		Au Assays 1 AT Fusions			9.750	263.25
27	1		Sample Handling Cert#0W-1745-RA1 ✓			3.000	81.00
28	1		Au Assays 1 AT Fusions			9.750	273.00
28	1		Sample Handling Cert#0W-1754-RA1			3.000	84.00
			-10% Discount				(89.25)
						TOTAL	803.25

W.B.

COMMENTS

Net 30 Days

Drilling

* Expenditures claimed Cert # 06 1754
 claim 472299 2 samples 25.50

-10% 2.55
 22.95

APPROVED FOR PAYMENT

[Signature]

claim 491651 5 samples 9 63.75

6.37
 57.38

PAID

NOV 21 1990

cl# 22336 5206.03

A/c 75-JV-28/104-779 assays *803.25



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1745-RA1

Company: **BATTLE MOUNTAIN**
Project: **75-JV-28**
Attn: **W. BENHAM**

Date: **NOV-14-90**
Copy 1. **HOLD COPY 567-4840**
2. **FAX # 567-6448**

We hereby certify the following Assay of 27 SPLIT CORE samples submitted NOV-08-90 by M. MASSON.

Sample Number	Au g/tonne	Au check g/tonne
6792	0.01	
6793	0.01	
6794	0.01	
6795	0.02	0.03
6796	Nil	
6797	0.01	
6798	0.02	
6799	0.01	
6800	0.02	
6801	0.01	
6802	0.02	
6803	0.01	
6804	0.01	
6805	Nil	
6806	0.04	
6807	0.03	
6808	0.01	
6809	0.05	0.07
6810	Nil	
6811	0.02	
6812	Nil	
6813	0.01	
6814	0.01	
6815	Nil	
6816	0.02	
6817	0.04	0.05
6818	0.02	
6819	NOT REC'D	

AK90-11

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1732-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-12-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 15 SPLIT CORE samples submitted NOV-07-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6777	0.01	
6778	Nil	
6779	Nil	
6780	0.01	
6781	Nil	
6782	Nil	
6783	Nil	
6784	Nil	
6785	Nil	Nil
6786	Nil	
6787	0.01	
6788	Nil	
6789	Nil	
6790	0.67	0.63
6791	Nil	
6792	not rec'd	

AK9D-10

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1753-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-14-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 15 SPLIT CORE samples submitted NOV-09-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6819	0.03	
6820	0.02	
6821	0.09	0.10
6822	Nil	
6823	0.01	
6824	0.02	
6825	0.01	
6826	0.01	
6827	0.02	
6828	0.02	0.03
6829	0.01	
6830	0.03	
6831	0.01	
6832	0.01	
6833	0.03	

AK90-11

Au was determined using 1 AT Fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1754-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **W.BENHAM**

Copy 1. 567-4840
2. FAX # 567-6448

Date: **NOV-14-90**

We hereby certify the following Assay of 28 SPLIT CORE samples submitted NOV-09-90 by .

Sample Number	Au g/tonne	Au check g/tonne
6834	Nil	
6835	0.01	
6836	0.01	
6837	0.01	
6838	0.01	
6839	0.01	
6840	0.02	0.01
11551	0.02	
11552	0.01	
11553	0.01	
11554	0.01	
11555	0.01	
11556	0.01	
11557	0.02	
11558	0.01	
11559	0.01	
11560	0.01	
11561	0.01	
11562	0.01	0.01
11563	0.01	
11564	Nil	
11565	0.01	
11566	0.02	
11567	0.03	
11568	0.02	0.02
11569	0.02	
11570	0.02	
11571	0.01	

AK90-12

AK90-08

Au was determined using 1 AT fusions

Certified by Donna Gardner

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23690
 DATE: 11-15-90
 PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

SHIP TO:

RECEIVED NOV 19 1990
 Same

75 JU 28 104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
48	1		Al Assays 1 AT Fusions			9.750	468.00
48	1		Sample Handling			3.000	144.00
			Cert#0W-1767-RA1				
			-10% Discount				(61.20)
						TOTAL	550.80

WB

Drilling

COMMENTS:

PAIN
 NOV 21 1990

APPROVED FOR PAYMENT

ch. # 2233-520603

[Signature]

A/c 75-JV-28/104-779 = 550.80 assay



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 2

Assay Certificate

0W-1767-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-15-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 48 SPLIT CORE samples submitted NOV-12-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6841	0.03	
6842	0.03	
6843	0.01	
6844	0.01	Nil
6845	0.01	
6846	0.01	
6847	0.01	
6848	0.02	
6849	0.01	
6850	Nil	
6851	Nil	
6852	0.02	
6853	0.01	
6854	0.01	
6855	0.01	0.01
6856	Nil	
6857	0.03	
6858	0.01	
6859	0.01	
6860	Nil	
6861	0.01	
6862	0.02	
6863	0.03	
6864	0.01	
6865	0.01	0.02
6866	0.01	
6867	0.01	
6868	0.01	
6869	0.01	
6870	0.01	0.03

AK90-12

AK90-13

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 2

Assay Certificate

0W-1767-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-15-90**
Copy 1. **HOLD COPY 567-4840**
2. **FAX TO 567-6448**

We hereby certify the following Assay of 48 SPLIT CORE samples submitted NOV-12-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6871	0.03	
6872	0.01	
6873	0.01	
6874	0.01	0.01
6875	0.02	
6876	0.03	
6877	0.01	
6878	0.02	
6879	0.04	
6880	0.03	
6881	0.02	
6882	0.02	
6883	0.02	
6884	0.02	
6885	0.02	
6886	0.01	
6887	0.01	
6888	0.01	

AK90-13

Au was determined using 1 AT fusions

Certified by Donna Gardner

BATTLE MOUNTAIN (CANADA) INC.

390 BAY STREET, SUITE 2910,
TORONTO, ONTARIO M5H 2Y2

002255

November 27 1990

PAY One Thousand One Hundred & Eighty-One ——— 92/100 DOLLARS \$ 1,181.92

TO Swastika Laboratories,
P.O. Box 10,
Swastika, Ontario.
POK 1T0

BATTLE MOUNTAIN (CANADA) INC.



Canadian Imperial Bank of Commerce
MAIN BRANCH-COMMERCE COURT
TORONTO, ONTARIO M5L 1G9



⑈002255⑈ ⑆00002⑆010⑆ 13⑈46113⑈

NOT NEGOTIABLE / NON NÉGOCIABLE

DETACH & RETAIN THIS STATEMENT

BATTLE MOUNTAIN (CANADA) INC.

002255

DATE	DESCRIPTION	AMOUNT
Nov. 27'90	Invoice # 23707 Nov. 16'90 \$ 711.45 ✓ # 23734 Nov. 20'90 470.47 ✓	\$ 1,181.92

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

RECEIVED NOV 21 1990

NO: 23707
 DATE: 11-16-90
 PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

SHIP TO:

Same

75 JV 28 104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
62	1		Au Assays 1 AT Fusions			5.750	604.50
62	1		Sample Handling			3.000	186.00
			Cert#0W-17B1-RA1				
			-10% Discount				79.05
COMMENTS						TOTAL	711.45
Net 30 Days							

WP

Drilling

JK

PAT
 NOV 26 1990

APPROVED FOR PAYMENT

[Signature]

cl# 2255-1191.92

A/c 75-JV-28/104-779 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 3

Assay Certificate

0W-1781-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-16-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 62 SPLIT CORE samples submitted NOV-14-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6889	0.01	
6890	Nil	
6891	0.01	
6892	0.01	
6893	Nil	
6894	0.06	
6895	0.03	
6896	0.01	
6897	0.01	
6898	0.01	0.01
6899	Nil	
6900	0.02	
6901	Nil	
6902	0.01	
6903	0.01	
6904	Nil	
6905	0.02	
6906	0.01	
6907	0.01	0.01
6908	0.01	
6909	Nil	
6910	0.01	0.01
6911	Nil	
6912	Nil	
6913	Nil	
6914	0.01	
6915	0.02	
6916	0.02	
6917	0.01	
6918	0.02	

AK90-14

Au was determined using 1 AT fusions

Certified by Sanna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 3

Assay Certificate

0W-1781-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-16-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 62 SPLIT CORE samples submitted NOV-14-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6919	0.01	
6920	Nil	
6921	0.01	
6922	0.01	0.01
6923	0.01	
6924	Nil	
6925	Nil	
6926	Nil	
6927	Nil	
6928	0.02	
6929	Nil	
6930	0.02	
6931	0.06	
6932	0.02	
6933	0.01	
6934	0.01	
6935	0.01	
6936	0.01	0.01
6937	0.02	
6938	Nil	
6939	0.01	
6940	0.01	
6941	0.01	
6942	0.01	
6943	0.01	
6944	0.01	
6945	0.03	
6946	Nil	
6947	Nil	
6948	Nil	

AK90-14

AK90-15

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 3 of 3

Assay Certificate

0W-1781-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: **WAYNE BENHAM**

Date: **NOV-16-90**

Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 62 SPLIT CORE samples submitted NOV-14-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
6949 } AK 70-15	Nil	
6950 }	Nil	

Au was determined using 1 AT fusions

Certified by Donna Gardner

BATTLE MOUNTAIN (CANADA) INC.
 890 BAY STREET, SUITE 2010,
 TORONTO, ONTARIO M5H 2Y2

002262

November 27 1990

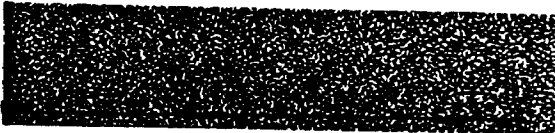
PAY Two thousand three hundred & seventeen 94/100 DOLLARS \$ 2,317.94

TO Swastika Laboratories,
 P.O. Box 10,
 Swastika, Ontario.
 POK 150

BATTLE MOUNTAIN (CANADA) INC.



Canadian Imperial Bank of Commerce
 MAIN BRANCH-COMMERCE COURT
 TORONTO, ONTARIO M5L 1G9



⑆002262⑆ ⑆00002⑆010⑆ 13⑆46113⑆

NOT NEGOTIABLE / NON NÉGOCIABLE

DETACH & RETAIN THIS STATEMENT

BATTLE MOUNTAIN (CANADA) INC.

002262

DATE	DESCRIPTION	AMOUNT
Nov. 27'90	Invoice # 23739 Nov. 20'90	\$ 1,503.22 ✓
	# 23770 Nov. 22'90	378.67 ✓
	# 23778 Nov. 23'90	<u>436.05 ✓</u>
		\$ 2,317.94

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23739
 DATE: 11-20-90
 PAGE: 1 of 1

SOLD TO:

SHIP TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

Same

75 JV 28 104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
34	1		Au Assays 1 AT Fusions			9.750	331.50
34	1		Sample Handling Cert#0W-1805-RA1			3.000	102.00
70	1		Au Assays 1 AT Fusions			9.750	682.50
70	1		Sample Handling Cert#0W-1797-RA1			3.000	210.00
27	1		Au Assays 1 AT Fusions			9.750	263.25
27	1		Sample Handling Cert#0W-1800-RA1			3.000	81.00
			-10% Discount				167.03
						TOTAL	1,503.22

WB

COMMENTS:

Net 30 Days

Drilling

PAID
 NOV 27 1990

* Expenditure claimed Cert# 1797 \$892.50
 -10% 89.25
 803.25

APPROVED FOR PAYMENT

[Signature]

ch# 2262 = 2317.94

A/c 75-JV-28/104-779 = \$1,503.22 Assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 3

Assay Certificate

0W-1797-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-20-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 70 SPLIT CORE samples submitted NOV-16-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
11572	Ni1	
11573	0.02	
11574	Ni1	
11575	Ni1	
11576	0.01	
11577	0.01	
11578	Ni1	
11579	Ni1	Ni1
11580	0.01	
11581	Ni1	
11582	0.01	
11583	Ni1	
11584	Ni1	0.01
11585	Ni1	
11586	AK90-16 0.01	
11587	Ni1	
11588	Ni1	
11589	Ni1	
11590	Ni1	
11591	Ni1	
11592	0.01	
11593	Ni1	
11594	Ni1	
11595	Ni1	
11596	Ni1	
11597	0.01	
11598	Ni1	
11599	0.01	
11600	Ni1	
11601	0.02	

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 3

Assay Certificate

0W-1797-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-20-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 70 SPLIT CORE samples submitted NOV-16-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
11602	0.02	
11603	0.02	
11604	0.02	0.01
11605	0.01	
11606	0.01	
11607	0.01	
11608	0.01	
11609	0.01	
11610	0.01	
11611	0.01	
11612	0.01	
11613	0.01	
11614	0.01	
11615	0.01	
11616	0.02	0.01
11617	0.01	
11618	0.02	
11619	0.02	
11620	0.02	
11621	0.02	
11622	0.02	
11623	0.03	
11624	0.03	
11625	0.02	
11626	0.02	
11627	Nil	
11628	0.01	
11629	0.01	
11630	0.02	
11631	0.01	0.01

AK90-16

Au was determined using 1 AT fusions

Certified by Lorna Gardner



Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 3 of 3

Assay Certificate

0W-1797-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: WAYNE BENHAM

Date: NOV-20-90
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 70 SPLIT CORE samples submitted NOV-16-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
11632	0.01	
11633	0.01	
11634	0.01	0.01
11635	0.02	
11636	0.01	
11637	0.01	
11638	0.01	
11639	Nil	
11640	0.01	
11641	0.01	

AK90-16

Au was determined using 1 AT fusions

Certified by Donna Gardner

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23778
 DATE: 11-23-90
 PAGE: 1 of 1

SOLD TO:

SHIP TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

Same

75 JU 28

104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
38	1		Au Assays 1 AT Fusions			9.750	370.50
38	1		Sample Handling			3.000	114.00
			Cert#0W-1B23-RA1				
			-10% Discount				48.45
<i>WB</i>							
COMMENTS							
Net 30 Days						TOTAL	436.05
<i>Drilling</i>							

PAT
 NOV 27 1990

*Cl # 2212 - *2317.94*

APPROVED FOR PAYMENT

[Signature]

A/c 75-JU-28/104-779- *436.05 *Assays*



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 2

Assay Certificate

0W-1823-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: W. BENHAM

Date: NOV-23-90
Copy 1. FAX TO 567-6448

We hereby certify the following Assay of 38 SPLIT CORE samples submitted NOV-21-90 by .

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7108	0.01			
7109	Nil			
7110	Nil			
7111	Nil			
7112	0.18			
7113	1.54	1.44		
7114	1.49			
7115	0.01			
7116	0.11			
7117	0.08			
7118	0.04			
7119	0.88			
7120	2.19	2.37		
7121	0.58			
7122	0.02			
7123	0.13			
7124	0.01			
7125	0.04			
7126	0.02			
7127	0.04			
7128	0.41			
7129	0.05			
7130	0.02			
7131	0.25			
7132	0.02			
7133	7.06	7.03		
7134	0.05			
7135	0.04			
7136	7.10	7.13		
7137	0.07			

AK 90-21

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 2

0W-1823-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **W. BENHAM**

Date: **NOV-23-90**
Copy 1. FAX TO 567-6448

We hereby certify the following Assay of 38 SPLIT CORE samples submitted NOV-21-90 by .

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7138	0.04			
7139	13.06	12.72	12.58	13.10
7140	1.02			
7141	0.89			
7142	0.89			
7143	0.13			
7144	11.04	10.53	8.91	8.85
7145	0.36			

AK90-21

Au was determined using 1 AT fusions

Certified by Donna Gardner

BATTLE MOUNTAIN (CANADA) INC.
390 BAY STREET, SUITE 2910,
TORONTO, ONTARIO M5H 2Y2

002288

December 7 1990

PAY Two Hundred & Ninety-Six _____ 10 /100 DOLLARS \$296.10

TO Swastika Laboratories,
P.O. Box 10,
Swastika, Ontario.
POK 1T0

BATTLE MOUNTAIN (CANADA) INC.



Canadian Imperial Bank of Commerce
MAIN BRANCH-COMMERCE COURT
TORONTO, ONTARIO M5L 1G9



⑆002288⑆ ⑆00002⑆010⑆ 13⑆46113⑆

NOT NEGOTIABLE / NON NEGOCIABLE

DETACH & RETAIN THIS STATEMENT

BATTLE MOUNTAIN (CANADA) INC.

002288

DATE	DESCRIPTION	AMOUNT
Dec. 07'90	Invoice # 23786 November 23, 1990	\$ 296.10 ✓

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23786
 DATE: 11-23-90
 PAGE: 1 of 1

SOLD TO:

SHIP TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

Same

RECEIVED NOV 28 1990
 75 JV 28 104 779

ITEM NO	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
28	1		Au Assays			8.750	245.00
28	1		Sample Handling Cert#0W-1B2B-RA1 -10% Discount			3.000	84.00
							32.90
Net 30 Days						TOTAL	296.10

W.F.

D. H. Lang

PAID
 DEC - 6 1990

Ch# 2288 = 296.10

APPROVED FOR PAYMENT

[Signature]

A/c 75-JV-28/104-779 = 296.10 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

045
11/23/90
AK90-81

Assay Certificate

RECEIVED DTC - 6 1990

0W-1828-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **NOV-23-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 28 SPLIT CORE samples submitted NOV-22-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7146	0.05			
7147	0.25			
7148	0.02			
7149	2.39	2.54	2.13	1.92
7150	0.02			
7501	0.03			
7502	0.02			
7503	Nil			
7504	0.17			
7505	0.04			
7506	0.01			
7507	0.03			
7508	0.04	0.07		
7509	0.02			
7510	0.01			
7511	0.01			
7512	0.04			
7513	0.01			
7514	0.01			
7515	0.02			
7516	0.02			
7517	0.02			
7518	0.03	0.03		
7519	0.01			
7520	0.02			
7521	0.01			
7522	0.02			
7523	0.01			

AK90-81

Au was determined using 1 AT fusions

Certified by Donna Jordan

BATTLE MOUNTAIN (CANADA) INC.
390 BAY STREET, SUITE 2910,
TORONTO, ONTARIO M5H 2Y2

002303

December 14 19 90

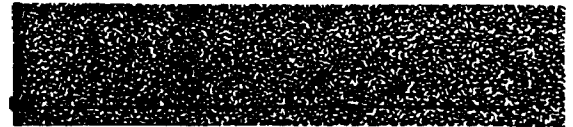
PAY Two Thousand Two Hundred & Twenty-Six ——— 15/100 DOLLARS \$ 2,226.15

TO Swastika Laboratories,
P.O. Box 10,
Swastika, Ontario.
POK 110

BATTLE MOUNTAIN (CANADA) INC.



Canadian Imperial Bank of Commerce
MAIN BRANCH-COMMERCE COURT
TORONTO, ONTARIO M5L 1G9



⑈002303⑈ ⑆00002⑈010⑆ 13⑈46113⑈ NOT NEGOTIABLE / NON NÉGOCIABLE

DETACH & RETAIN THIS STATEMENT

BATTLE MOUNTAIN (CANADA) INC.

002303

DATE	DESCRIPTION	AMOUNT
Dec. 14'90	Invoice # 23806 Nov. 28'90 \$ 1,265.20 ✓ # 23819 Nov. 29'90 229.50 ✓ # 23860 Dec. 05'90 <u>711.45</u> ✓	\$ 2,226.15

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23806
 DATE: 11-28-90
 PAGE: 1 of 1

SOLD TO:

SHIP TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

Same

75 JU 28 104 779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
112	1		Au Assays 1 AT Fusions			9.750	1,092.00
112	1		Sample Handling			3.000	336.00
			Cert#0W-1839-RA1				
			-10% Discount				142.80
						TOTAL	1,285.20

RECEIVED DEC 10 1990

WP

COMMENTS:

Net 30 Days

Drilling

PAID
 DEC 13 1990

APPROVED FOR PAYMENT

Ch King

~~2303~~ = 2226.15

A/c 75-JV-28/104-779 = 1,285.20 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 4

0W-1839-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **W. BENHAM**

Date: **NOV-28-90**
Copy 1. FAX TO 567-6448

We hereby certify the following Assay of 112 SAWN CORE samples submitted NOV-23-90 by R. PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
7524	0.01	
7525	Nil	
7526	0.01	
7527	Nil	
7528	0.01	
7529	Nil	
7530	0.04	0.09
7531	Nil	
7532	Nil	
7533	0.02	
7534	0.01	
7535	0.01	
7536	0.02	
7537	Nil	
7538	Nil	
7539	Nil	Nil
7540	0.01	
7541	Nil	
7542	Nil	
7543	Nil	
7544	0.01	
7545	0.01	
7546	0.01	
7547	0.01	
7548	0.01	
7549	0.02	
7550	0.05	
7551	0.03	
7552	0.35	0.48
7553	0.02	

AK90-22

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 4

Assay Certificate

0W-1839-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **W. BENHAM**

Date: **NOV-28-90**
Copy 1. FAX TO 567-6448

We hereby certify the following Assay of 112 SAWN CORE samples submitted NOV-23-90 by R. PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
7554	0.01	
7555	0.01	
7556	Nil	
7557	0.01	0.01
7558	0.01	
7559	Nil	
7560	Nil	
7561	Nil	
7562	0.01	
7563	Nil	
7564	Nil	
7565	0.01	
7566	0.01	
7567	0.37	0.35
7568	0.09	
7569	0.01	
7570	0.01	
7571	0.01	
7572	0.01	
7573	0.01	
7574	0.02	
7575	0.02	
7576	0.01	
7577	0.01	
7578	0.01	
7579	0.01	
7580	0.01	
7581	0.01	0.01
7582	0.01	
7583	0.01	

AK90-22

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 3 of 4

0W-1839-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **W. BENHAM**

Date: **NOV-28-90**
Copy 1. FAX TO 567-6448

We hereby certify the following Assay of 112 SAWN CORE samples submitted NOV-23-90 by R. PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
7584	0.01	
7585	0.01	
7586	0.01	
7587	0.01	
7588	0.06	0.04
7589	0.01	
7590	0.01	
7591	0.01	
7592	0.01	
7593	0.01	
7594	0.01	
7595	0.01	
7596	0.01	
7597	0.01	0.01
7598	0.01	
7599	0.01	
7600	0.01	
7601	0.01	
7602	0.01	
7603	0.01	
7604	0.02	
7605	0.01	
7606	0.01	
7607	Ni 1	
7608	0.01	
7609	0.02	0.02
7610	0.01	
7611	0.01	
7612	0.01	
7613	0.02	

AK90-22

60057
177419

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 4 of 4

Assay Certificate

0W-1839-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: W. BENHAM

Date: NOV-28-90
Copy 1. FAX TO 567-6448

We hereby certify the following Assay of 112 SAWN CORE samples submitted NOV-23-90 by R. PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
7614	0.01	
7615	0.01	
7616	0.02	
7617	0.01	
7618	0.02	0.02
7619	0.02	
7620	0.01	
7621	0.01	
7622	0.01	
7623	0.02	
7624	0.01	
7625	0.01	
7626	Nil	
7627	Nil	
7628	Nil	
7629	Nil	
7630	Nil	
7631	Nil	
7632	Nil	
7633	Nil	
7634	0.01	
7635	0.01	0.01

AK90-22

Au was determined using 1 AT fusions

Certified by Donna Gardner

7626-7728

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 F0K 1T0

INVOICE

NO: 23819
 DATE: 11-29-90
 PAGE: 1 of 1

SOLD TO:

SHIP TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 F2N 3K1

Same

75 JV 28 104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F P	UNIT PRICE	AMOUNT
	20	1	Au Assays 1 AT Fusions		9.750	195.00
	20	1	Sample Handling		3.000	60.00
			Cert#0W-1842-RA1			
			-10% Discount			25.50
					TOTAL	229.50

RECEIVED DEC 1 0 1990

WB

Drilling

PAID
 DEC 13 1990

ch# 2303 2226.15

APPROVED FOR PAYMENT

[Signature]

a/c 75-JV-28/104-779 - 229.50 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1842-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: W.BENHAM

Date: NOV-29-90
Copy 1. FAX # 567-6448

We hereby certify the following Assay of 20 SPLIT CORE samples submitted NOV-26-90 by R. PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
11642	0.01			
11643	0.01			
11644	0.01			
11645	0.01			
11646	0.01	0.01		
11647	0.01			
11648	Ni1			
11649	0.02			
11650	Ni1			
11651	0.01			
11652	0.01			
11653	0.02			
11654	Ni1			
11655	0.01			
11656	0.02			
11657	1.12	1.18	1.03	0.96
11658	0.02			
11659	0.02			
11660	0.07			
11661	0.01			

AK90-21

Au was determined using 1 AT fusions

Certified by Donna Gardner

BATTLE MOUNTAIN (CANADA) INC.
 390 BAY STREET, SUITE 2910,
 TORONTO, ONTARIO M5H 2Y2

002352

December 20 1990

PAY THREE THOUSAND NINE HUNDRED & FORTY-ONE /100 DOLLARS \$ 3,441.99

TO Swastika Laboratories,
 P.O. Box 10,
 Swastika, Ontario,
 P0K 1L0

BATTLE MOUNTAIN (CANADA) INC.



Canadian Imperial Bank of Commerce
 MAIN BRANCH-COMMERCE COURT
 TORONTO, ONTARIO M5L 1G9



⑈002352⑈ ⑆00002⑈010⑆ ⑆3⑈46⑈1⑈3⑈

NOT NEGOTIABLE / NON NÉGOCIABLE

DETACH & RETAIN THIS STATEMENT

BATTLE MOUNTAIN (CANADA) INC.

002352

DATE	DESCRIPTION	AMOUNT
Dec. 26'90	Invoice # 23874 Dec. 06'90 \$ 68.85 ✓	
	# 23884 Dec. 07'90 901.12 ✓	
	# 23897 Dec. 11'90 309.82 ✓	
	# 23909 Dec. 11'90 573.75 ✓	
	# 23914 Dec. 12'90 1,147.50 ✓	
	# 23920 Dec. 13'90 940.95 ✓	
		\$ 3,941.99

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23884
 DATE: 12-07-90

SOLD TO:

SHIP TO:

PAGE: 1 of 1

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

Same

75 JU 28 104 779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
20	1		Au Assays 1 AT Fusions			9.750	195.00
35	1		Sample Handling Cert#0W-1892-RA1			3.000	105.00
55	1		Au Assays 1 AT Fusions			9.750	536.25
55	1		Sample Handling Cert#0W-1882-RA1			3.000	165.00
			-10% Discount				100.13
						TOTAL	901.12

W B

COMMENTS

Net 30 Days

Deilling

DEC 26 1990

Cl # 2352 = 3941.99

APPROVED FOR PAYMENT

[Signature]

A/c 75-51-28/104-779 = 901.12 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 2

Assay Certificate

0W-1892-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: 75-JV-28
Attn: WAYNE BENHAM

Date: DEC-07-90
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 35 SPLIT CORE samples submitted DEC-04-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7848	not rec'd			
7849	0.01			
7850	0.01			
7851	0.03			
7852	0.01			
7853	0.01			
7854	0.02			
7855	0.02			
7856	0.02			
7857	0.01			
7858	0.31			
7859	7.61	7.65	6.55	6.65
7860	1.00			
7861	2.40	2.19		
7862	0.42			
7863	0.02			
7864	0.02			
7865	0.01			
7866	Nil			
7867	0.01			
7868	0.02			
7869	0.01			
7870	0.02			
7871	0.01			
7872	0.01			
7873	0.01			
7874	0.02			
7875	0.02	0.02		
7876	0.04			
7877	0.02			

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 2

Assay Certificate

0W-1892-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-07-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 35 SPLIT CORE samples submitted DEC-04-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7878	0.02			
7879	0.02			
7880	0.02			
7881	0.02			
7882	0.02			
7883	0.02			

AK 90-23

Au was determined using 1 AT fusions

Certified by Donna Gardner

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23897
 DATE: 12-11-90
 PAGE: 1 of 1

SOLD TO:

SHIP TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

Same

95 JUZ 8 104779

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
27	1		Au Assays 1 AT Fusions			9.750	263.25
27	1		Sample Handling			3.000	81.00
			Cert#0W-1894-RA1				
			-10% Discount				(34.43)
COMMENTS:						TOTAL	K 309.82
Net 30 Days							
							Drilling.

NB

PAID
 DEC. 26 1990

Ch# 2352 *3941.99

APPROVED FOR PAYMENT

[Signature]

A/c 75-JV-28/104-779-309.82 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Assay Certificate

0W-1894-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-10-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 27 SPLIT CORE samples submitted DEC-05-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
7884	0.12	0.22
7885	0.03	
7886	0.09	
7887	0.02	
7888	Nil	
7889	0.01	
7890	0.01	
7891	0.02	
7892	0.01	
7893	0.02	
7894	0.02	
7895	0.20	
7896	0.28	
7897	0.44	0.43
7898	0.06	
7899	Nil	
7900	Nil	
7901	0.02	
7902	0.01	
7903	0.01	
7904	Nil	
7905	0.01	
7906	0.04	
7907	0.01	
7908	0.01	
7909	0.02	
7910	0.01	0.01

AK 90-26

Au was determined using 1 AT fusions

Certified by *R Landon*

Swastika Laboratories
P.O. Box 10
Swastika, Ontario
P0K 1T0

INVOICE

NO: 23909
DATE: 12-11-90
PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
Box 635
Kirkland Lake, Ontario
P2N 3K1

SHIP TO:

Same

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
50	1		Au Assays 1 AT Fusions			9.750	487.50
50	1		Sample Handling			3.000	150.00
			Cert#0W-1905-RA1				
			-10% Discount				63.75
						TOTAL	573.75
COMMENTS:							
Net 30 Days							

PAID
DEC 26 1990

APPROVED FOR PAYMENT
[Signature]

ch# 2352 = 3941.99

A/c 75-JV-28/104-779-573.75 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 2

0W-1905-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-12-90**

Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 50 SPLIT CORE samples submitted DEC-06-90 by ROBERT PEEVER.

RECEIVED Dec 27 1990

Sample Number	Au g/tonne	Au check g/tonne
7911	0.01	
7912	Nil	
7913	0.01	
7914	Nil	
7915	Nil	
7916	0.01	
7917	Nil	0.01
7918	0.01	
7919	0.01	
7920	0.01	
7921	0.01	
7922	0.04	0.02
7923	0.01	
7924	0.01	
7925	0.01	
7926	0.01	
7927	0.01	
7928	0.01	
7929	Nil	
7930	0.01	
7931	0.02	
7932	0.04	
7933	0.03	0.03
7934	0.02	
7935	0.04	
7936	0.01	
7937	Nil	
7938	0.01	
7939	0.02	
7940	0.01	

AK 90-27

Certified by Donna Henderson



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 2

0W-1905-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-12-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 50 SPLIT CORE samples submitted DEC-06-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
7941	0.01	
7942	0.01	
7943	0.08	0.03
7944	0.01	
7945	0.01	
7946	0.01	
7947	0.01	
7948	0.01	
7949	0.01	
7950	0.01	
7951	0.01	
7952	0.01	
7953	0.01	
7954	0.01	
7955	0.01	
7956	0.01	
7957	0.01	
7958	0.01	
7959	0.01	
7960	0.01	0.04

AK90-27

Certified by Donna Gardner

Swastika Laboratories
P.O. Box 10
Swastika, Ontario
P0K 1T0

INVOICE

NO: 23914
DATE: 12-12-90
PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
Box 635
Kirkland Lake, Ontario
P2N 3K1

SHIP TO:

Same

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT
	100	1	Au Assays 1 AT Fusions			9.750	975.00
	100	1	Sample Handling			3.000	300.00
			Cert#0W-191B-RA1				
			-10% Discount				127.50
COMMENTS:						TOTAL	1,147.50
Net 30 Days							

PAID
DEC 26 1990

cl# 2352 = *3,741.79

A/c 75-JV-28/104-779 - 1,147.50 assays

APPROVED FOR PAYMENT
[Signature]



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 4

Assay Certificate

0W-1918-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-12-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 100 SPLIT CORE samples submitted DEC-07-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7961	0.01			
7962	0.01			
7963	0.01			
7964	0.01			
7965	0.02			
7966	0.02			
7967	0.02			
7968	0.02			
7969	0.01	0.01		
7970	0.02			
7971	0.01			
7972	0.01			
7973	0.01			
7974	0.02			
7975	0.01			
7976	0.01			
7977	0.02			
7978	0.02			
7979	0.02			
7980	0.03			
7981	0.02	0.01		
7982	0.02			
7983	0.02			
7984	0.01			
7985	0.01			
7986	0.01			
7987	Nil			
7988	Nil	Nil		
7989	Nil			
7990	0.01			

AK 90-20

Certified by Donna Hansen



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 4

Assay Certificate

0W-1918-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-12-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448.

We hereby certify the following Assay of 100 SPLIT CORE samples submitted DEC-07-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
7991	Nil			
7992	Nil			
7993	0.01			
7994	0.01			
7995	Nil			
7996	0.01			
7997	0.02			
7998	0.02			
7999	0.01	0.01		
8000	0.01			
11701	0.02			
11702	0.02			
11703	0.02			
11704	0.02			
11705	0.02			
11706	0.75			
11707	4.39	4.22	3.81	3.70
11708	1.54			
11709	0.03			
11710	0.02			
11711	0.01			
11712	0.03			
11713	0.01			
11714	0.01			
11715	0.01			
11716	0.01			
11717	0.02	0.02		
11718	0.01			
11719	0.01			
11720	0.01			

AK 90-28

Certified by *Donna Gardner*



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 3 of 4

Assay Certificate

0W-1918-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-12-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 100 SPLIT CORE samples submitted DEC-07-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
11721	0.01			
11722	0.01			
11723	0.01			
11724	0.01			
11725	0.01	0.02		
11726	0.01			
11727	0.01			
11728	0.01			
11729	0.01			
11730	0.02			
11731	0.01			
11732	Nil			
11733	0.01			
11734	0.02			
11735	0.01			
11736	0.02			
11737	0.02			
11738	0.01			
11739	0.01			
11740	0.02			
11741	0.01			
11742	0.02			
11743	0.02			
11744	0.01	0.01		
11745	0.01			
11746	0.01			
11747	0.01			
11748	0.02			
11749	0.01			
11750	0.03			

AK90-20

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 4 of 4

0W-1918-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-12-90**

Copy 1. HOLD COPY 567-4840
2. FAX TO 567-6448

We hereby certify the following Assay of 100 SPLIT CORE samples submitted DEC-07-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne	Au 2nd g/tonne	Au check 2nd g/t
11751	0.02			
11752	0.01			
11753	0.01			
11754	0.01			
11755	0.01			

11756	0.01			
11757	0.01			
11758	0.01			
11759	Nil			
11760	0.01	0.01		

AK90-28

Certified by *Donna Gordon*

Swastika Laboratories
 P.O. Box 10
 Swastika, Ontario
 P0K 1T0

INVOICE

NO: 23920
 DATE: 12-13-90
 PAGE: 1 of 1

SOLD TO:

Battle Mountain Canada Inc
 Box 635
 Kirkland Lake, Ontario
 P2N 3K1

SHIP TO:

Same

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	F	P	UNIT PRICE	AMOUNT	
82	1		Au Assays 1 AT Fusions			9.750	799.50	
82	1		Sample Handling			3.000	246.00	
			Cert#0W-1919-RA1					
			-10% Discount				104.55	
COMMENTS: Hole AK90-28 41 samples $\times 12.75 = 522.75$ $-10\% = 52.28$ 5470.47							TOTAL <i>K</i> 940.95	
Net 30 Days								

APPROVED FOR PAYMENT

[Signature]

CL# 2352 = 3,941.99

ak 75-JV-28/104-779 = *940.95 assays



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 1 of 3

0W-1919-RA1

Assay Certificate

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-13-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 267-6448

We hereby certify the following Assay of 82 SPLIT CORE samples submitted DEC-10-90 by ROBERT PEEVER.

RECEIVED DEC 17 1990

Sample Number	Au g/tonne	Au check g/tonne
11761	0.01	
11762	0.01	
11763	0.02	0.02
11764	0.01	
11765	0.01	
11766	0.01	
11767	0.04	
11768	0.01	
11769	0.01	
11770	0.02	
11771	0.01	
11772	0.01	
11773	0.02	
11774	Nil	
11775	Nil	
11776	Nil	
11777	Nil	
11778	Nil	0.01
11779	0.01	
11780	Nil	
11781	Nil	
11782	Nil	
11783	Nil	
11784	0.01	
11785	Nil	
11786	0.01	
11787	0.01	
11788	0.02	
11789	0.01	
11790	Nil	

AK90-28
= 41 samples

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 2 of 3

Assay Certificate

0W-1919-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-13-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 267-6448

We hereby certify the following Assay of 82 SPLIT CORE samples submitted DEC-10-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
11791	Nil	
11792	Nil	
11793	0.01	0.02
11794	Nil	
11795	Nil	
11796	0.01	
11797	0.02	
11798	0.01	
11799	0.01	
11800	0.01	
11801	Nil	
11802	0.01	0.01
11803	0.01	
11804	0.01	
11805	0.01	
11806	0.01	
11807	0.01	
11808	0.01	
11809	0.01	
11810	0.02	
11811	0.01	
11812	0.01	
11813	0.02	
11814	0.02	0.01
11815	0.01	
11816	0.01	
11817	0.01	
11818	0.01	
11819	0.01	
11820	0.01	

AK90-28

AK90-09

Au was determined using 1 AT fusions

Certified by Donna Gardner



Established 1928

Swastika Laboratories

A Division of Assayers Corporation Ltd.

Assaying - Consulting - Representation

Page 3 of 3

Assay Certificate

0W-1919-RA1

Company: **BATTLE MOUNTAIN CANADA INC.**
Project: **75-JV-28**
Attn: **WAYNE BENHAM**

Date: **DEC-13-90**
Copy 1. HOLD COPY 567-4840
2. FAX TO 267-6448

We hereby certify the following Assay of 82 SPLIT CORE samples submitted DEC-10-90 by ROBERT PEEVER.

Sample Number	Au g/tonne	Au check g/tonne
11821	0.01	
11822	0.01	
11823	0.02	
11824	0.02	
11825	0.01	
AK90-09		
11826	0.03	
11827	0.01	0.01
11828	0.01	
11829	0.02	
11830	0.01	
11831	0.01	
11832	0.01	
11833	0.01	
11834	0.01	
11835	0.01	
11836	0.01	
11837	Nil	
11838	0.01	
11839	0.01	
11840	0.01	
AK90-05		
11841	Nil	
11842	0.01	0.01

Au was determined using 1 AT fusions

Certified by Donna Gardner

BATTLE MOUNTAIN (CANADA) INC.

VOLUME 2

KIRKLAND LAKE PROJECT

DIAMOND DRILLING REPORT

**AMALGAMATED KIRKLAND PROPERTY
(OCTOBER - DECEMBER, 1990)**

**TECK TOWNSHIP, LARDER LAKE MINING DIVISION
ONTARIO, CANADA**

**Kirkland Lake, Ontario
January, 1991**

W. Benham

TABLE OF CONTENTS

VOLUME 2

LIST OF DRAWINGS

Drawing Number	Description	Scale
GP - 001	Magnetic Interpretation	1:5000
DP - 001	Drill Plan	1:5000
DC - 001	Section 7350E	1:500
DC - 002	Section 7900E, S 1/2	1:500
DC - 003	Section 7900E, N 1/2	1:500
DC - 004	Section 8000E	1:500
DC - 005	Section 8050E, S 1/2	1:500
DC - 006	Section 8050E, N 1/2	1:500
DC - 007	Section 8100E	1:500
DC - 008	Section 8125E	1:500
DC - 009	Section 8150E	1:500
DC - 010	Section 8190E	1:500

BATTLE MOUNTAIN (CANADA) INC.

VOLUME 3

KIRKLAND LAKE PROJECT

DIAMOND DRILLING REPORT

**AMALGAMATED KIRKLAND PROPERTY
(OCTOBER - DECEMBER, 1990)**

**TECK TOWNSHIP, LARDER LAKE MINING DIVISION
ONTARIO, CANADA**

2 . 1 3 9 5 7

**Kirkland Lake, Ontario
January, 1991**

W. Benham

TABLE OF CONTENTS

VOLUME 3

LIST OF DRAWINGS

Drawing Number	Description	Scale
DC - 011	Section 8200E, S 1/2	1:500
DC - 012	Section 8200E, N 1/2	1:500
DC - 013	Section 8300E	1:500
DC - 014	Section 8340E	1:500
DC - 015	Section 8350E	1:500
DC - 016	Section 8370E	1:500
DC - 017	Section 8400E	1:500
DC - 018	Section 8425E	1:500
DC - 019	Section 8450E	1:500
DC - 020	Section 8500E, S 1/2	1:500
DC - 021	Section 8500E, N 1/2	1:100
DC - 022	Section 8600E	1:500
DC - 023	Section 8825E	1:500

Report of Work (Expenditures, Subsection 77(19))



900

Type of Work Performed Assaying Diamond Drill Core	Mining License No. Lar
Recorded Holder Battle Mountain (Canada) Inc.	Inspector's Licence No. T 5179
Address 390 Bay Street, Suite 2910, Toronto, Ontario M5H 2Y2	
Telephone No. (416) 867-9815	
Work Performed By Battle Mountain (Canada) Inc.	
Name and Address of Author (of Submission) W. Benham, Battle Mountain (Canada) Inc., 390 Bay Street, Suite 2910 Toronto, Ontario M5H 2Y2	Date When Work was Performed From: 15, 10, 90 To: 13, 12, 90

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. *See Note No. 1 on reverse side		Mining Claim 477299	No. of Days 1.53	Mining Claim 477419	No. of Days 173.14	Mining Claim 491183	No. of Days 107.86	Mining Claim 491651	No. of Days 185.90	
Mining Claim 500057	No. of Days 68.85	Mining Claim 500058	No. of Days 3.83							
SEE ATTACHED SCHEDULE I										
Instructions Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).				Calculation of Expenditure Days Credits Total Expenditures \$ 8,116.65			Total Days Credits 15		Total Number of Mining Claims Covered by this Report of Work 15	

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
L	1046442	60	L	1046765	41.11						
L	1046443	60	L	1045668	60						
L	1046523	60									
L	1046526	20									
L	1046527	60									
L	1046528	60									
L	1046529	60									
1	1046530	60									

RECEIVED
APR 30 1991
MINING DIVISION

RECEIVED
MAR 11 1991
MINING DIVISION

Total Number of Days Performed 541.11	Total Number of Days Claimed 541.11	Total Number of Days to be Claimed at a Future Date 1991
---	---	--

Certification of Beneficial Interest *See Note No. 2 on reverse side
I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.
Date: **Feb 19, 1991**
Recorded Holder or Agent (Signature): **O. E. Leigh**

Certification Verifying Report of Work
I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Address of Person Certifying T. J. Bottrill, Battle Mountain (Canada) Inc. 390 Bay Street, Suite 2910, Toronto, Ontario M5H 2Y2	Telephone No. (416) 867-9815	Date Feb 19, 1991
--	--	-----------------------------

For Office Use Only		RECEIVED LARDER MINING DIVISION FEB 22 1991 TIME 4:08pm
Total Days Cr. Recorded 541.11	Date Recorded Feb 22 1991	
Date Approved as Recorded Apr 12, 1991	Mining Recorder T. Bottrill Provincial Manager, Mining Lands	

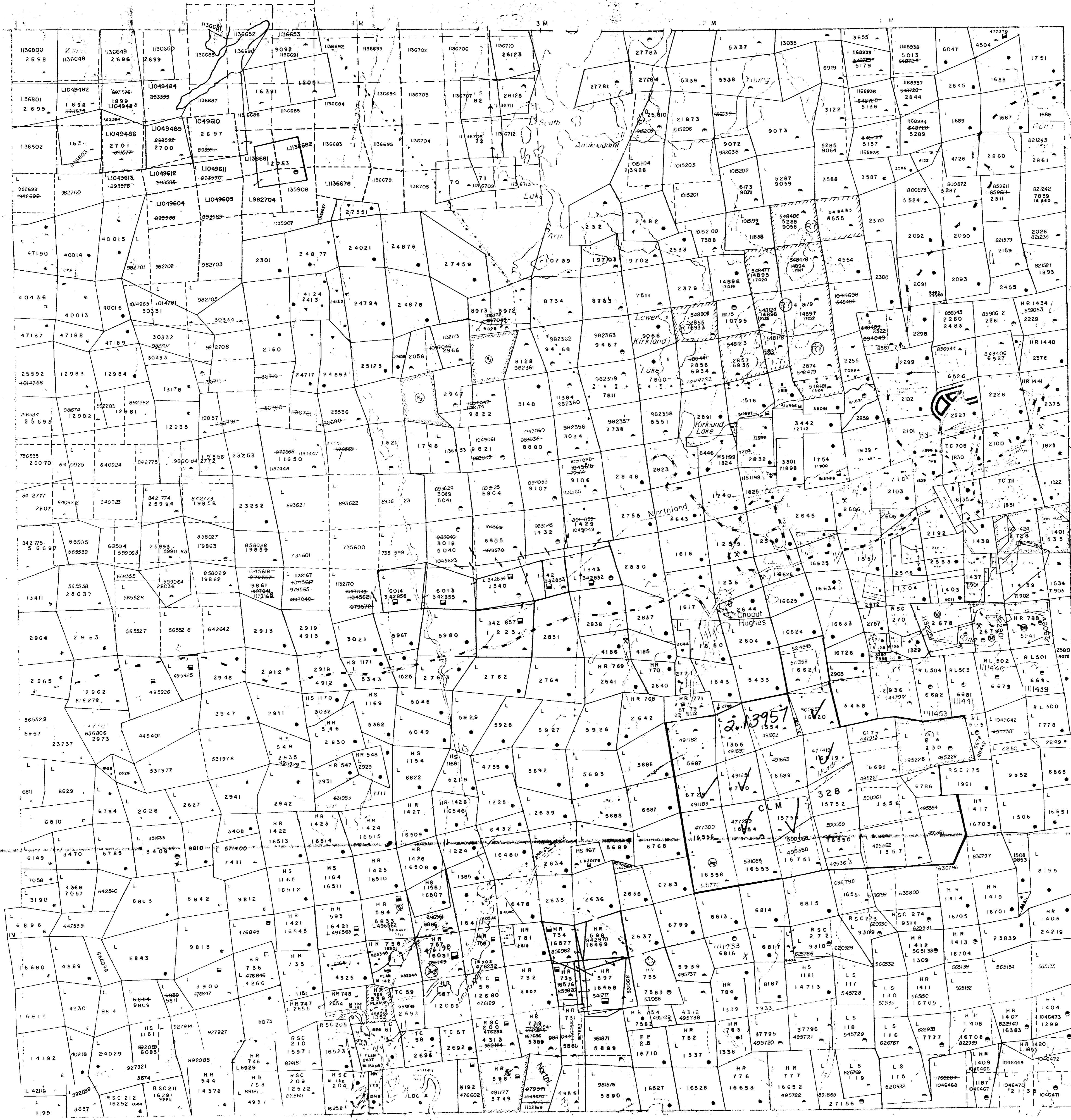
SCHEDULE I

Number of Day's Work Performed On Each Claim

<u>Hole No.</u>	<u>No. of Samples</u>	<u>477299</u>	<u>477419</u>	<u>491183</u>	<u>491651</u>	<u>500057</u>	<u>500058</u>	<u>Cert. No.</u>	<u>Amount</u>
AK90 - 10	31	-	-	-	355.73	-	-	1724	355.73
- 10	15	-	-	-	172.12	-	-	1732	172.12
- 11	27	-	-	-	309.83	-	-	1745	309.83
- 11	15	-	-	-	172.12	-	-	1753	172.12
- 12	2	22.95	-	-	-	-	-	1754	22.95
- 12	5	-	-	-	57.38	-	-	1754	57.38
- 12, 13	48	-	-	-	550.80	-	-	1767	550.80
- 14	52	-	-	-	596.70	-	-	1781	596.70
- 14	5	-	-	-	-	-	57.38	1781	57.38
- 16	70	-	803.25	-	-	-	-	1797	803.25
- 21	38	-	436.05	-	-	-	-	1823	436.05
- 21	28	-	296.10	-	-	-	-	1828	296.10
- 22	90	-	-	-	-	1,032.75	-	1839	1,032.75
- 22	22	-	252.45	-	-	-	-	1839	252.45
- 21	20	-	229.50	-	-	-	-	1842	229.50
- 26	35	-	270.00	-	-	-	-	1892	270.00
- 26	27	-	309.82	-	-	-	-	1894	309.82
- 27	50	-	-	-	573.75	-	-	1905	573.75
- 28	100	-	-	1,147.50	-	-	-	1918	1,147.50
- 28	41	-	-	470.47	-	-	-	1919	470.47
	<u>721</u>								
Total Expenditure		<u>22.95</u>	<u>2,597.17</u>	<u>1,617.97</u>	<u>2,788.43</u>	<u>1,032.75</u>	<u>57.38</u>		<u>\$8,116.65</u>
Total Days Credit		<u>1.53</u>	<u>173.14</u>	<u>107.86</u>	<u>185.90</u>	<u>68.85</u>	<u>3.83</u>		<u>541.11</u>

JLS





DEFINITION OF TERMS

ROADS
 REMOVED BY ADS
 HIGHWAYS
 RAILWAYS
 POWER LINES
 MARCH OF MUSKIEE
 BOUNDARIES

NOTES

Areas shown thus [Symbol] for staking disposal

Mining claim L.5779 - Mining Rights subject to Sec. 36 of the Mining Act (RSO. 1950)

- AREAS WITHDRAWN FROM STAKING
- (S) SURFACE RIGHTS WITHDRAWN FROM STAKING SECTION 43/70 ORDER NO. W/6/80
 - (R) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W/8/82
 - (N) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W/8/86 ORDER NO. 0-20/88 OPENS PART W-38/86
 - (D) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W/8/86 ORDER NO. 0-22/88 OPENS PART W-38/86
 - (H) SURFACE AND MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W/8/86 ORDER NO. 0-19/80 NR OPENS W/8/86 NOV 15/80
 - (M) MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W/8/87 NR ORDER NO. 0-33/88 OPENS W-38/87
 - (T) MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W-22/86
 - (U) MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W-22/86 NR ORDER NO. 0-2/89 NR
 - (V) MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W-22/86 NR ORDER NO. 0-22/88 OPENS PART W-38/86
 - (W) MINING RIGHTS WITHDRAWN FROM STAKING SECTION 36/80 ORDER NO. W-37/89 NR ORDER NO. 0-11/90 OPENS W-37/89 NR

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

DATE OF ISSUE
 FEB 12 1991
 LARDER LAKE
 MINING RECORDER'S OFFICE



2.13957



LEGEND

— Length of hole

○ 90-01—Hole No

Dip of hole—(-45°)

SCALE

0 100 200

metres

BATTLE MOUNTAIN (CANADA) INC.

KIRKLAND LAKE PROJECT
AMALGAMATED KIRKLAND PROPERTY
1990
D.D.H. PLAN

Project No. 75-JV-28	Scale 1:5000
NTS: 42 A/1	Data by: W. Benham.
Drawing No. DP-001	Date: DEC. 1990



42A01NE0111 2.13957 TECK

BL. 100 N

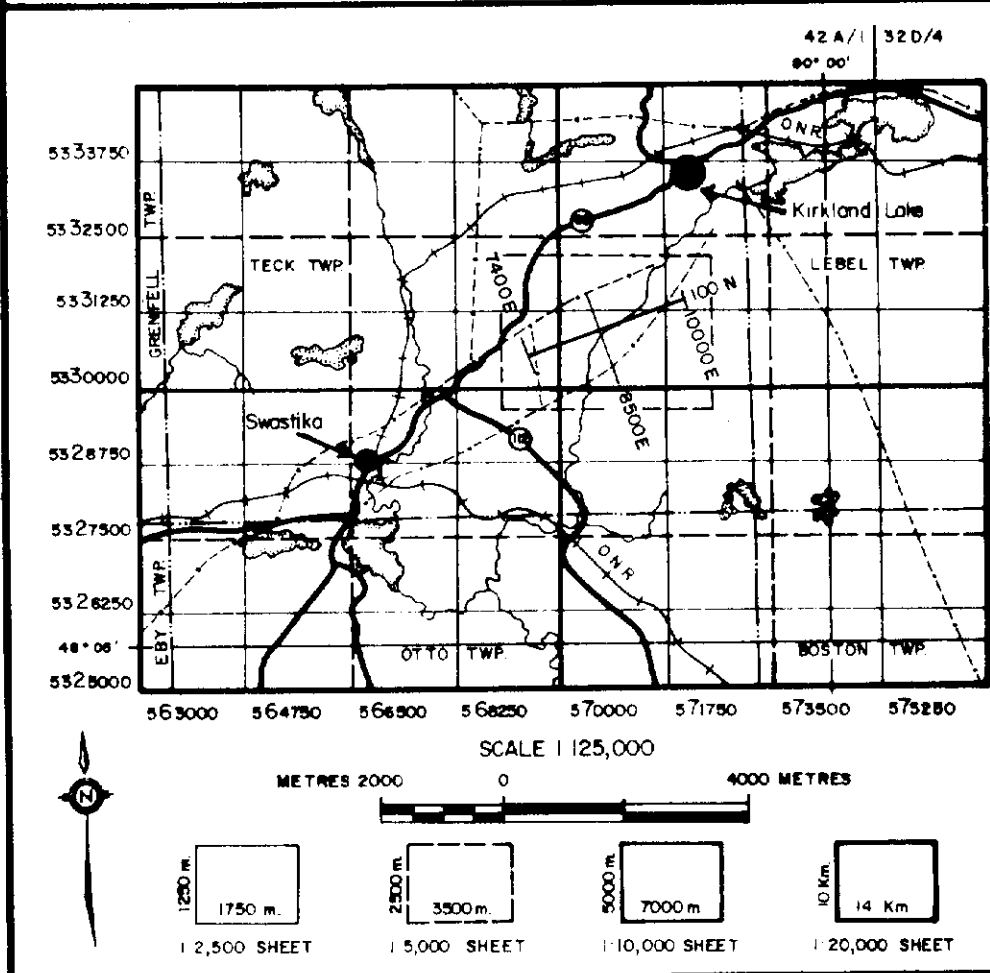
210

L477300



LEGEND

- FAULT
- "STRUCTURAL BREAK" MAGNETIC LOW
- IP CHARGEABILITY (Pole-dipole $\alpha=12.5m$)
- GOLD PROSPECT
- OVERBURDEN TRENCH



BATTLE MOUNTAIN (CANADA) INC.

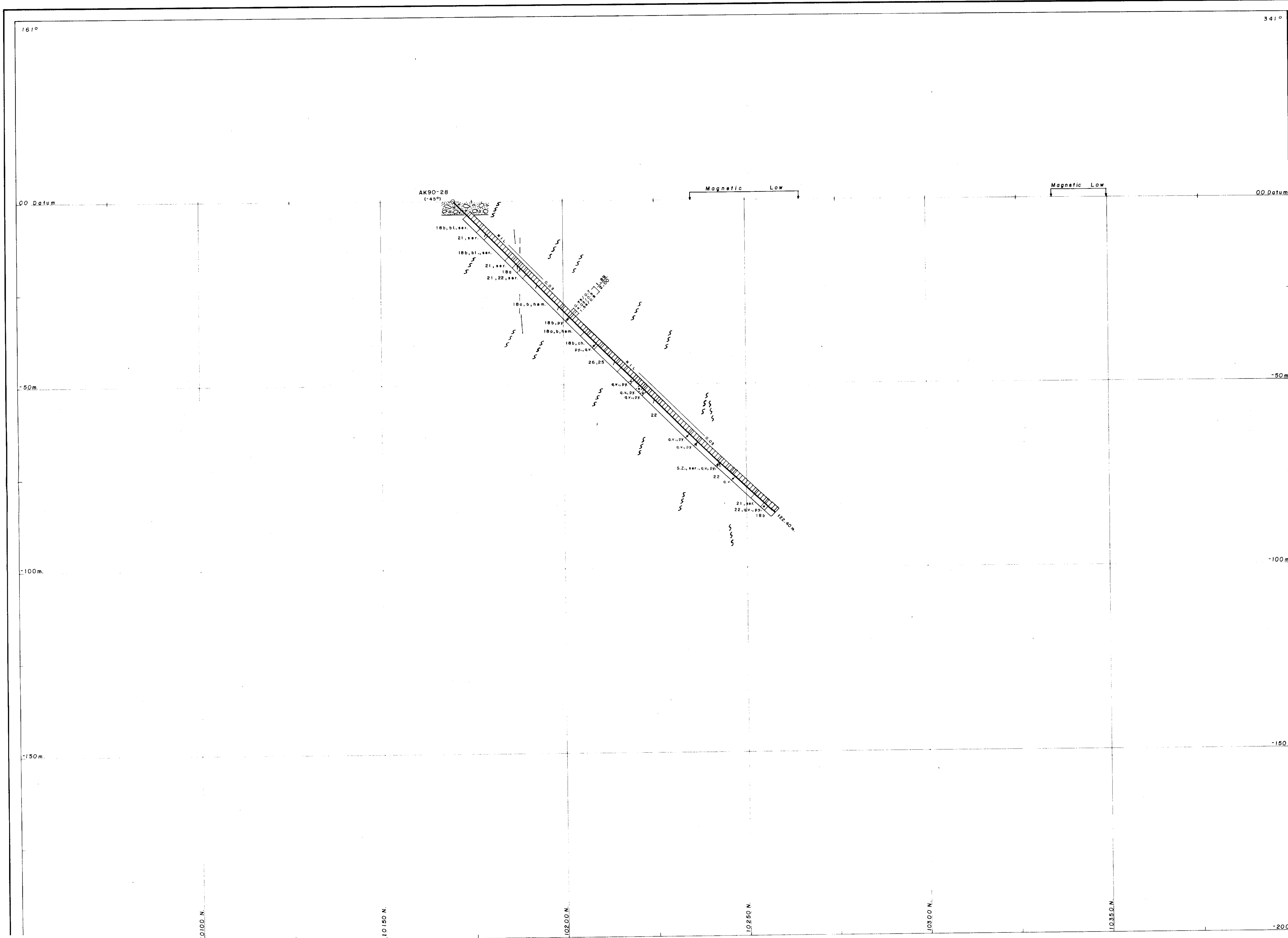
2.13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

GROUND MAGNETIC INTERPRETATION

PROJECT No. 75-JV-28	DATA BY W Benham
NTS 42A/1 & 32D/4	DRAWN BY B.H. Madill, Tech.
DRAWING No. GP-001	DATE: Revised January 1991
SCALE: 1:5,000	





LEGEND

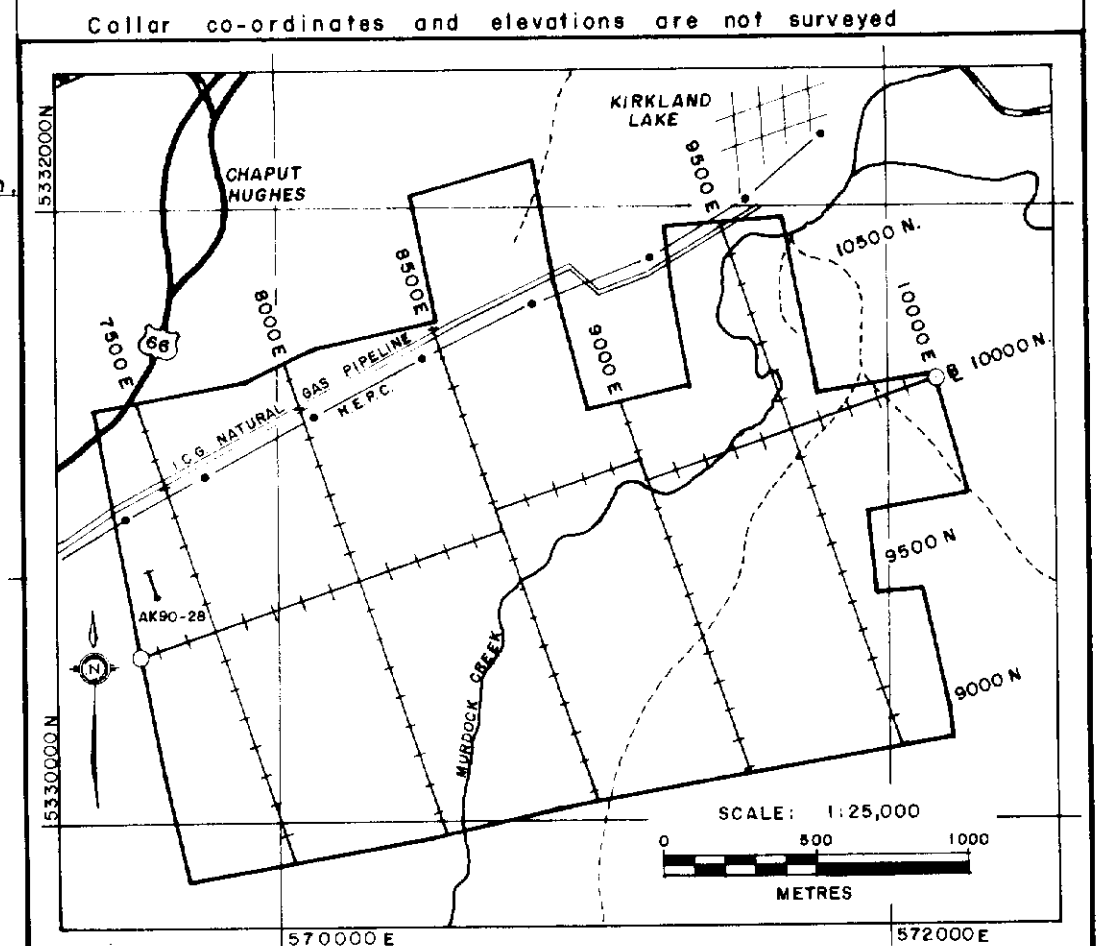
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdaloidal	tsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - shaled
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	var - variolitic
cp - chalcopryite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone	bl - bleached	



BATTLE MOUNTAIN (CANADA) INC.
2.13957

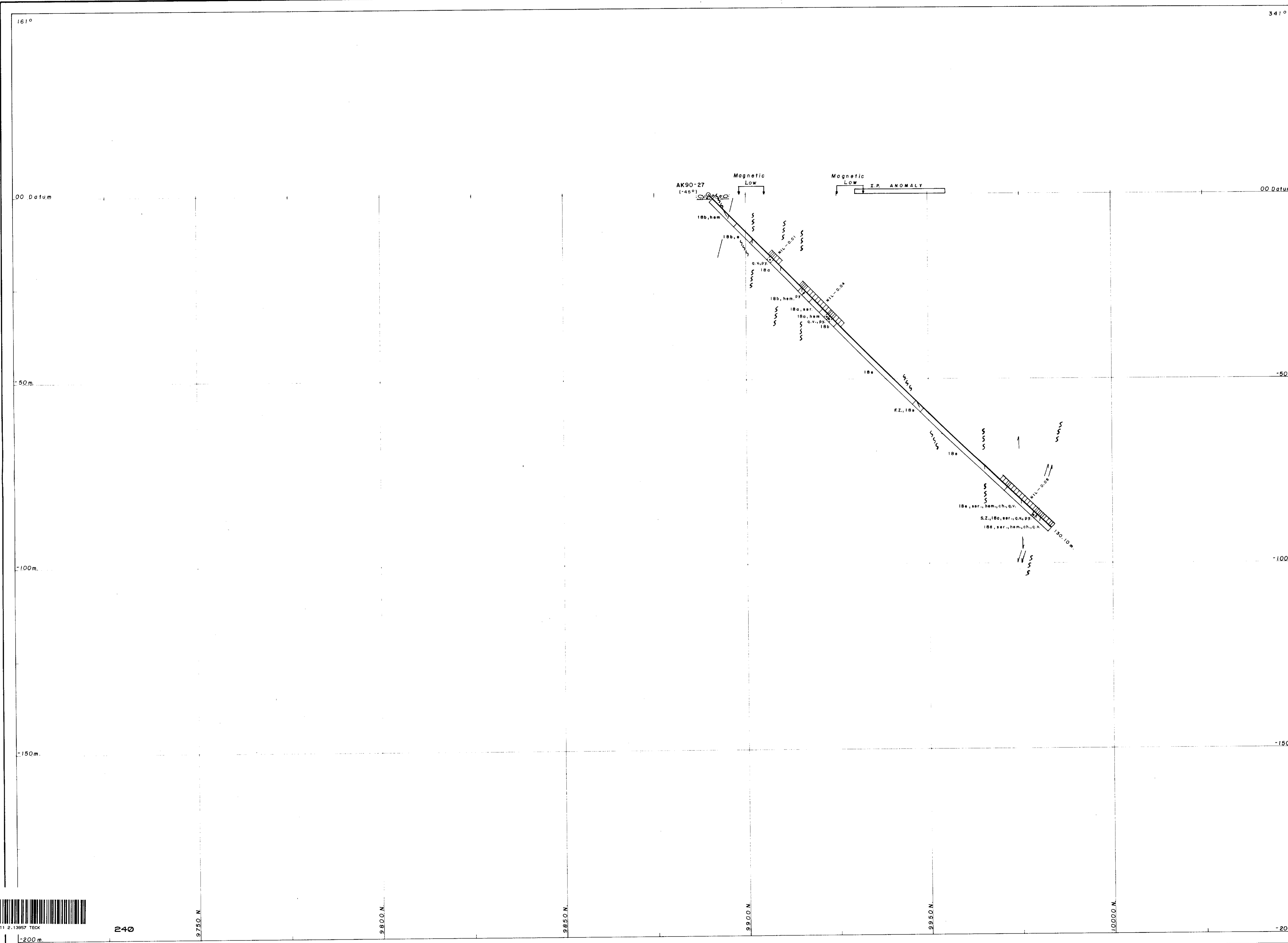
KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY

SECTION 7350 E
 HOLE AK90-28

PROJECT No.: 75-JV-28	DATA BY: W. Benhom
NTS.: 42 A/1	DRAWN BY: B. H. Modill, Tech.
DRAWING No: DC-001	DATE: January 1991

SCALE: 1:500





LEGEND

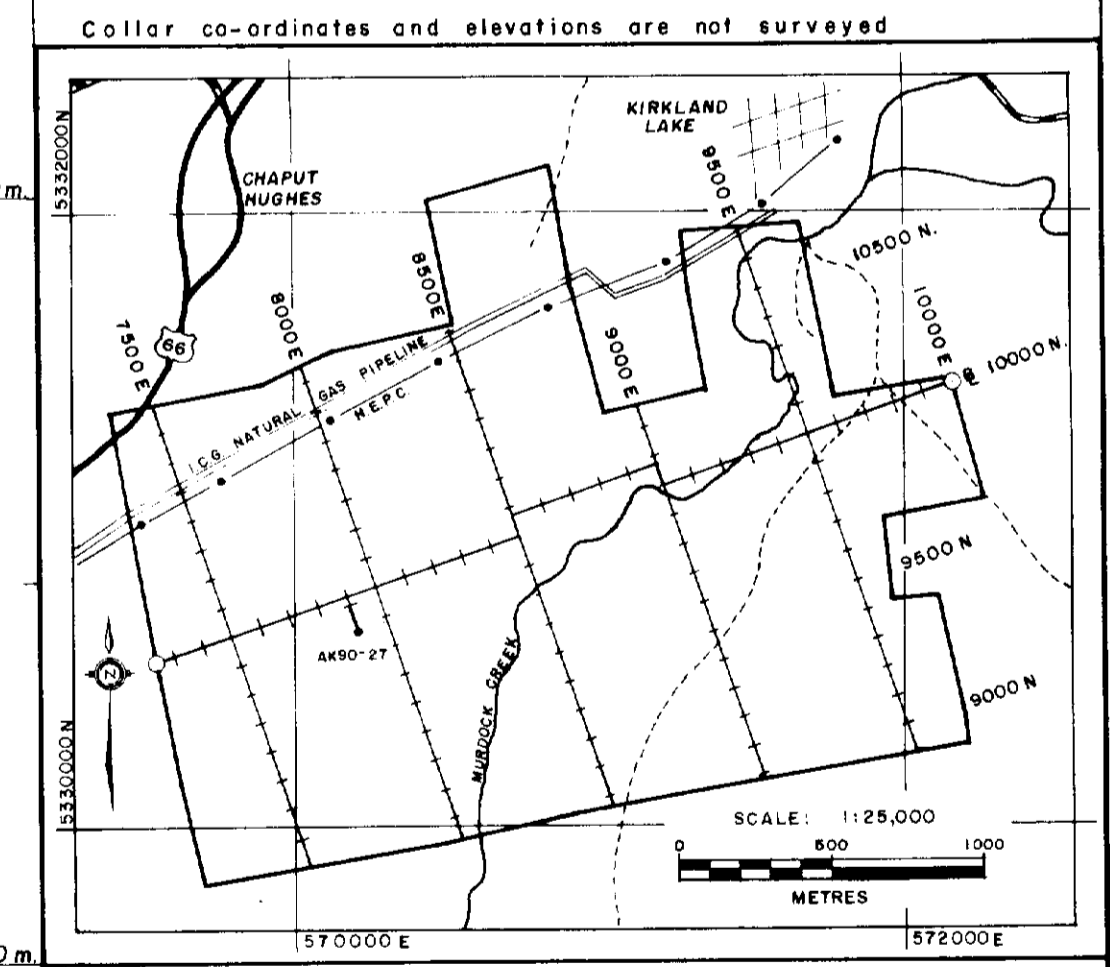
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agg - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - antigorite	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lcm - laminated	sh - sheared
cd - calcite	m - massive	S.Z. - shear zone
cb - carbonate	mag - magnetite	trc - trachoidict
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
f.c. - fractured	mo - molybdenite	vg - visible gold
f.z. - fault zone		



BATTLE MOUNTAIN (CANADA) INC.
 2-1393

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY
 SECTION 7900 E
 HOLE AK90-27

PROJECT No.: 75-JV-28	DATA BY: W. Benham
N.T.S. 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: DC-002	DATE: January 1991

SCALE: 1:500



161°

341°

LEGEND

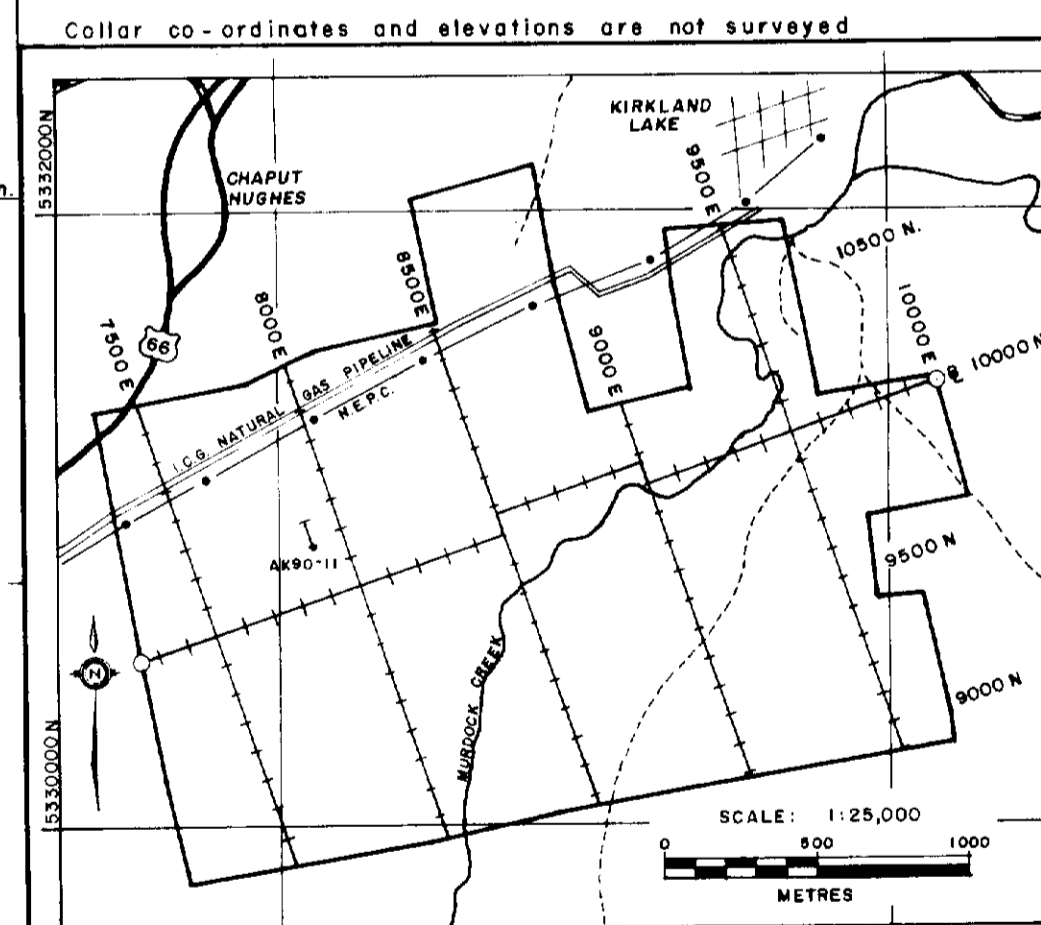
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Siliceous	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

app - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdales	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - siliceous
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sr - sward
cc - calcite	m - massive	sz - shear zone
cb - carbonates	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone		



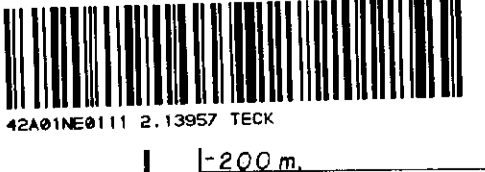
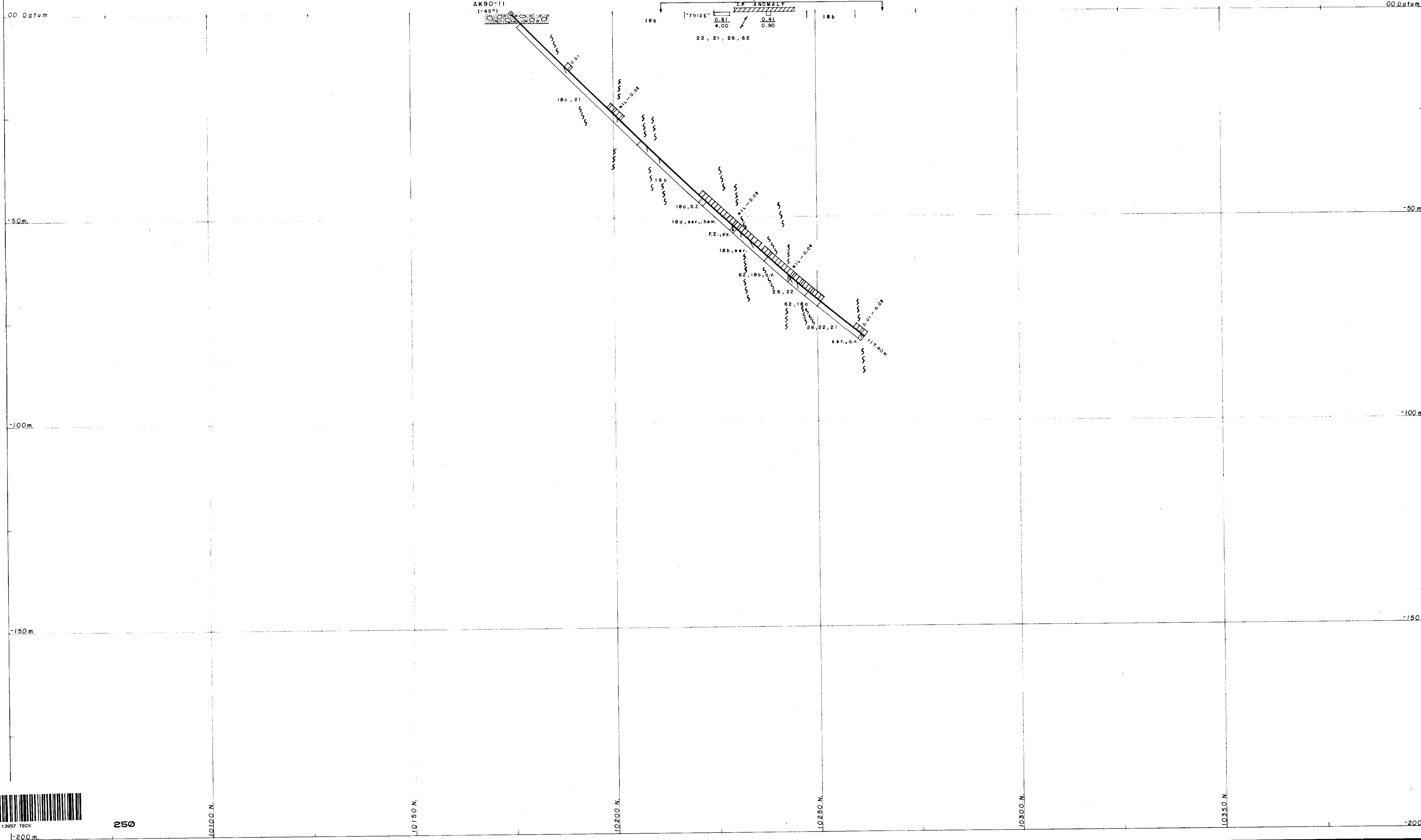
BATTLE MOUNTAIN (CANADA) INC.
2.13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 7900 E
HOLE AK90-II

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B. H. Madill, Tech.
DRAWING No: DC-003	DATE: January 1991

SCALE: 1:500
METRES



250

10100.0 N.

10150.0 N.

10200.0 N.

10250.0 N.

10300.0 N.

10350.0 N.

10400.0 N.

1:200 m.

161°

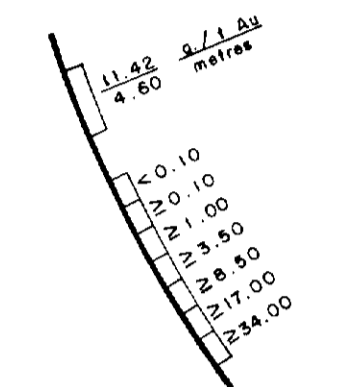
341°

LEGEND

- | | |
|-----------------------|---------------------|
| 60 ALTERATION | 20 SEDIMENTS |
| 61 Chloritic | 21 Conglomerate |
| 62 Sericitic | 22 Graywacke |
| 63 Hematitic | 25 Siltstone |
| 64 Silicic | 26 Mudstone |
| 65 Carbonatized | |
| 40 INTRUSIVES | 10 VOLCANICS |
| 41 Diabase | 18 Trachytes |
| 42 Lamprophyre | 18a Ash Tuff |
| 46 Syenite | 18b Lapilli Tuff |
| 461 Augite Syenite | 18c Block Tuff |
| 462 Mafic Syenite | 18d Lithic Tuff |
| 465 Feldspar Porphyry | 18e Monolithic Tuff |

SYMBOLS

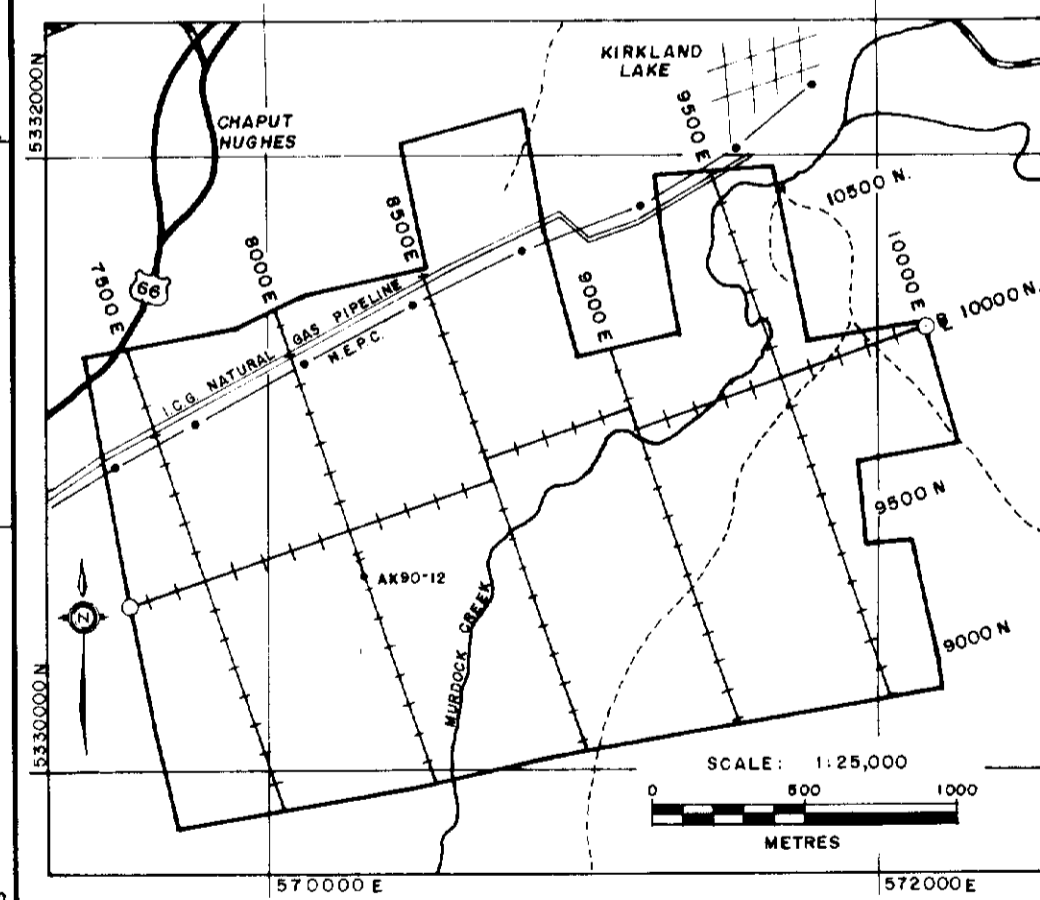
- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

- | | | |
|--------------------------|---------------------------|-------------------|
| agp - augite porphyritic | fd - feldspar porphyritic | qv - quartz vein |
| amg - amygdaloid | fsp - feldspathic | ser - sericitic |
| amp - amphibolite | gf - graphitic | sil - silicic |
| ank - ankerite | hem - hematite | sp - sphalerite |
| bx - breccia | lam - laminated | sh - sheared |
| ca - calcite | m - massive | s.z - shear zone |
| cb - carbonate | mcg - magnetite | fr - fractoidal |
| ch - chlorite | pb - galena | var - variolite |
| cp - chalcopyrite | py - pyrite | ves - vesicular |
| fc - fractured | mo - molybdenite | vg - visible gold |
| f.z - fault zone | bl - bleached | |

Collar co-ordinates and elevations are not surveyed

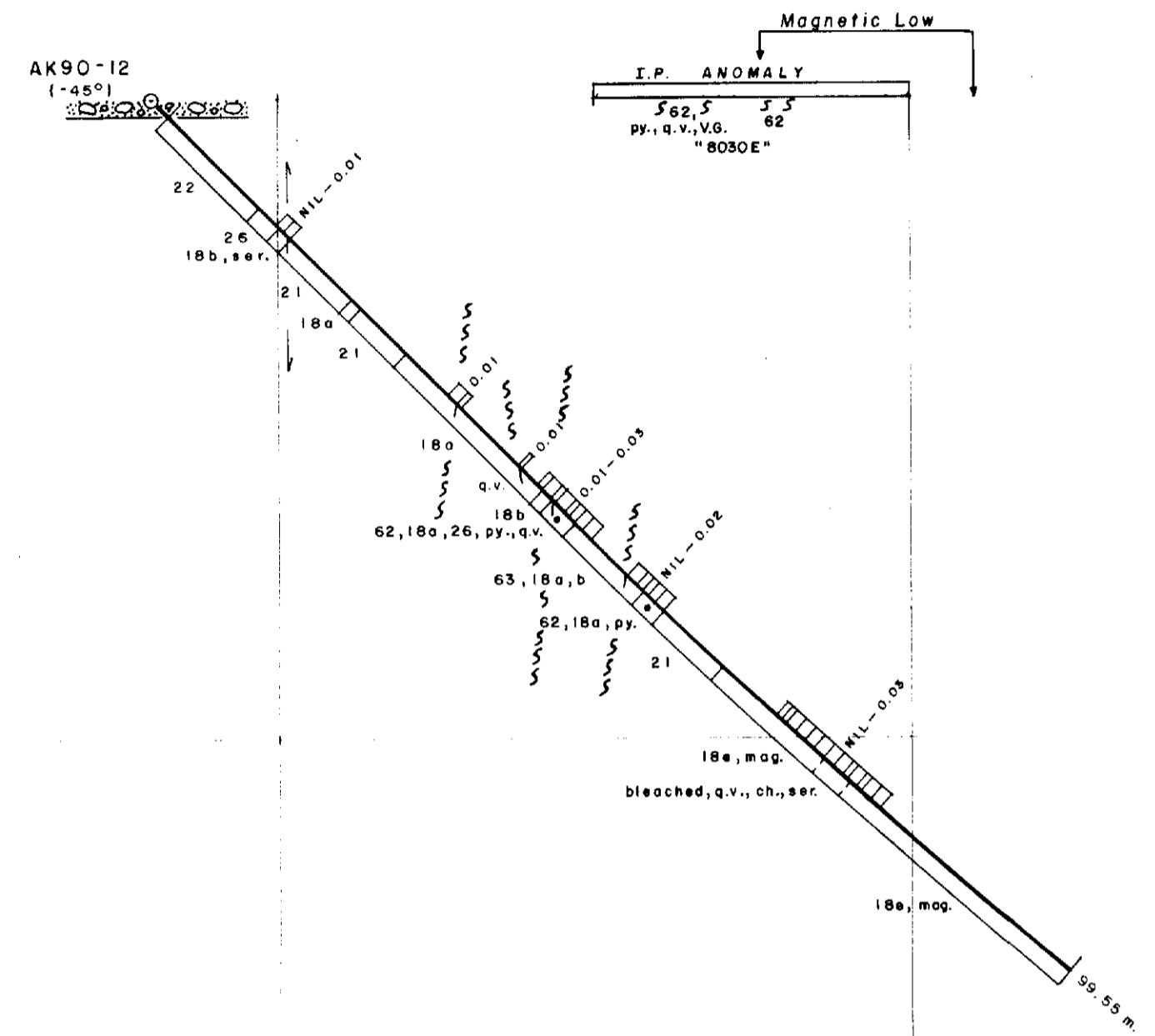
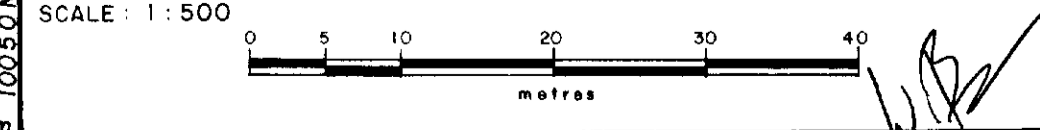


BATTLE MOUNTAIN (CANADA) INC.
 2010007

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 (AMALGAMATED KIRKLAND PROPERTY)

SECTION 8000 E
 HOLE AK90-12

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A / 1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-004	DATE: January 1991



00 Datum

00 Datum

-50m

-50m

-100m

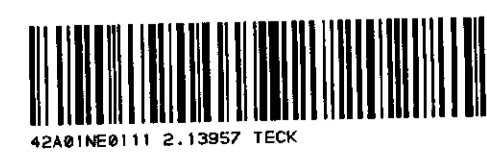
-100m

-150m

-150m

-200m

-200m



260

9750 N

9800 N

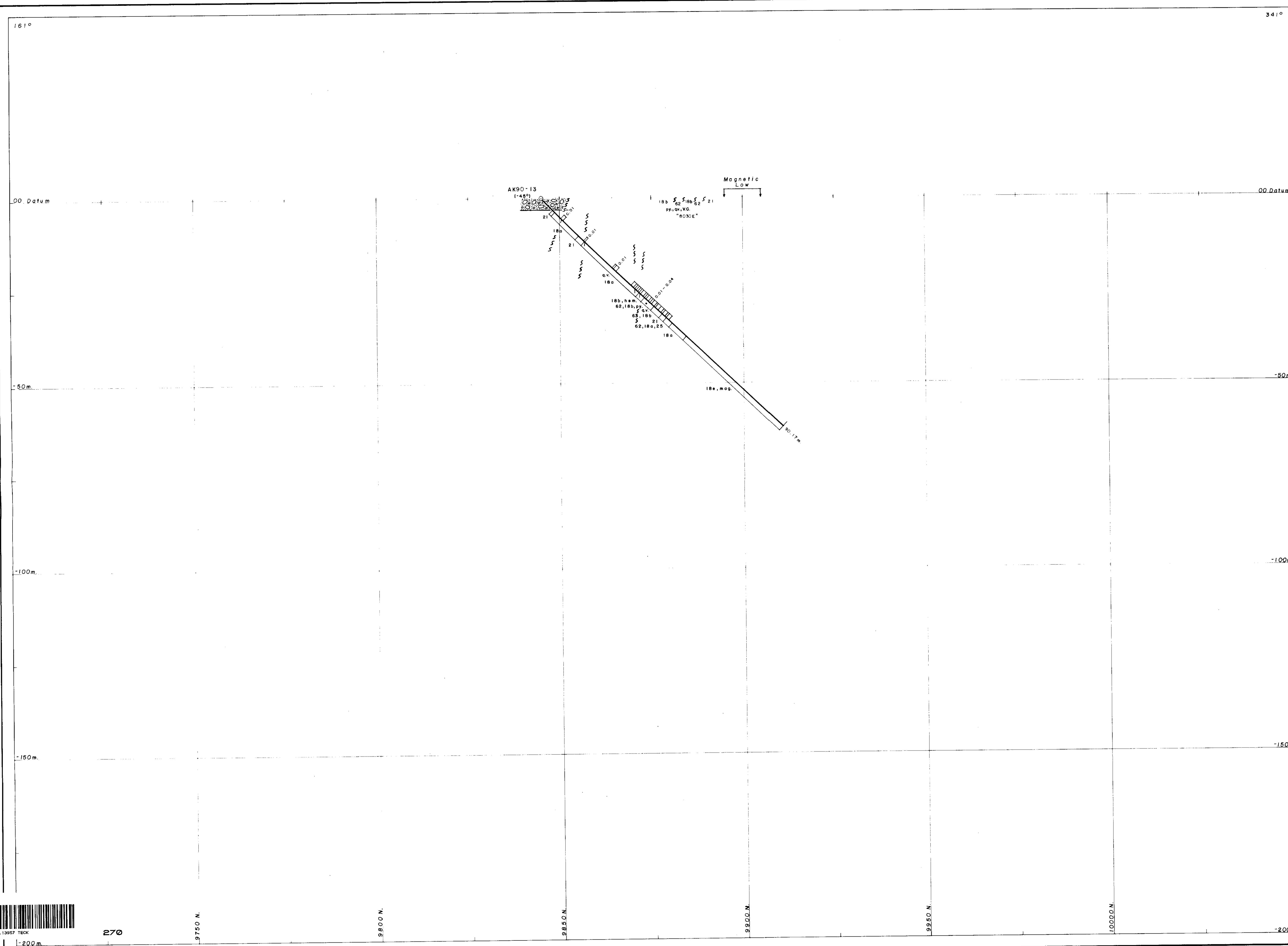
9850 N

9900 N

9950 N

10000 N

10050 N



LEGEND

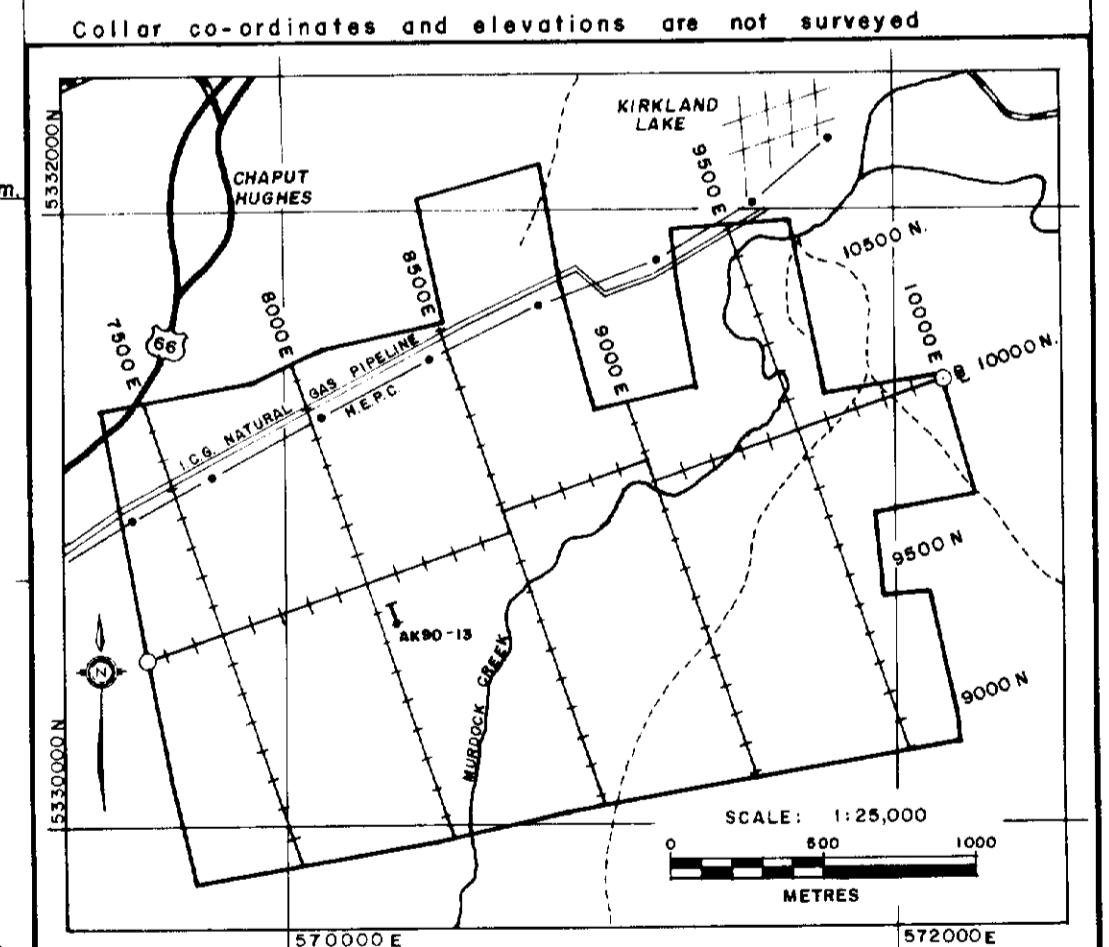
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdaloid	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
br - breccia	lom - lamination	sh - sheared
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoid
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone		



BATTLE MOUNTAIN (CANADA) INC.

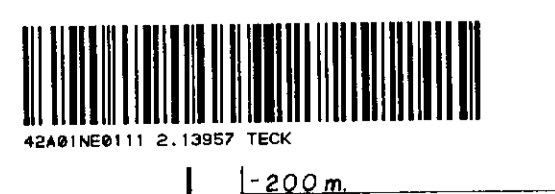
2.13957

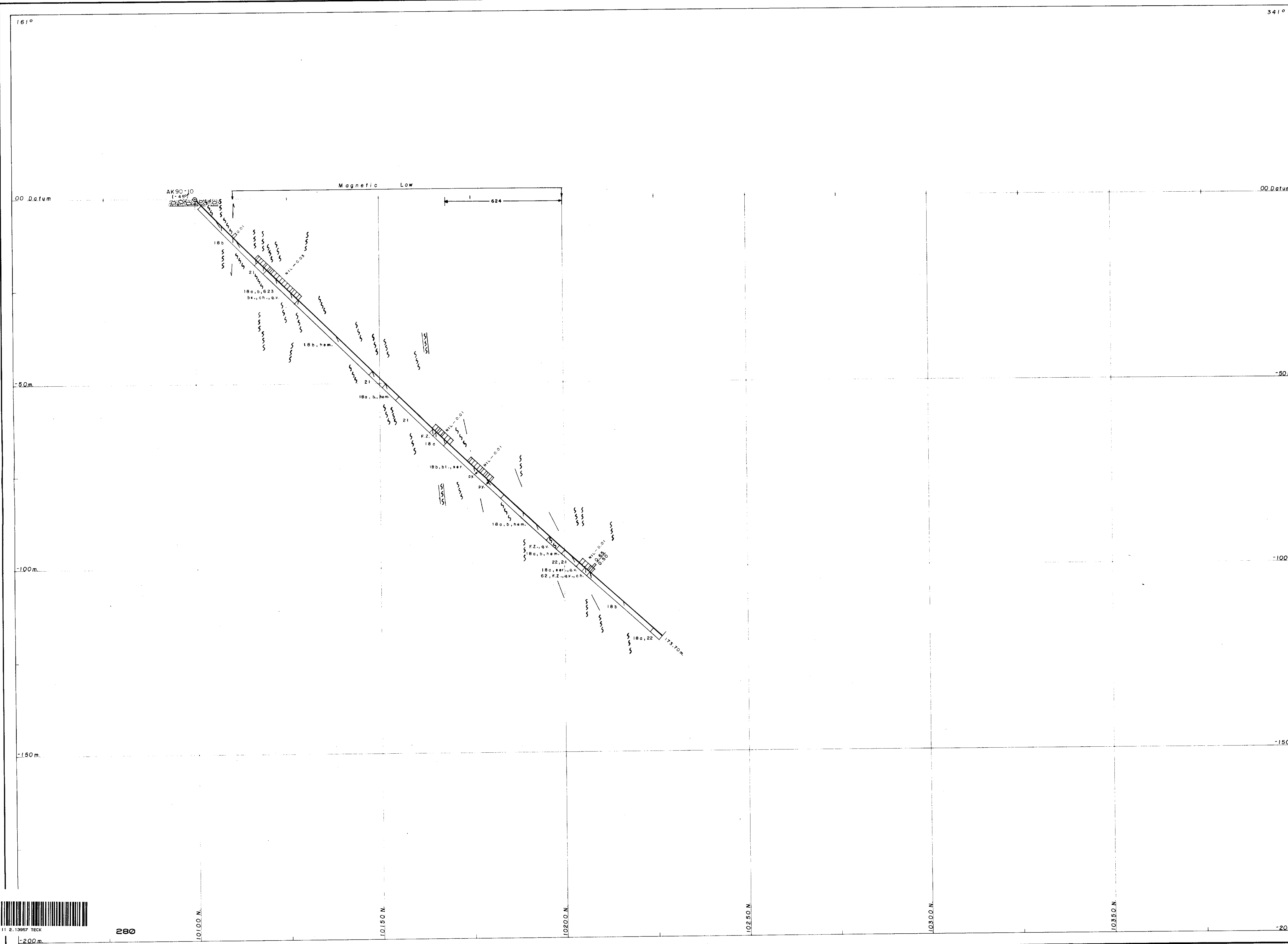
KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8050E
HOLE AK90-13

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: DC-005	DATE: January 1991

SCALE: 1:500





LEGEND

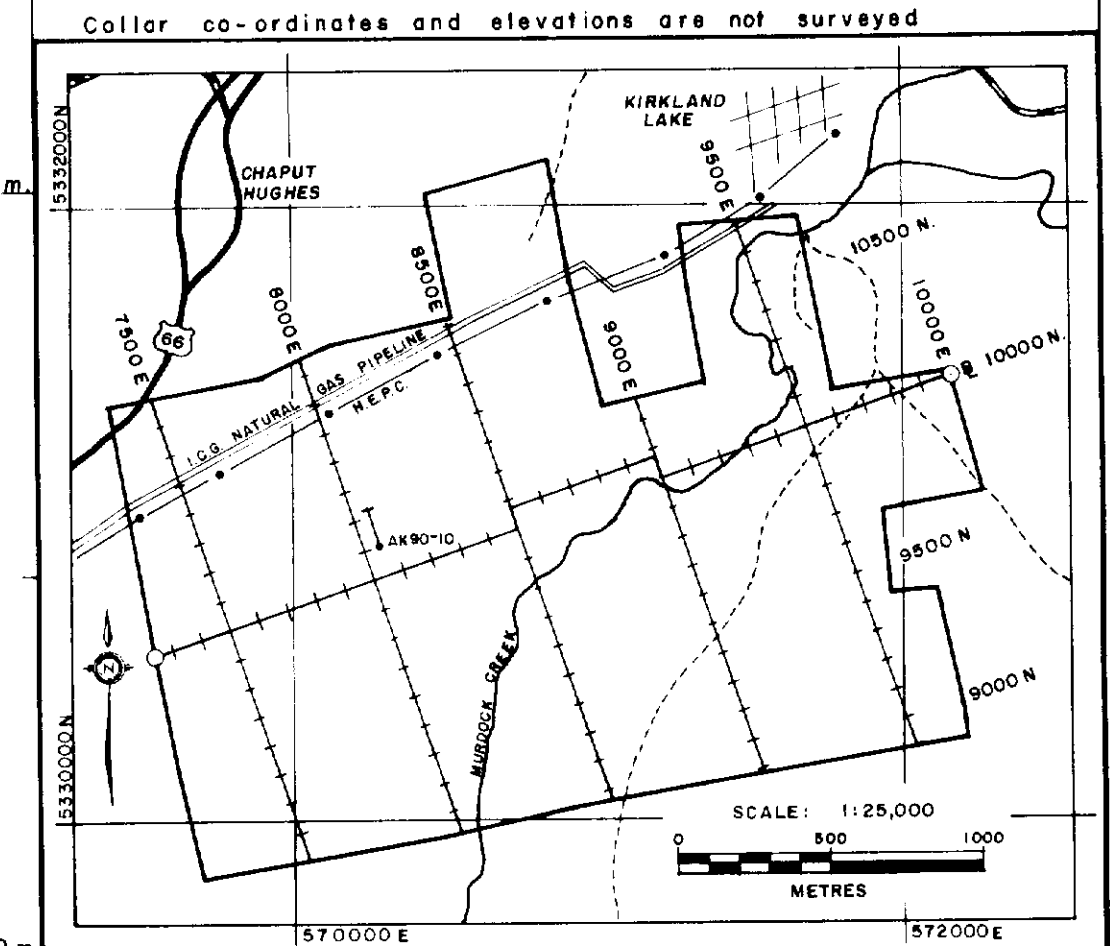
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Black Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

Bedding, contacts	Pyrite Mineralization
Breccia	
Facing direction	
Foliation	
Fault, Fault Zone	
Drag folding	

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdaloidal	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
an.k - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - sheared
cc - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	vor - vermicular
cp - chalcopryrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone	bl - bleached	



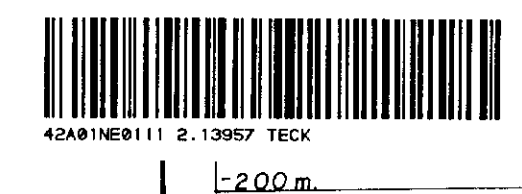
BATTLE MOUNTAIN (CANADA) INC.
2-13957

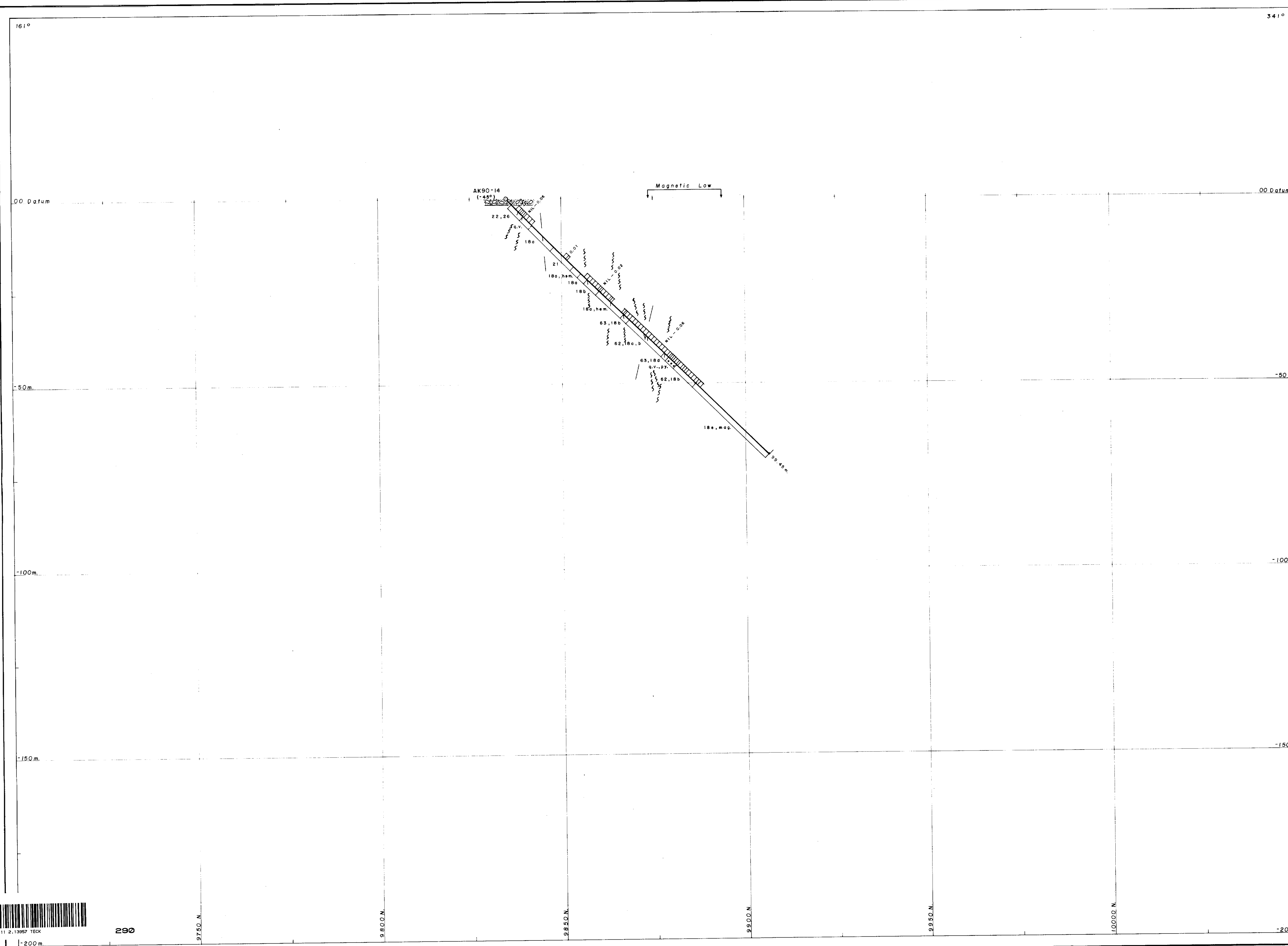
KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8050 E
HOLE AK90-10

PROJECT No.: 75-JV-28	DATA BY: W. Benham
N.T.S.: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-006	DATE: January 1991

SCALE: 1:500





LEGEND

60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Black Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

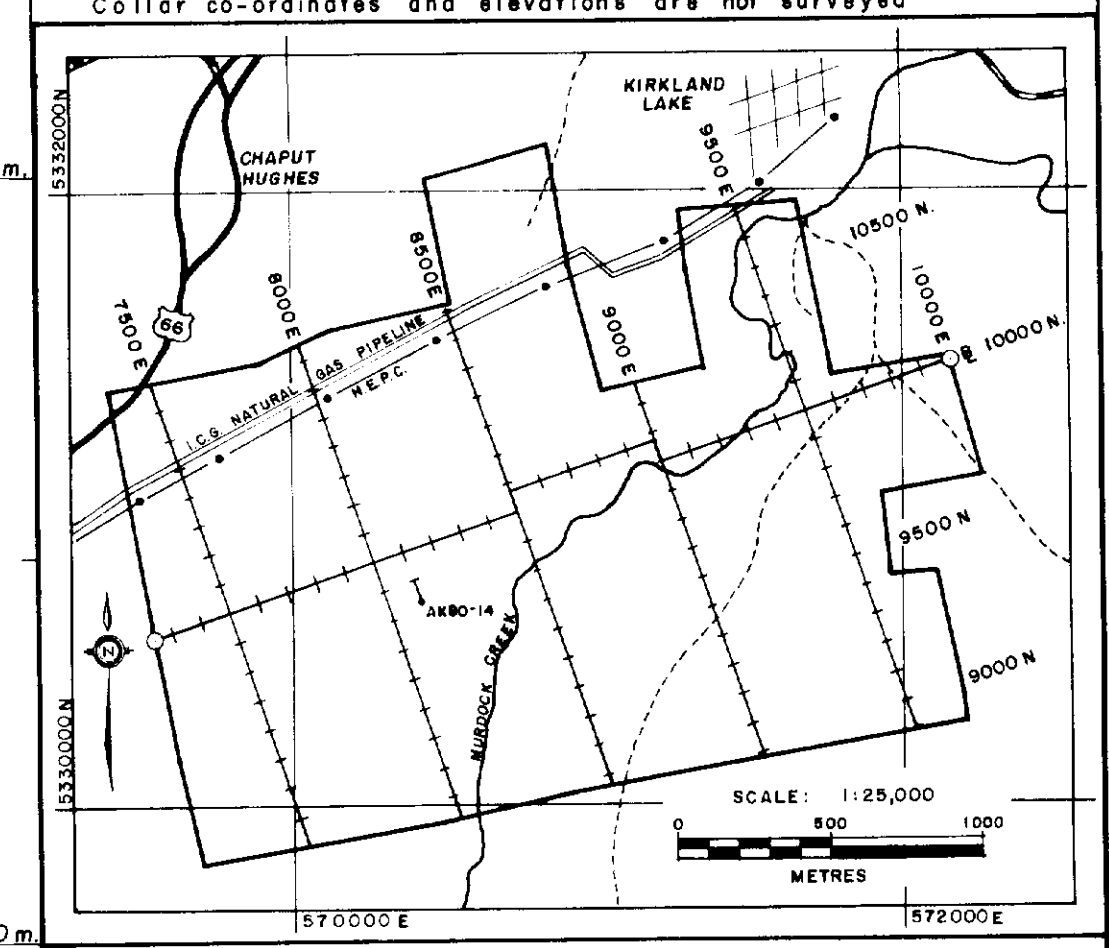
SYMBOLS

—	Bedding, contacts
△	Breccia
→	Facing direction
~	Foliation
—	Fault, Fault Zone
~	Drag folding
H	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdaloidal	fsp - felspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	ham - hematite	sp - spineliferous
br - breccia	lom - laminated	sh - sheared
ca - calcite	m - massive	s.z - shear zone
cb - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mb - molybdenite	vg - visible gold
fz - fault zone		

Collar co-ordinates and elevations are not surveyed



BATTLE MOUNTAIN (CANADA) INC.

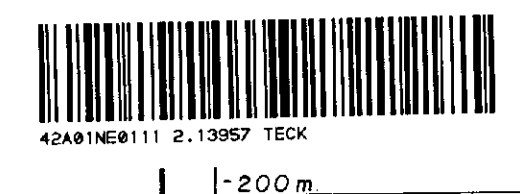
2.13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8100E
HOLE AK90-14

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: DC-007	DATE: January 1991

SCALE: 1:500



161°

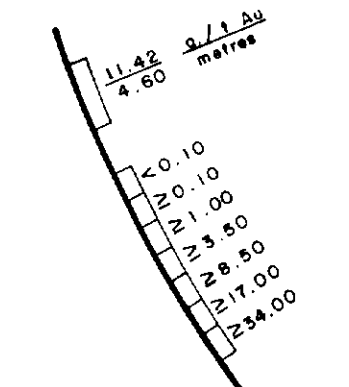
341°

LEGEND

- | | |
|-----------------------|---------------------|
| 60 ALTERATION | 20 SEDIMENTS |
| 61 Chloritic | 21 Conglomerate |
| 62 Sericitic | 22 Graywacke |
| 63 Hematitic | 25 Siltstone |
| 64 Silicic | 26 Mudstone |
| 65 Carbonatized | 10 VOLCANICS |
| 40 INTRUSIVES | 18 Trachytes |
| 41 Diabase | 18a Ash Tuff |
| 412 Lamprophyre | 18b Lapilli Tuff |
| 46 Syenite | 18c Block Tuff |
| 461 Augite Syenite | 18d Lithic Tuff |
| 462 Mafic Syenite | 18e Monolithic Tuff |
| 465 Feldspar Porphyry | |

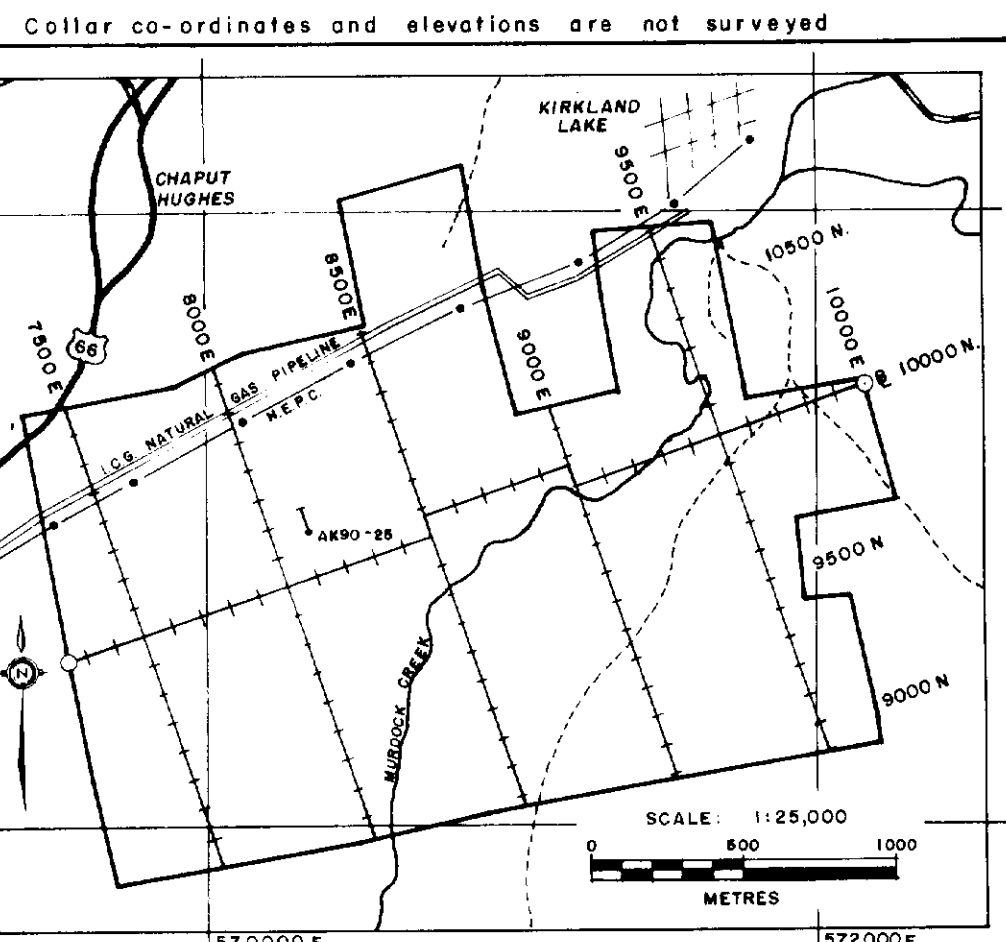
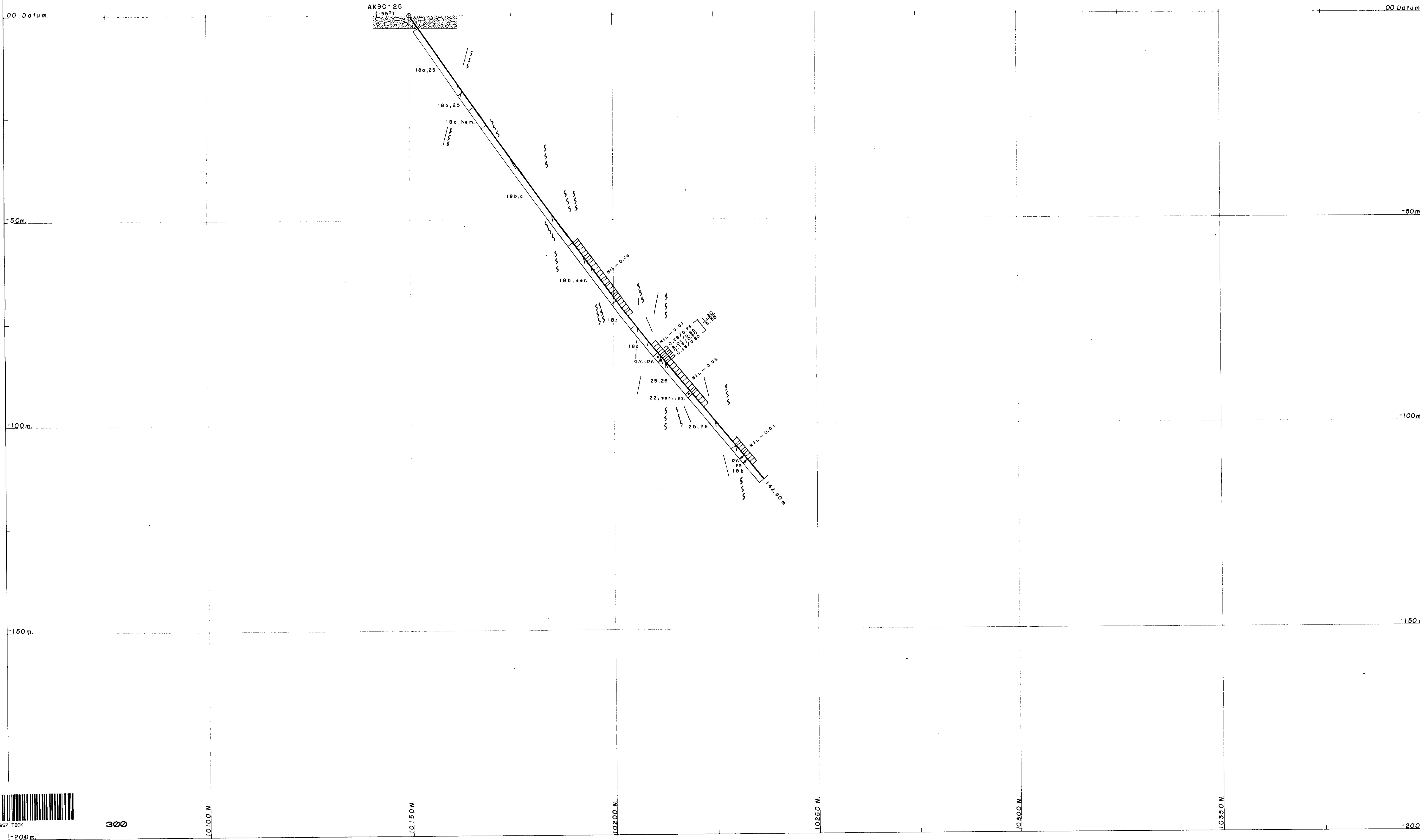
SYMBOLS

- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

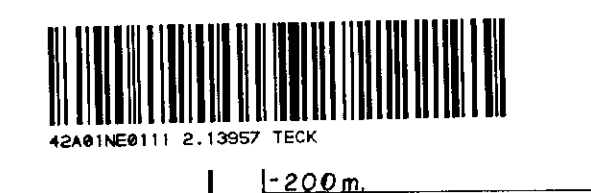
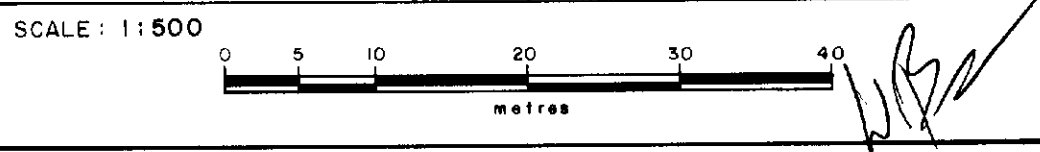
- | | | |
|--------------------------|---------------------------|-------------------|
| agp - augite porphyritic | fp - feldspar porphyritic | qv - quartz vein |
| amp - amygdales | fsp - feldspathic | ser - sericitic |
| amp - amphibolite | gf - graphitic | sil - silicic |
| ank - ankerite | hem - hematite | sp - sphalerite |
| bx - breccia | lam - laminated | sh - sheared |
| cd - calcite | m - massive | sz - shear zone |
| cb - carbonate | mag - magnetite | trc - trachoidal |
| ch - chlorite | pb - galena | var - variolitic |
| cp - chalcopyrite | py - pyrite | ves - vesicular |
| f.c. - fracturad | mo - molybdenite | vg - visible gold |
| f.z. - fault zone | | |



BATTLE MOUNTAIN (CANADA) INC.
 2-10857

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY
 SECTION 8125 E
 HOLE AK90-25

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Modill, Tech.
DRAWING No.: D C - 008	DATE: January 1991

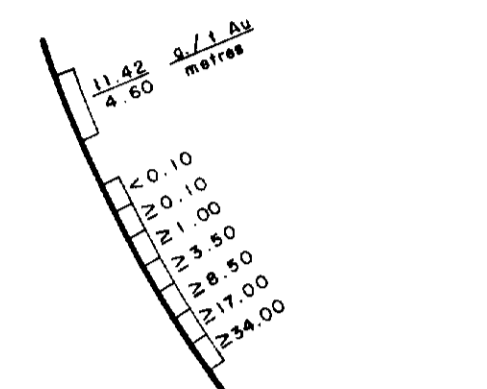


161°

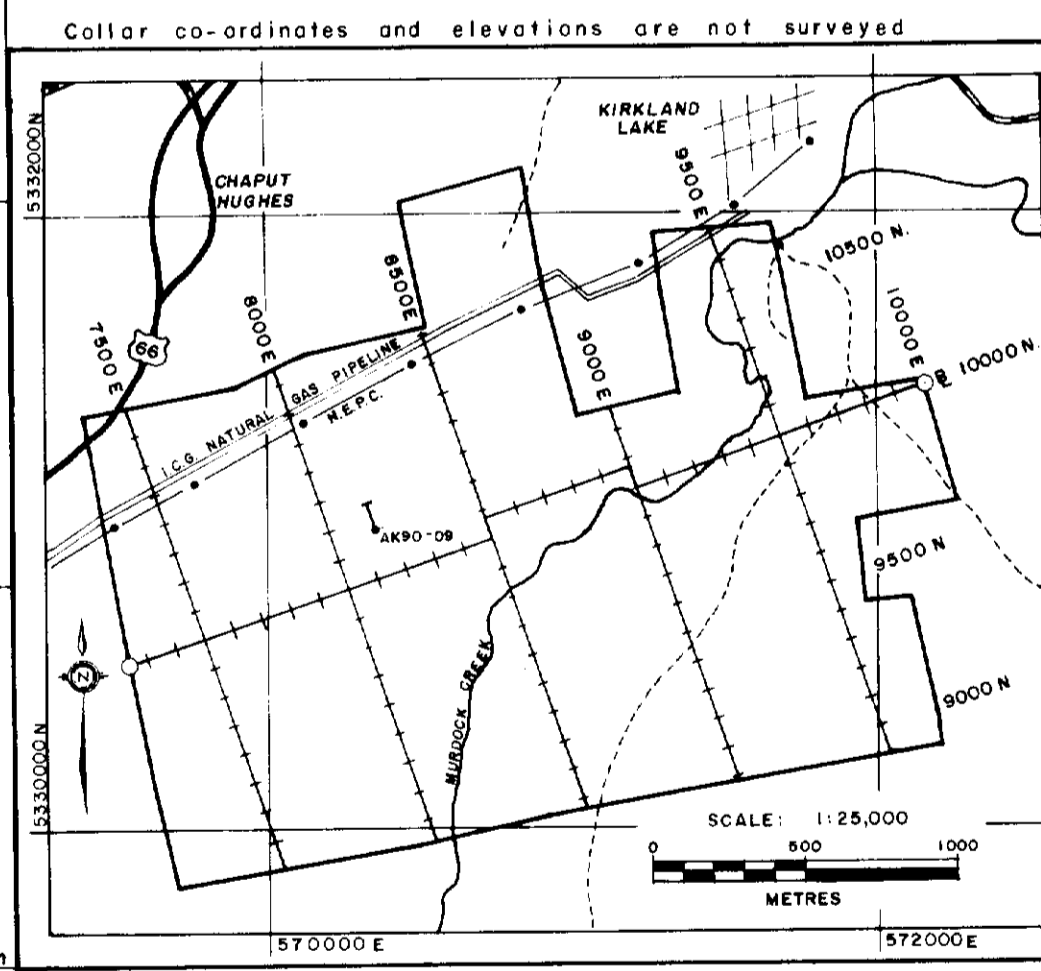
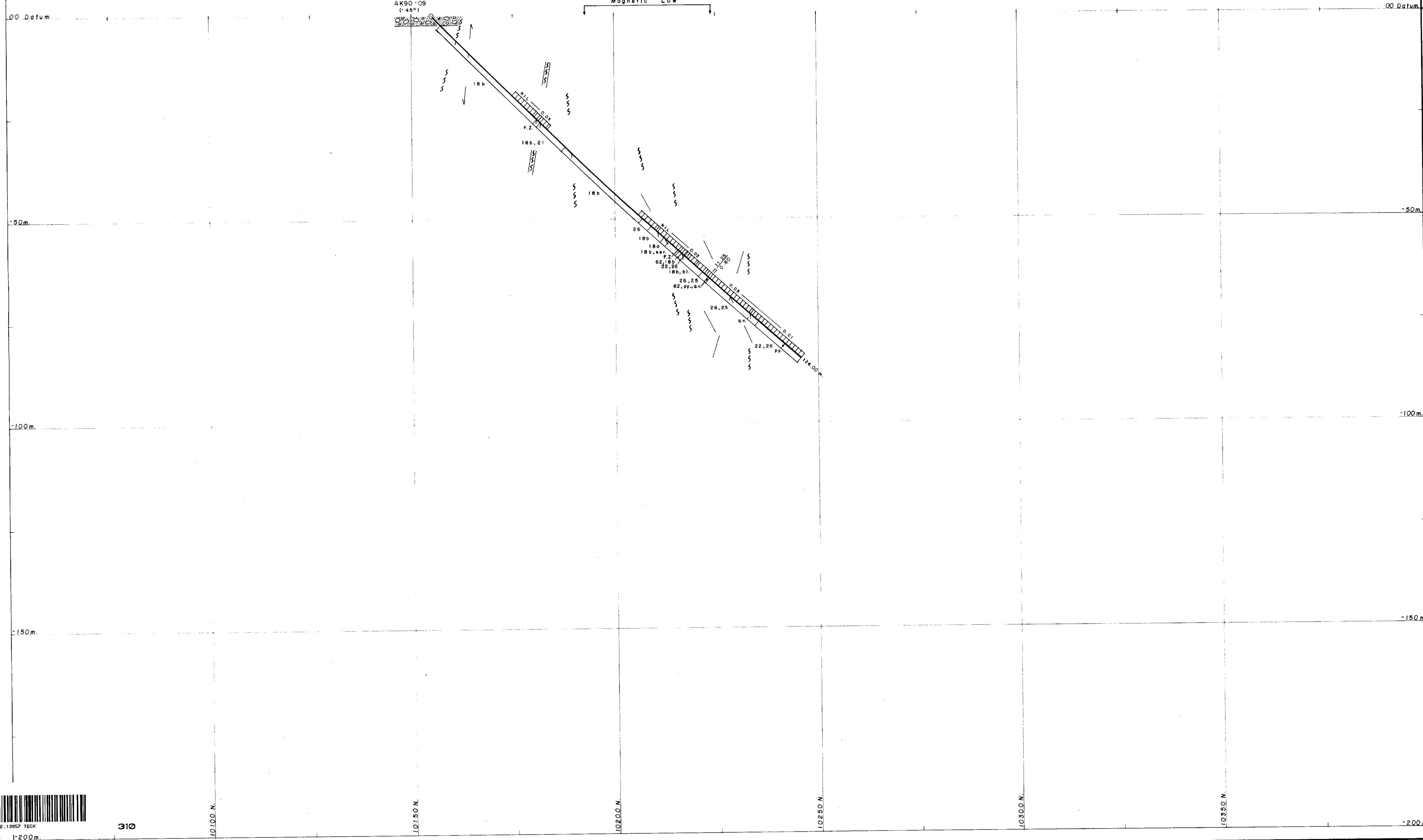
341°

LEGEND	
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS	
	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization



ABBREVIATIONS		
agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdales	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - sheared
cc - calcite	m - massive	sz - shear zone
cb - carbonates	mag - magnetite	trc - trachoidal
ch - chlorite	py - pyrite	var - variolitic
cp - chalcopyrite	mo - molybdenite	ves - vesicular
fc - fractured	bl - bleached	vg - visible gold
fz - fault zone		



BATTLE MOUNTAIN (CANADA) INC.

2.1 39 57

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8150 E
HOLE AK90-09

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-009	DATE: January 1991

SCALE: 1:500



161°

341°

00 Datum

00 Datum

-50m

-50m

-100m

-100m

-150m

-150m

-200m

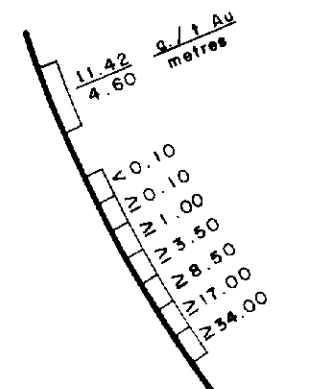
-200m

LEGEND

60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

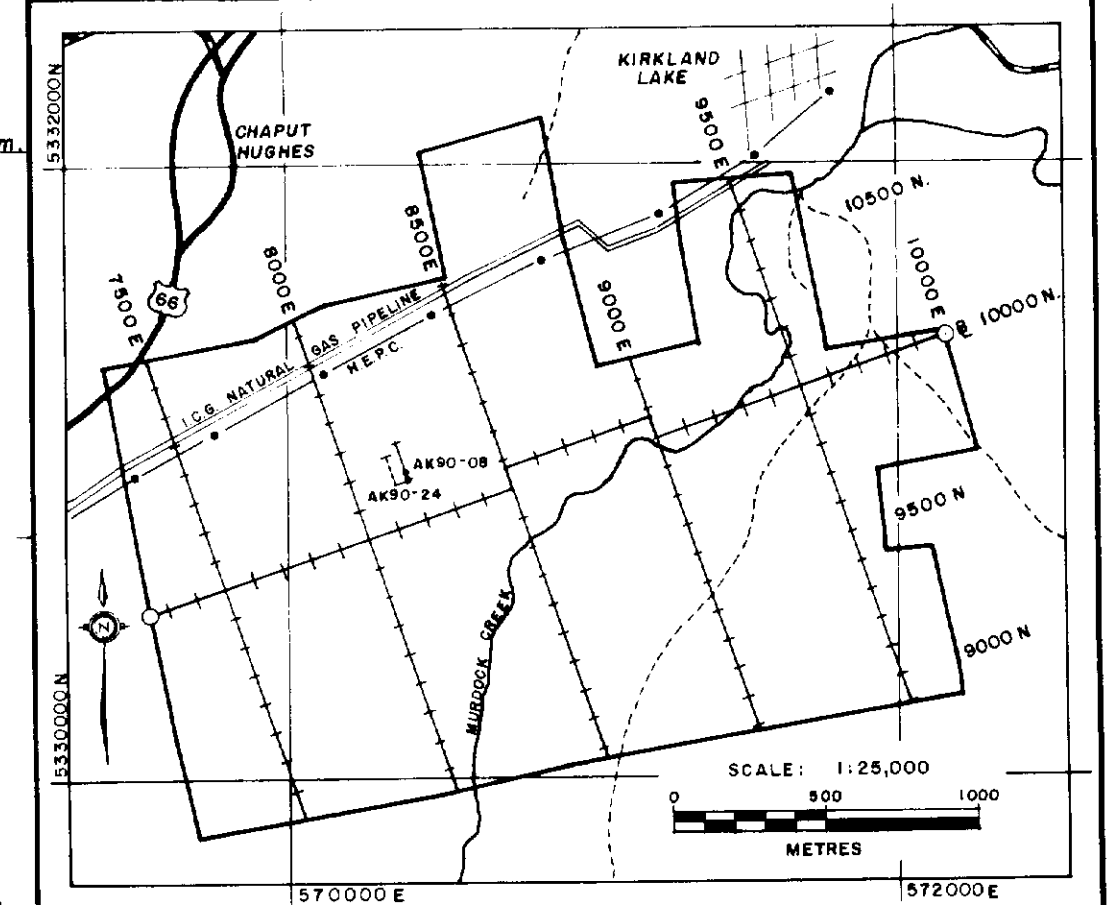
- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdaloid	fsp - feldspathic	ser - sericitic
amp - amphibolite	gl - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
br - breccia	lam - laminated	sh - sheared
cc - calcite	m - massive	s.z - shear zone
cb - carbonate	mag - magnetite	trc - trachoid
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone	bl - bleached	

Collar co-ordinates and elevations are not surveyed.



BATTLE MOUNTAIN (CANADA) INC.

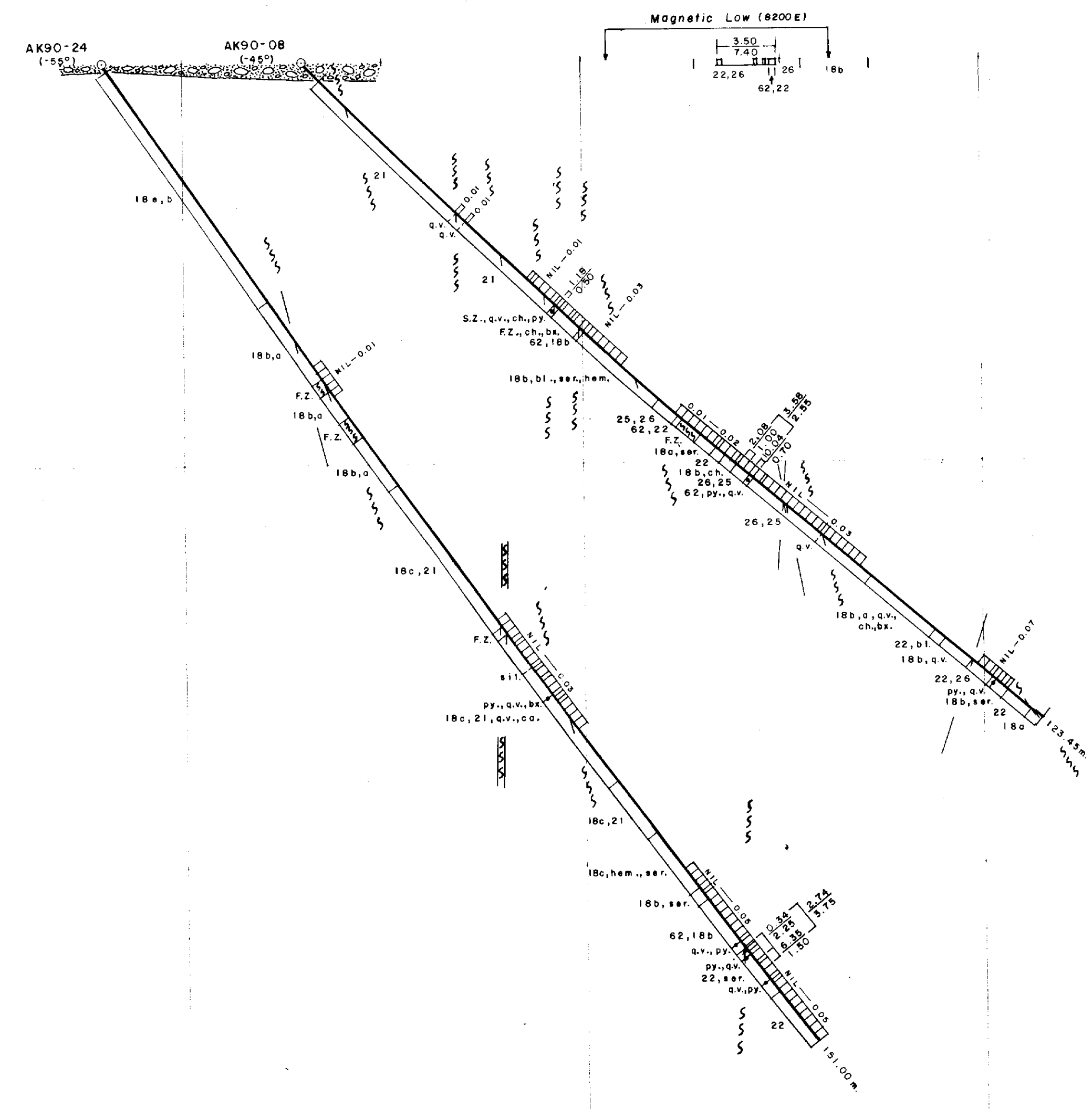
2 0 0 7

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8190E
HOLES AK90-08,24

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: D.C.-010	DATE: January 1991

SCALE: 1:500



320

10100.0 N

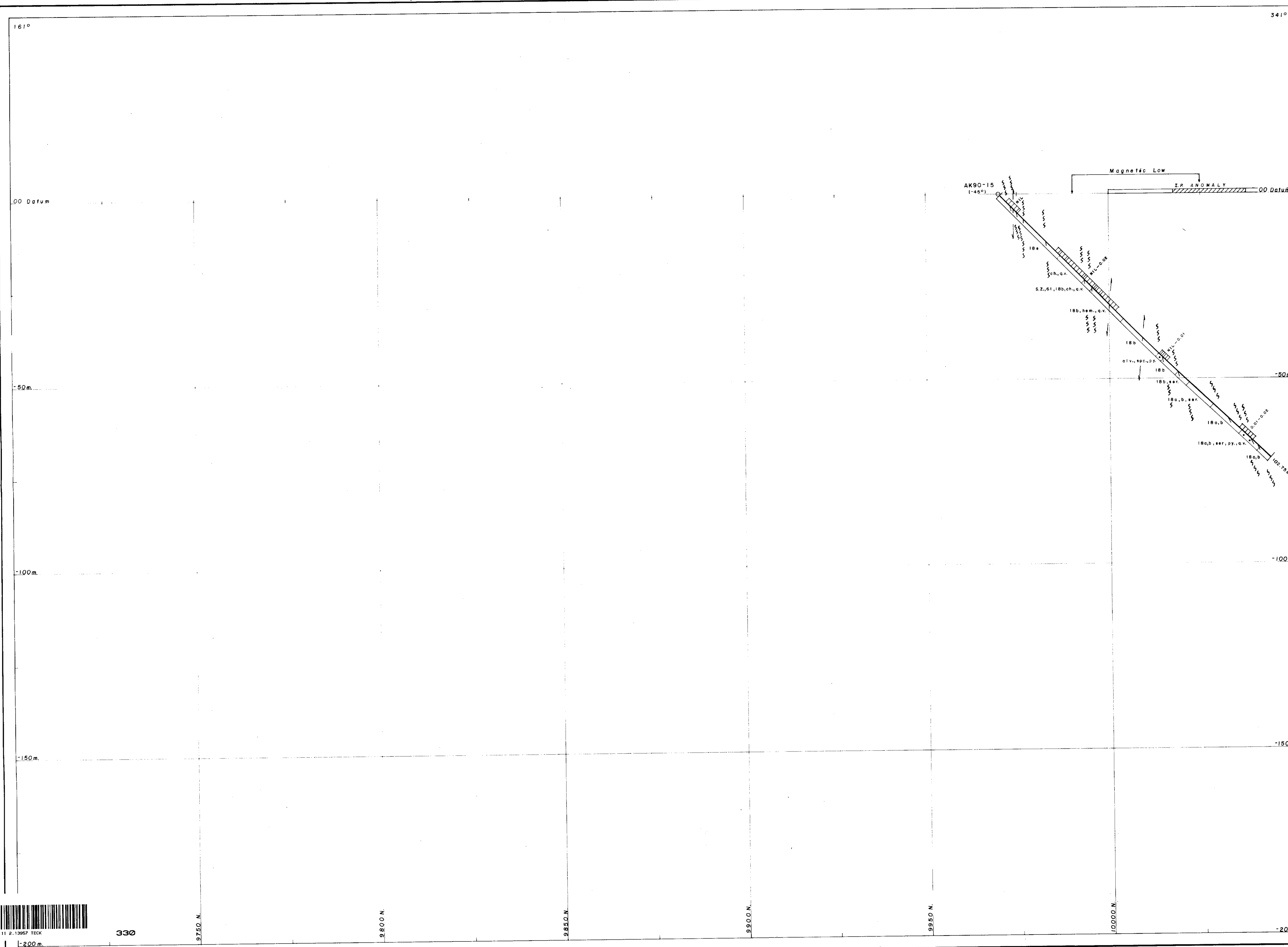
10150.0 N

10200.0 N

10250.0 N

10300.0 N

10350.0 N



LEGEND

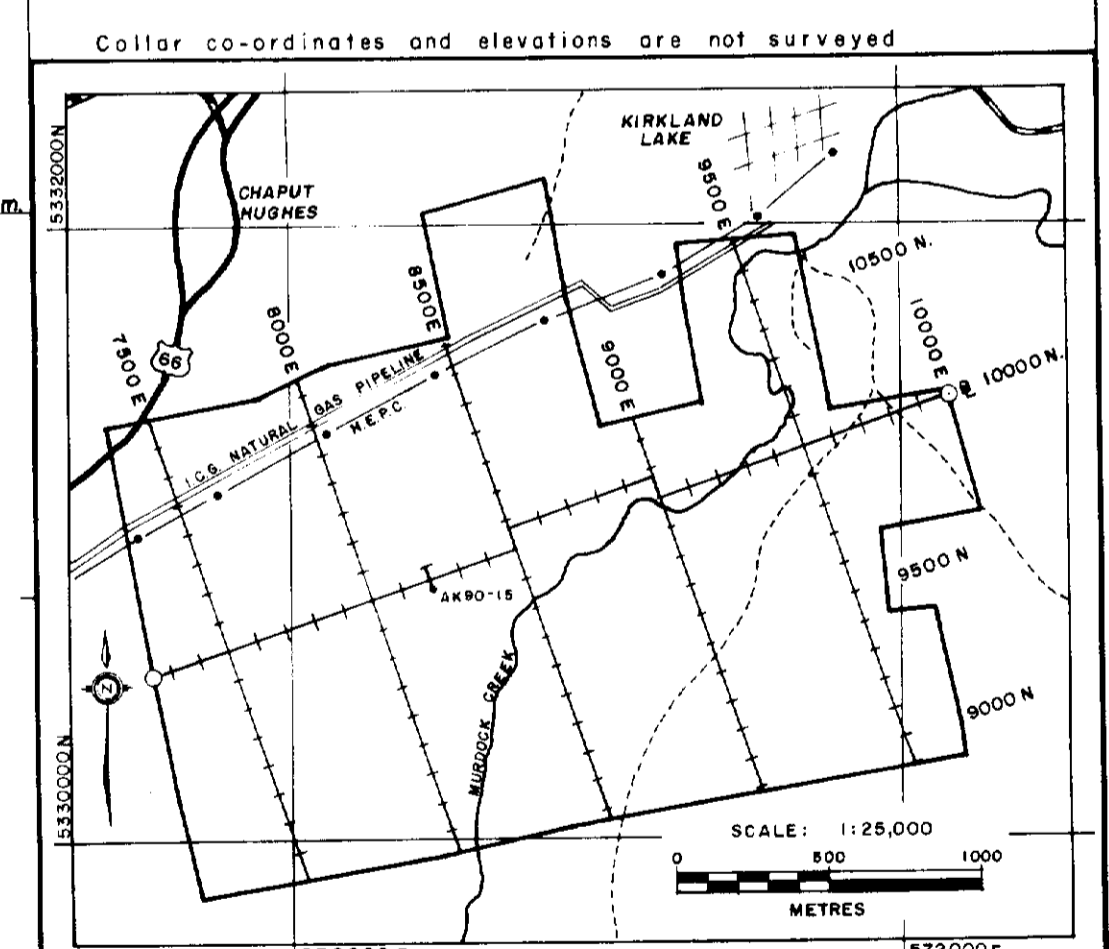
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	23 Siltstone
64 Silicic	24 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdatoid	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lcm - laminated	sh - shaled
ca - calcite	m - massive	s.z - shear zone
cd - carbonate	mag - magnetite	trc - trachoid
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone	olv - olivine vein	spc - specularite



BATTLE MOUNTAIN (CANADA) INC.

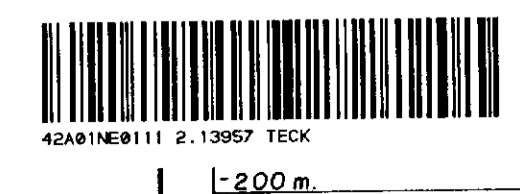
2.1 3957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8200E
HOLE AK90-15

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-011	DATE: January 1991

SCALE: 1:500



330

9750.0 N

9800.0 N

9850.0 N

9900.0 N

9950.0 N

10000.0 N

10050.0 N

1:200m

161°

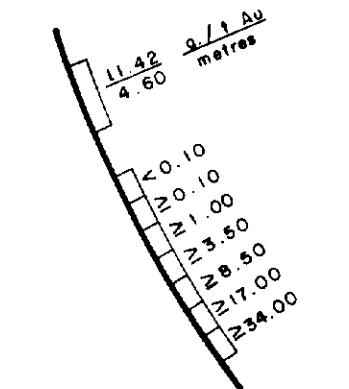
341°

LEGEND

- | | |
|-----------------------|---------------------|
| 60 ALTERATION | 20 SEDIMENTS |
| 61 Chloritic | 21 Conglomerate |
| 62 Sericitic | 22 Graywacke |
| 63 Hematitic | 25 Siltstone |
| 64 Silicic | 26 Mudstone |
| 65 Carbonatized | |
| 40 INTRUSIVES | 10 VOLCANICS |
| 41 Diabase | 18 Trachytes |
| 42 Lamprophyre | 18a Ash Tuff |
| 46 Syenite | 18b Lapilli Tuff |
| 461 Augite Syenite | 18c Block Tuff |
| 462 Mafic Syenite | 18d Lithic Tuff |
| 465 Feldspar Porphyry | 18e Monoitic Tuff |

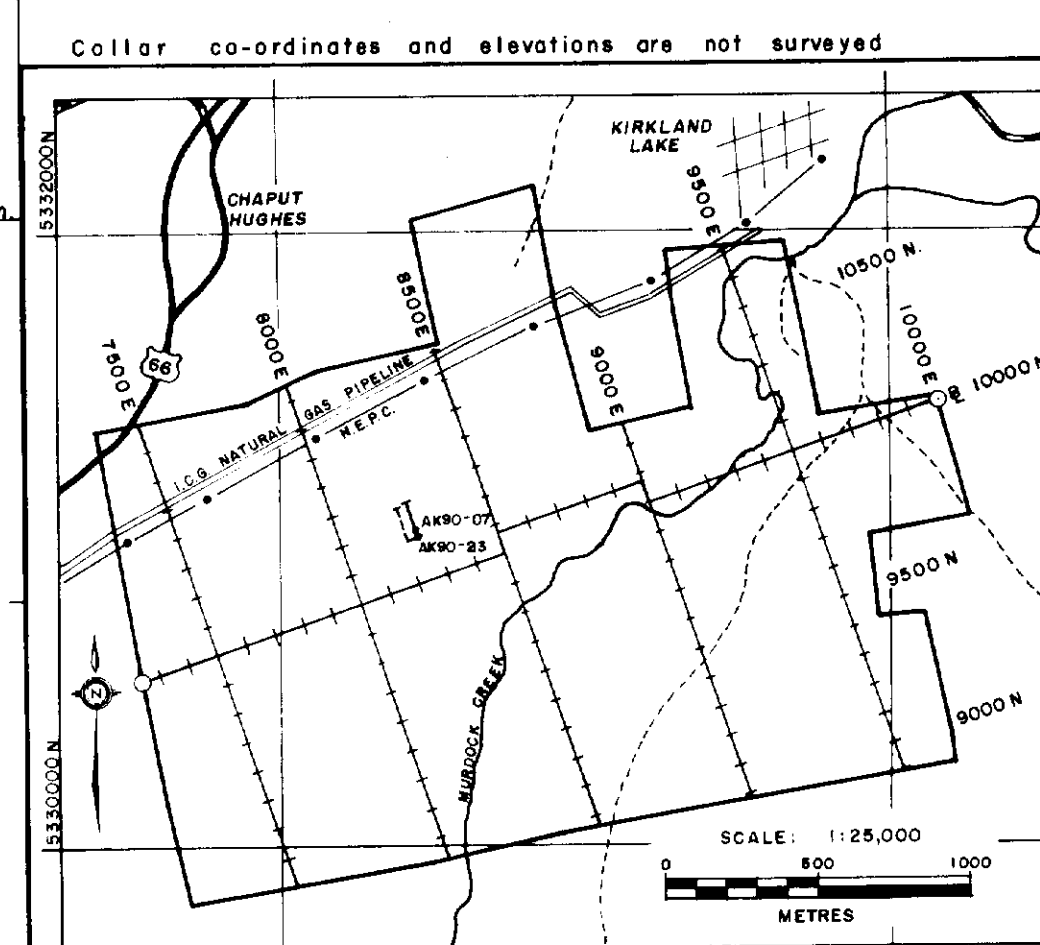
SYMBOLS

- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

- | | | |
|--------------------------|----------------------------|-------------------|
| app - augite porphyritic | fsp - feldspar porphyritic | qv - quartz vein |
| amg - amygdaloid | fsp - feldspathic | ser - sericitic |
| amp - amphibolite | gf - graphitic | sil - silicic |
| ank - ankerite | hem - hematite | sp - sphalerite |
| bx - breccia | lgn - laminated | sh - shored |
| cd - calcite | m - massive | sz - shear zone |
| cb - carbonate | mag - magnetite | trc - trichoid |
| ch - chlorite | pb - galena | var - variolitic |
| cp - chalcopyrite | py - pyrite | vss - vesicular |
| fc - fractured | mo - molybdenite | vg - visible gold |
| fz - fault zone | | |



BATTLE MOUNTAIN (CANADA) INC.

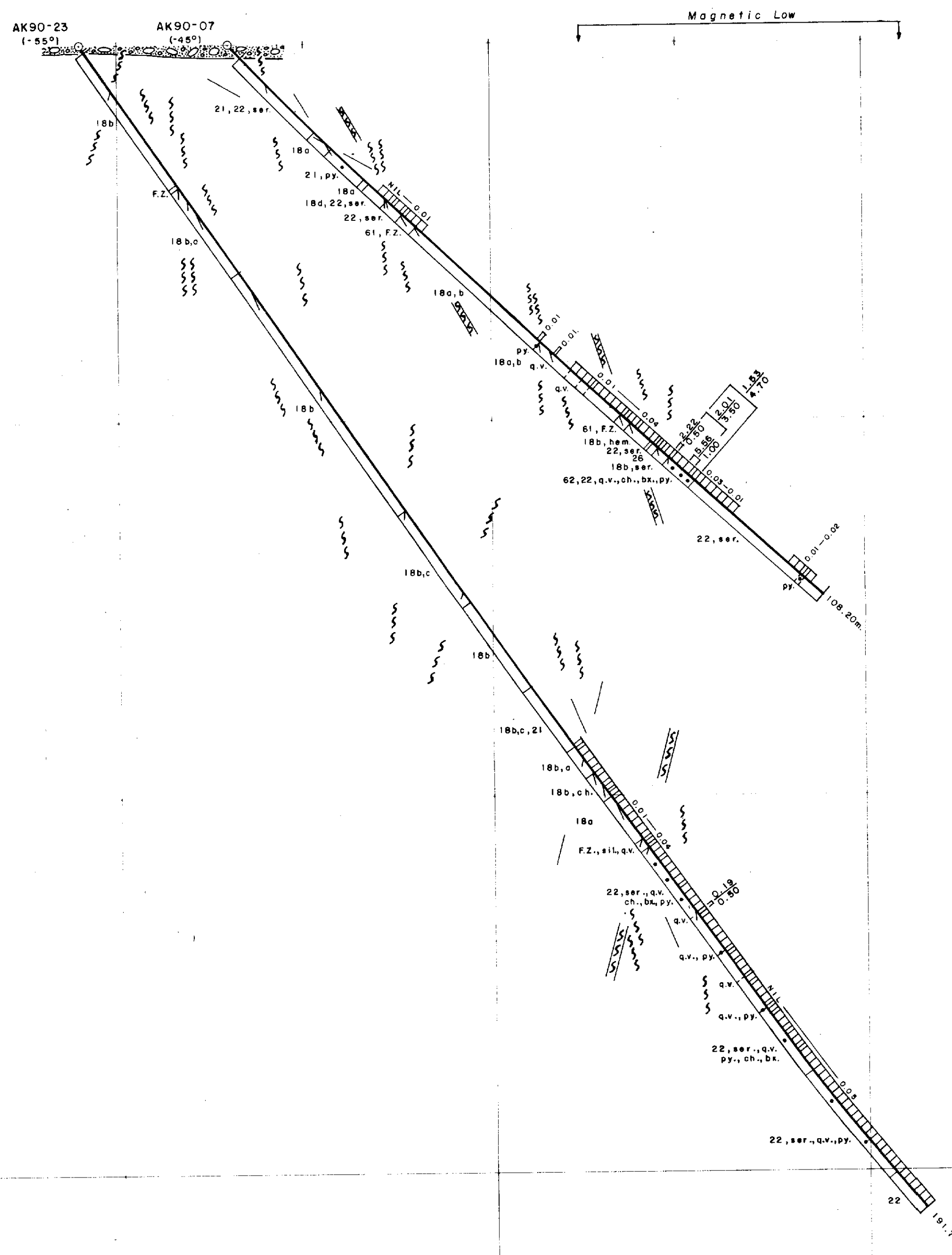
2

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8250 E
HOLES AK90-07, 23

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B. H. Modill, Tech.
DRAWING No: DC-012	DATE: January 1991

SCALE: 1:500



340

10100 N.

10150 N.

10200 N.

10250 N.

10300 N.

10350 N.

10400 N.

10200 W.

10250 W.

10300 W.

10350 W.

10400 W.

10450 W.

10500 W.

10550 W.

10600 W.

10650 W.

10700 W.

10750 W.

10800 W.

10850 W.

10900 W.

10950 W.

11000 W.

11050 W.

11100 W.

11150 W.

11200 W.

11250 W.

11300 W.

11350 W.

11400 W.

11450 W.

11500 W.

11550 W.

11600 W.

11650 W.

11700 W.

11750 W.

11800 W.

11850 W.

11900 W.

11950 W.

12000 W.

12050 W.

12100 W.

12150 W.

12200 W.

12250 W.

12300 W.

12350 W.

12400 W.

12450 W.

12500 W.

12550 W.

12600 W.

12650 W.

12700 W.

12750 W.

12800 W.

12850 W.

12900 W.

12950 W.

13000 W.

13050 W.

13100 W.

13150 W.

13200 W.

13250 W.

13300 W.

13350 W.

13400 W.

13450 W.

13500 W.

13550 W.

13600 W.

13650 W.

13700 W.

13750 W.

13800 W.

13850 W.

13900 W.

13950 W.

14000 W.

14050 W.

14100 W.

14150 W.

14200 W.

14250 W.

14300 W.

14350 W.

14400 W.

14450 W.

14500 W.

14550 W.

14600 W.

14650 W.

14700 W.

14750 W.

14800 W.

14850 W.

14900 W.

14950 W.

15000 W.

15050 W.

15100 W.

15150 W.

15200 W.

15250 W.

15300 W.

15350 W.

15400 W.

15450 W.

15500 W.

15550 W.

15600 W.

15650 W.

15700 W.

15750 W.

15800 W.

15850 W.

15900 W.

15950 W.

16000 W.

16050 W.

16100 W.

16150 W.

16200 W.

16250 W.

16300 W.

16350 W.

16400 W.

16450 W.

16500 W.

16550 W.

16600 W.

16650 W.

16700 W.

16750 W.

16800 W.

16850 W.

16900 W.

16950 W.

17000 W.

17050 W.

17100 W.

17150 W.

17200 W.

17250 W.

17300 W.

17350 W.

17400 W.

17450 W.

17500 W.

17550 W.

17600 W.

17650 W.

17700 W.

17750 W.

17800 W.

17850 W.

17900 W.

17950 W.

18000 W.

18050 W.

18100 W.

18150 W.

18200 W.

18250 W.

18300 W.

18350 W.

18400 W.

18450 W.

18500 W.

18550 W.

18600 W.

18650 W.

18700 W.

18750 W.

18800 W.

18850 W.

18900 W.

18950 W.

19000 W.

19050 W.

19100 W.

19150 W.

19200 W.

19250 W.

19300 W.

19350 W.

19400 W.

19450 W.

19500 W.

19550 W.

19600 W.

19650 W.

19700 W.

19750 W.

19800 W.

19850 W.

19900 W.

19950 W.

20000 W.

20050 W.

20100 W.

20150 W.

20200 W.

20250 W.

20300 W.

20350 W.

20400 W.

20450 W.

20500 W.

20550 W.

20600 W.

20650 W.

20700 W.

20750 W.

20800 W.

20850 W.

20900 W.

20950 W.

21000 W.

21050 W.

21100 W.

21150 W.

21200 W.

21250 W.

21300 W.

21350 W.

21400 W.

21450 W.

21500 W.

21550 W.

21600 W.

21650 W.

21700 W.

21750 W.

21800 W.

21850 W.

21900 W.

21950 W.

22000 W.

22050 W.

22100 W.

22150 W.

22200 W.

22250 W.

22300 W.

22350 W.

22400 W.

22450 W.

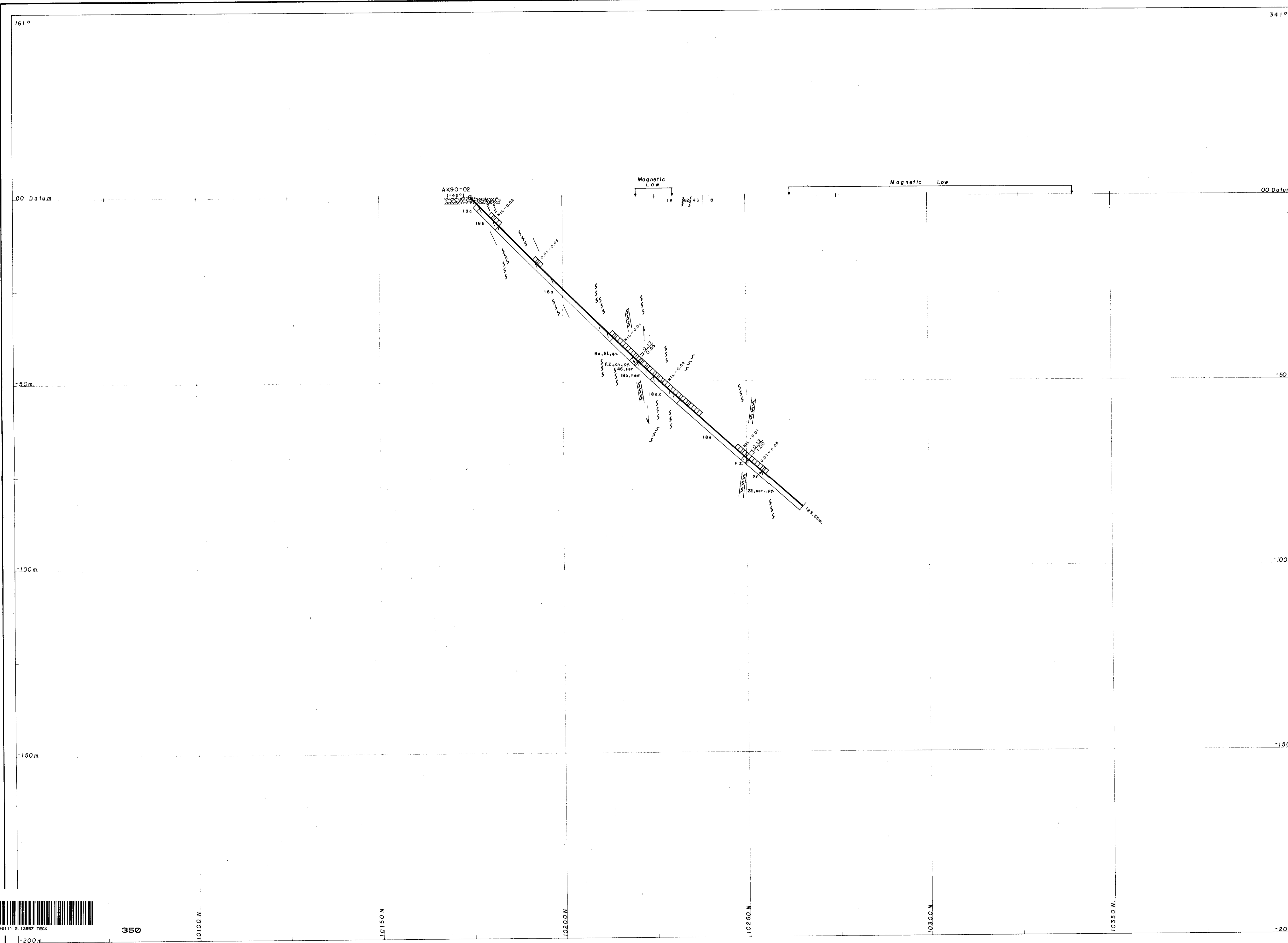
22500 W.

22550 W.

22600 W.

22650 W.

22700 W.



LEGEND

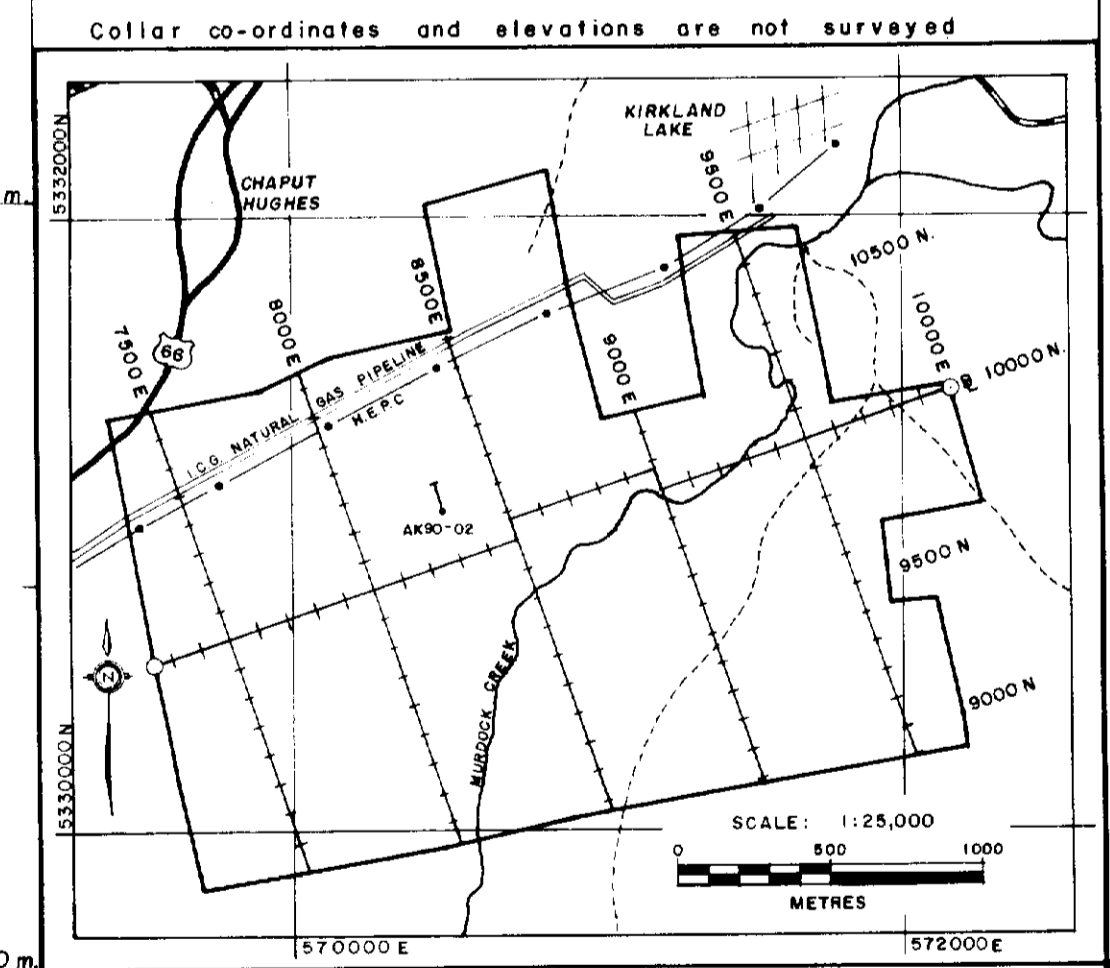
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	23 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Black Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amphibolite	fsp - feldspathic	ser - sericitic
amp - amphibole	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lcm - laminated	sh - sheared
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	var - variolitic
cd - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone	bl - bleached	



BATTLE MOUNTAIN (CANADA) INC.

2.13957

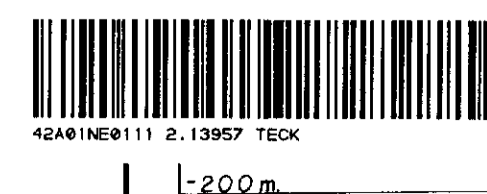
KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO

AMALGAMATED KIRKLAND PROPERTY

SECTION 8300 E
HOLE AK90-02

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS.: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-013	DATE: December 1990

SCALE: 1:500



350

10100 N

10150 N

10200 N

10250 N

10300 N

10350 N

10400 N

-200m

-100m

-50m

00 Datum

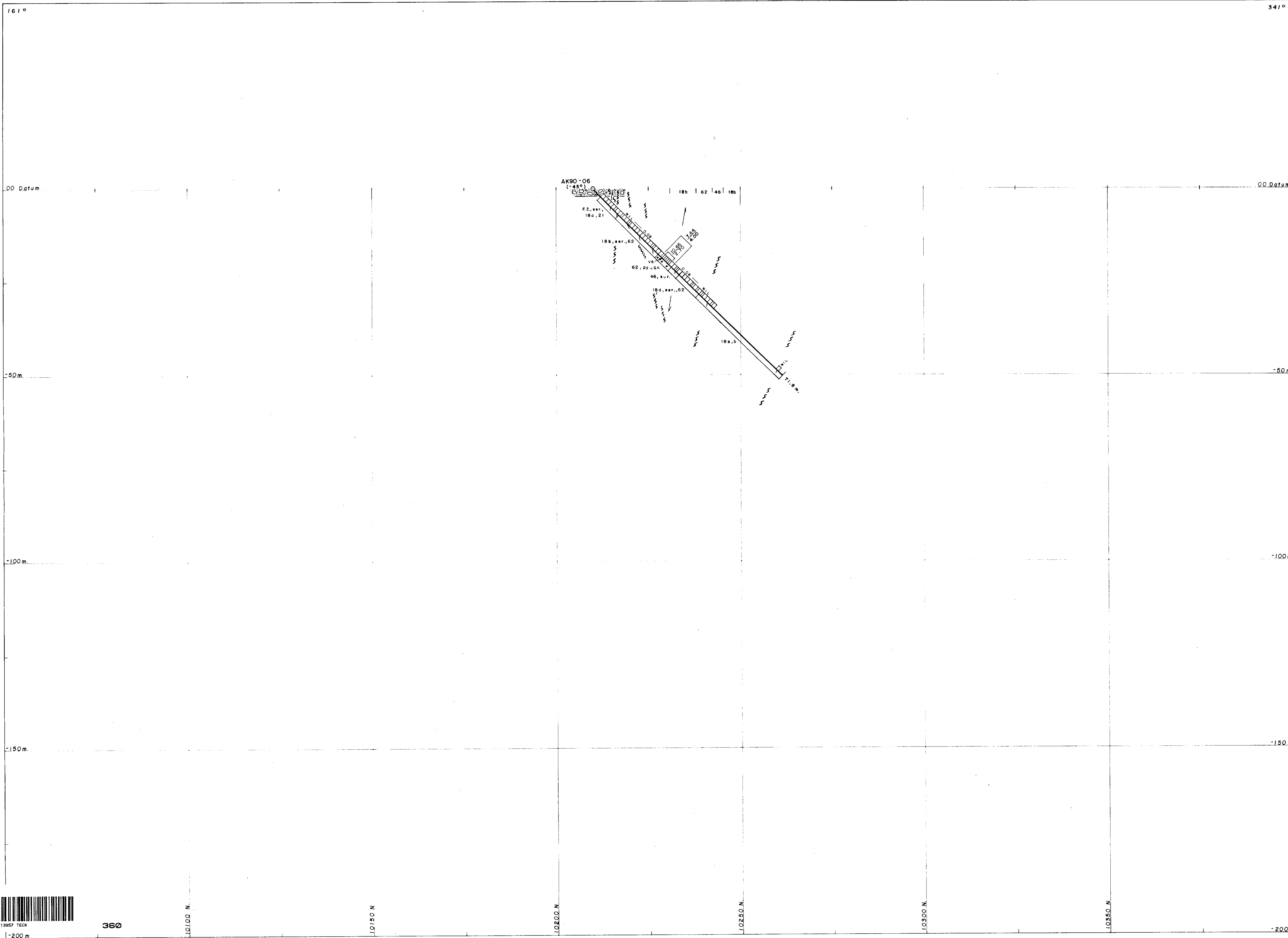
00 Datum

-50m

-100m

-150m

-200m

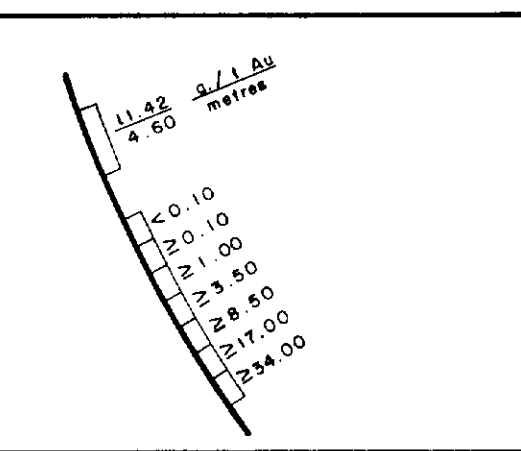


LEGEND

60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

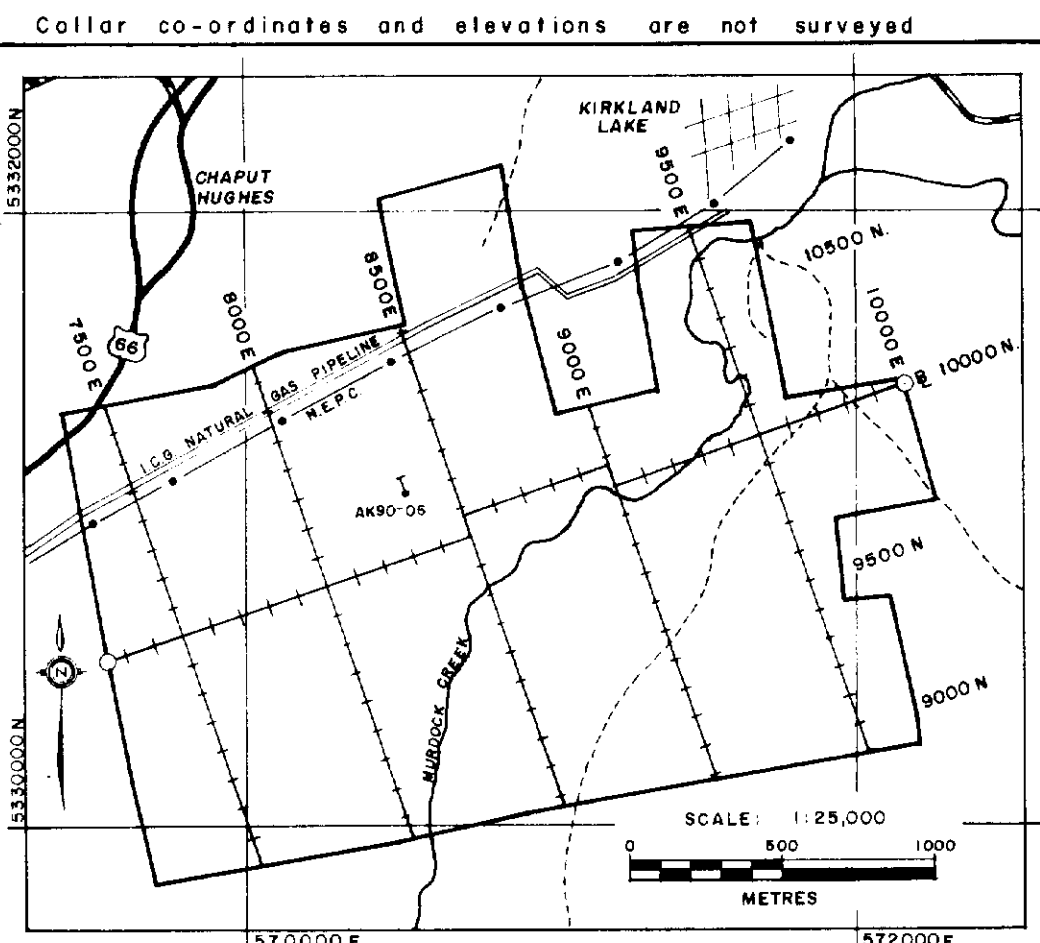
SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization



ABBREVIATIONS

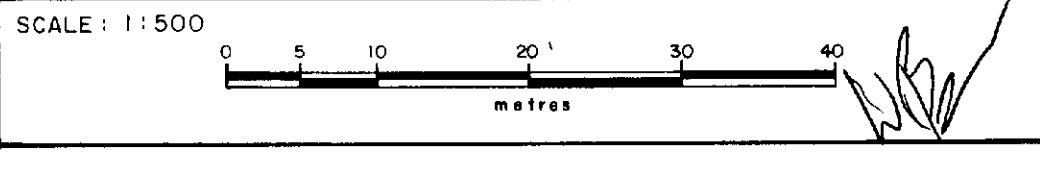
agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amp - amphibolite	fsp - feldspathic	ser - sericitic
cnk - calcite	gt - granitic	sil - silicic
br - breccia	hem - hematite	sp - sphalerite
cc - calcite	lam - laminated	sh - sheared
cb - carbonates	m - massive	s.z - shear zone
ch - chlorite	mag - magnetite	trc - trachoid
cp - chalcopyrite	pb - galena	var - variolitic
fc - fractured	py - pyrite	ves - vesicular
fz - fault zone	mo - molybdenite	vg - visible gold



BATTLE MOUNTAIN (CANADA) INC.
2.13957

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY
SECTION 8340 E
 HOLE AK90-06

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.N. Madill, Tech.
DRAWING No.: DC-014	DATE: January 1991



360

10400 N

10150 N

10200 N

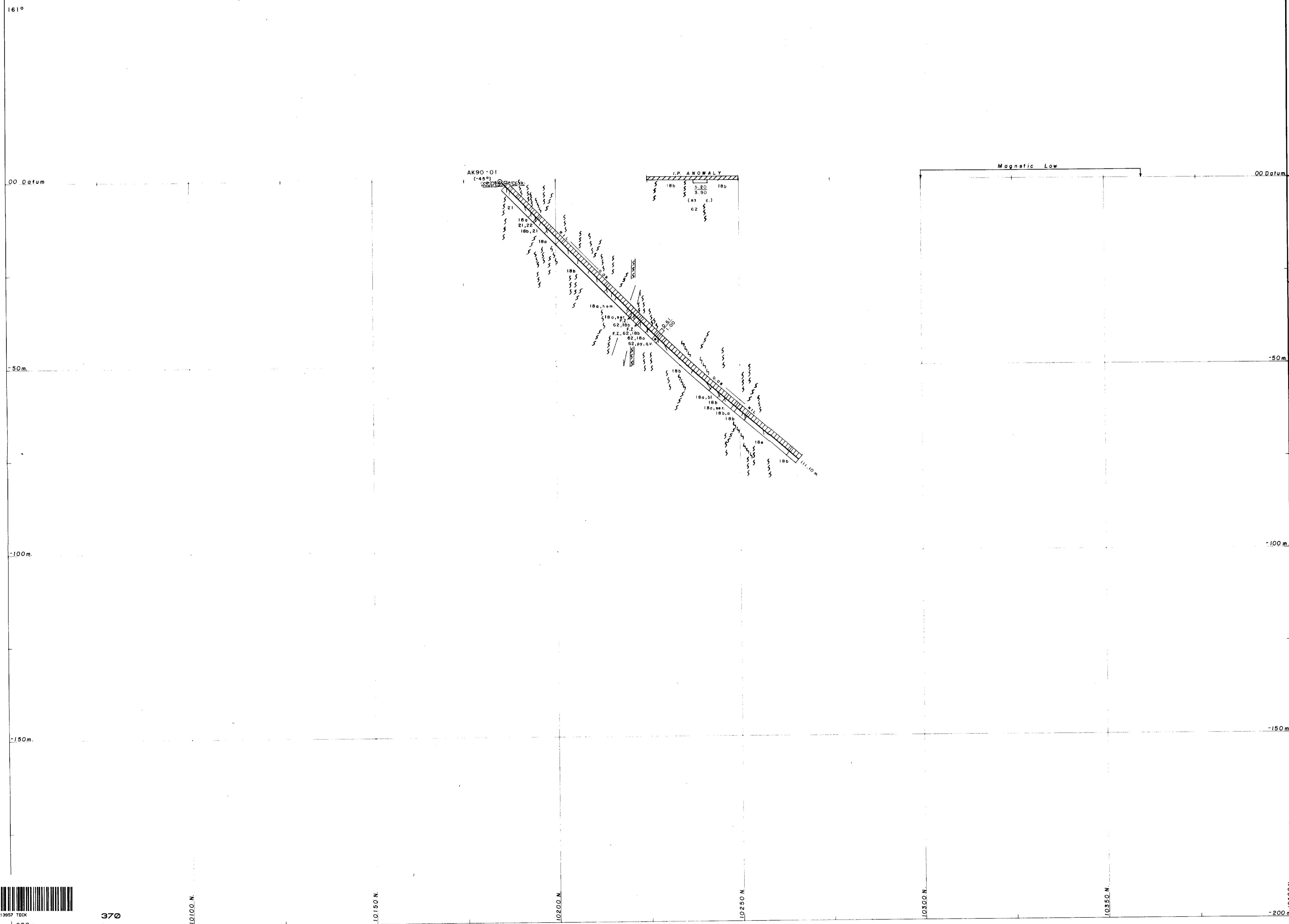
10250 N

10300 N

10350 N

10400 N

1620



LEGEND

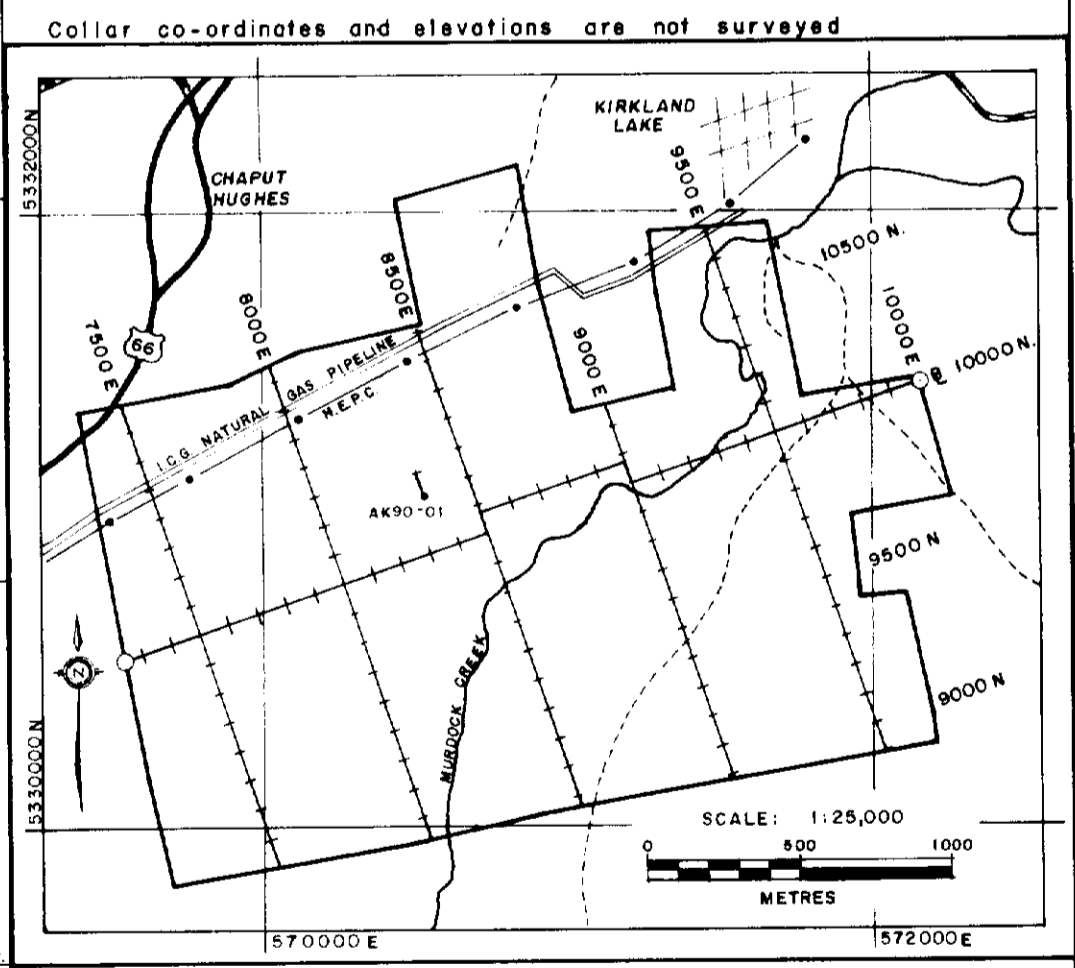
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Manolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdatoid	fsd - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - shored
cd - calcite	m - massive	sz - shear zone
cd - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	var - variolitic
c.p. - chalcopyrite	py - pyrite	ves - vesicular
f.c. - fractured	mo - molybdenite	vg - visible gold
f.z. - fault zone	bl - bleached	



BATTLE MOUNTAIN (CANADA) INC.

2.13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO

AMALGAMATED KIRKLAND PROPERTY

SECTION 8350 E
HOLE AK90-01

PROJECT No.: 75-JV-28	DATA BY: W. Benham
N.T.S.: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-015	DATE: December 1990

SCALE: 1:500



161°

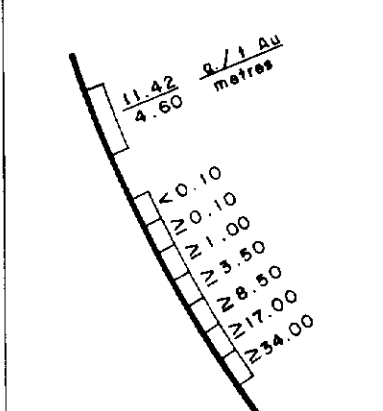
341°

LEGEND

- | | |
|-----------------------|---------------------|
| 60 ALTERATION | 20 SEDIMENTS |
| 61 Chloritic | 21 Conglomerate |
| 62 Sericitic | 22 Graywacke |
| 63 Hematitic | 25 Siltstone |
| 64 Silicic | 26 Mudstone |
| 65 Carbonatized | |
| 40 INTRUSIVES | 10 VOLCANICS |
| 41 Diabase | 18 Trachytes |
| 412 Lamprophyre | 18a Ash Tuff |
| 46 Syenite | 18b Lapilli Tuff |
| 461 Augite Syenite | 18c Block Tuff |
| 462 Mafic Syenite | 18d Lithic Tuff |
| 465 Feldspar Porphyry | 18e Monolithic Tuff |

SYMBOLS

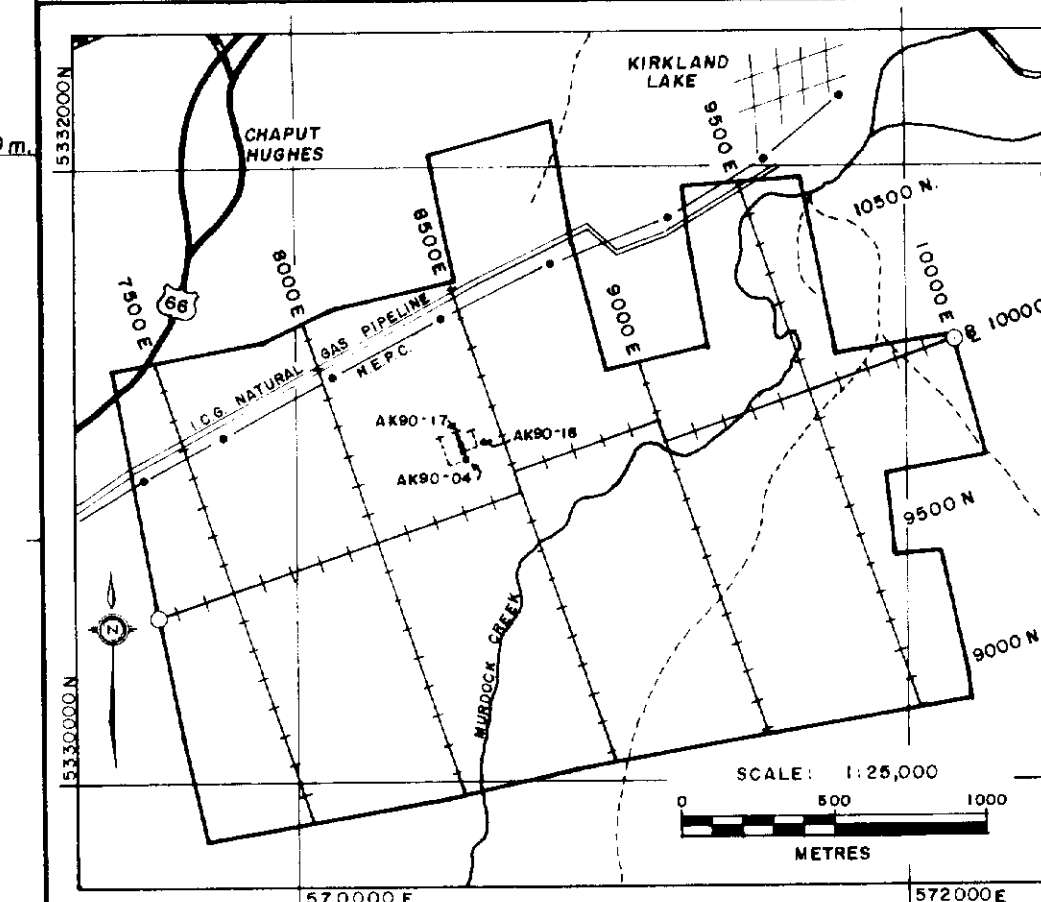
- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

- | | | |
|--------------------------|---------------------------|---------------------|
| agp - augite porphyritic | fd - feldspar porphyritic | qv - quartz vein |
| amg - amygdaloidal | fsp - feldspathic | ser - sericitic |
| amp - amphibolite | gf - graphitic | sil - silicic |
| ank - ankerite | hem - hematite | sp - sphalerite |
| bx - breccia | lam - laminated | sh - sheared |
| co - calcite | m - massive | sz - shear zone |
| cb - carbonate | mag - magnetite | trc - trachoid tuff |
| ch - chlorite | pb - galena | vor - variolite |
| cp - chalcopyrite | py - pyrite | ves - vesicular |
| f.c - fractured | mo - molybdenite | vg - visible gold |
| f.z - fault zone | bl - bleached | |

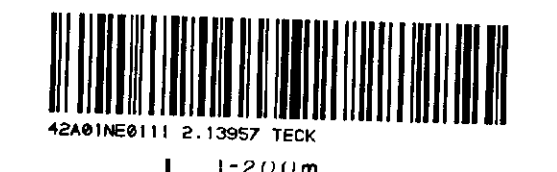
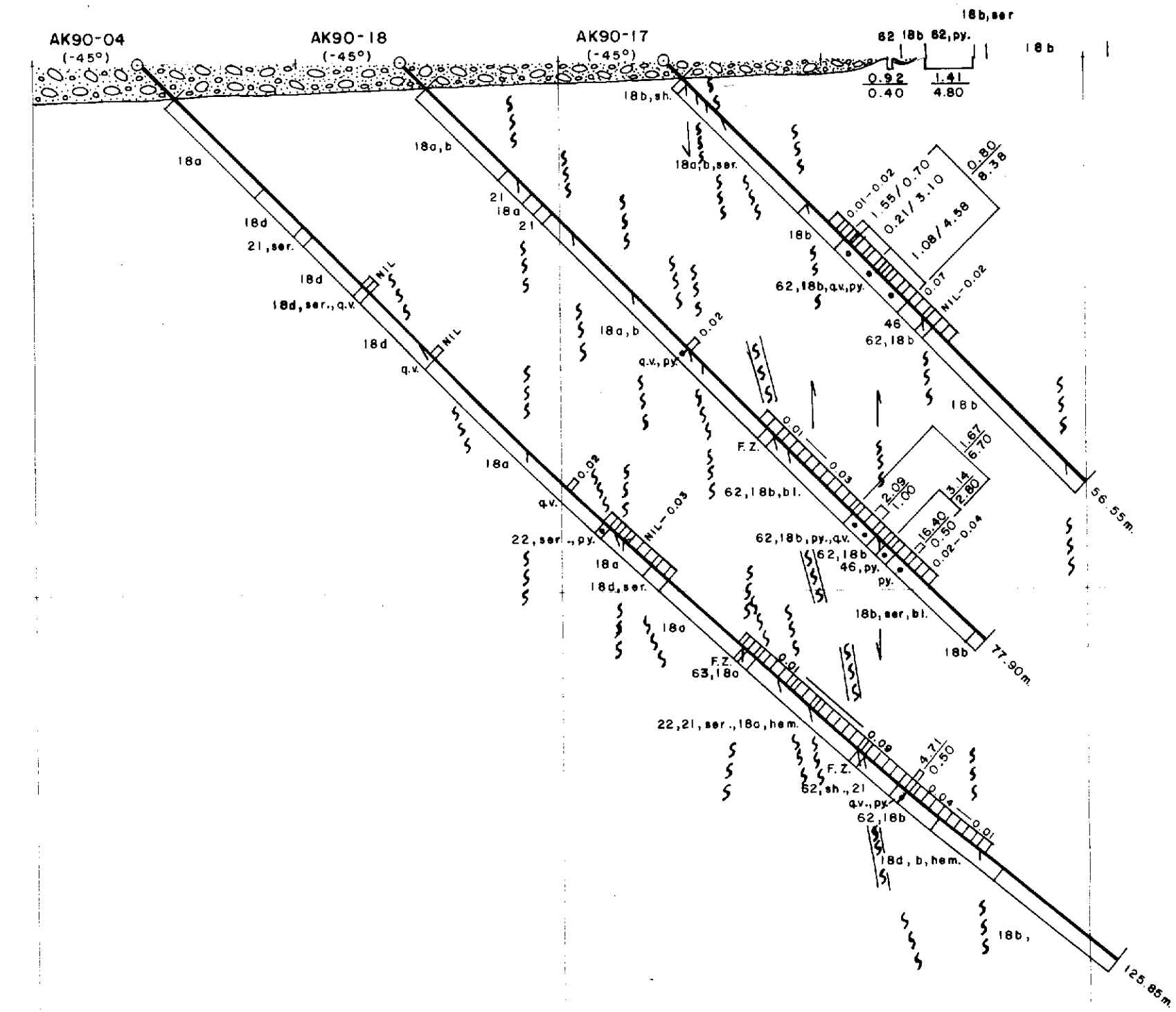
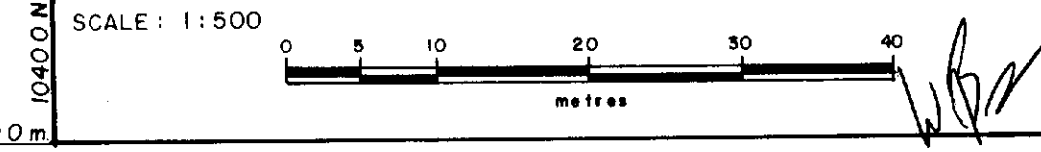
Collar co-ordinates and elevations are not surveyed.



BATTLE MOUNTAIN (CANADA) INC.
 2.13907

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY
SECTION 8370E
 HOLES AK90-04,17,18

PROJECT No: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Modill, Tech.
DRAWING No: DC-016	DATE: December 1990



10100 N

10150 N

10200 N

10250 N

10300 N

10350 N

10400 N

-200m

00 Datum

00 Datum

-50m

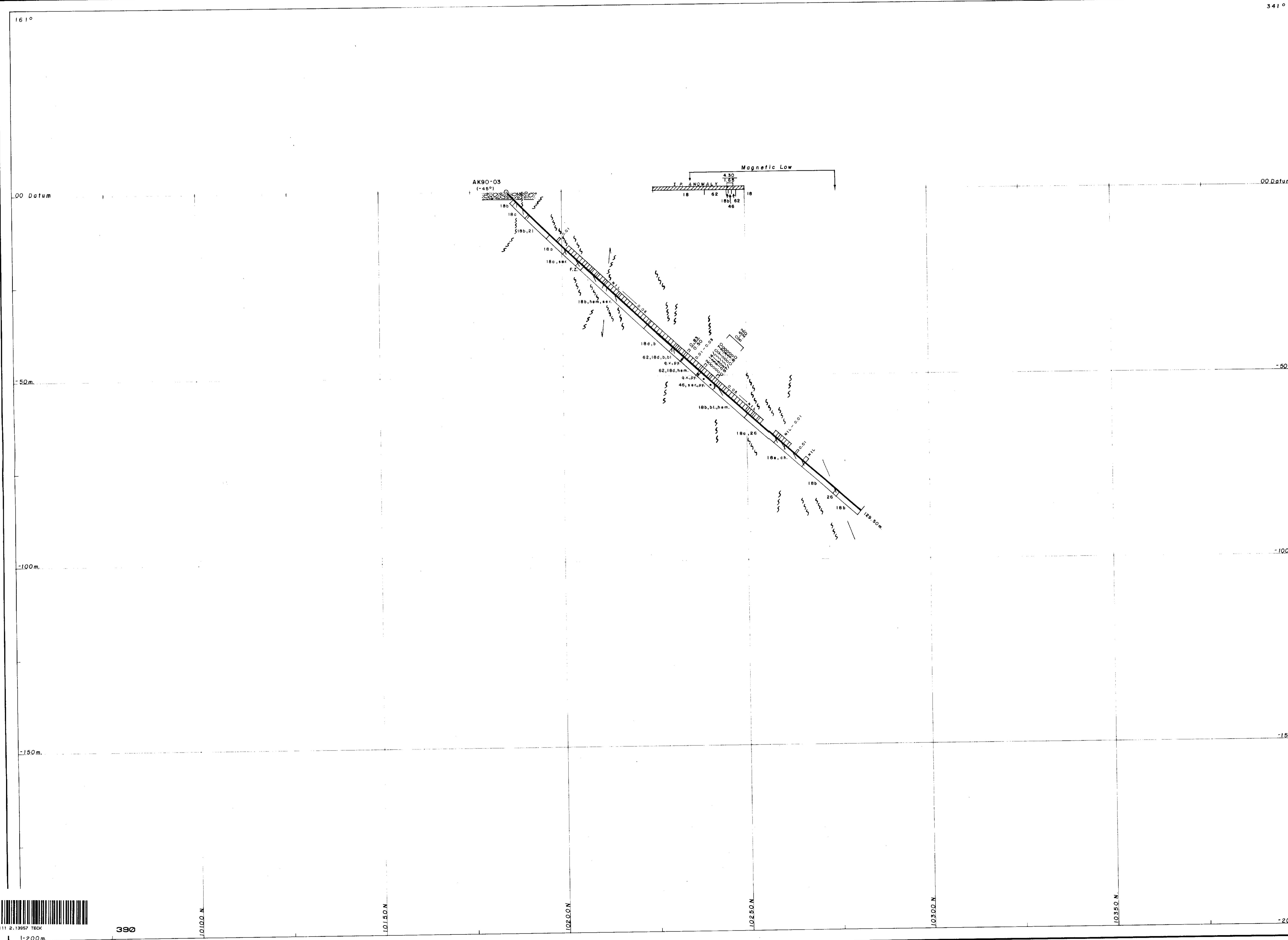
-50m

-100m

-100m

-150m

-150m



LEGEND

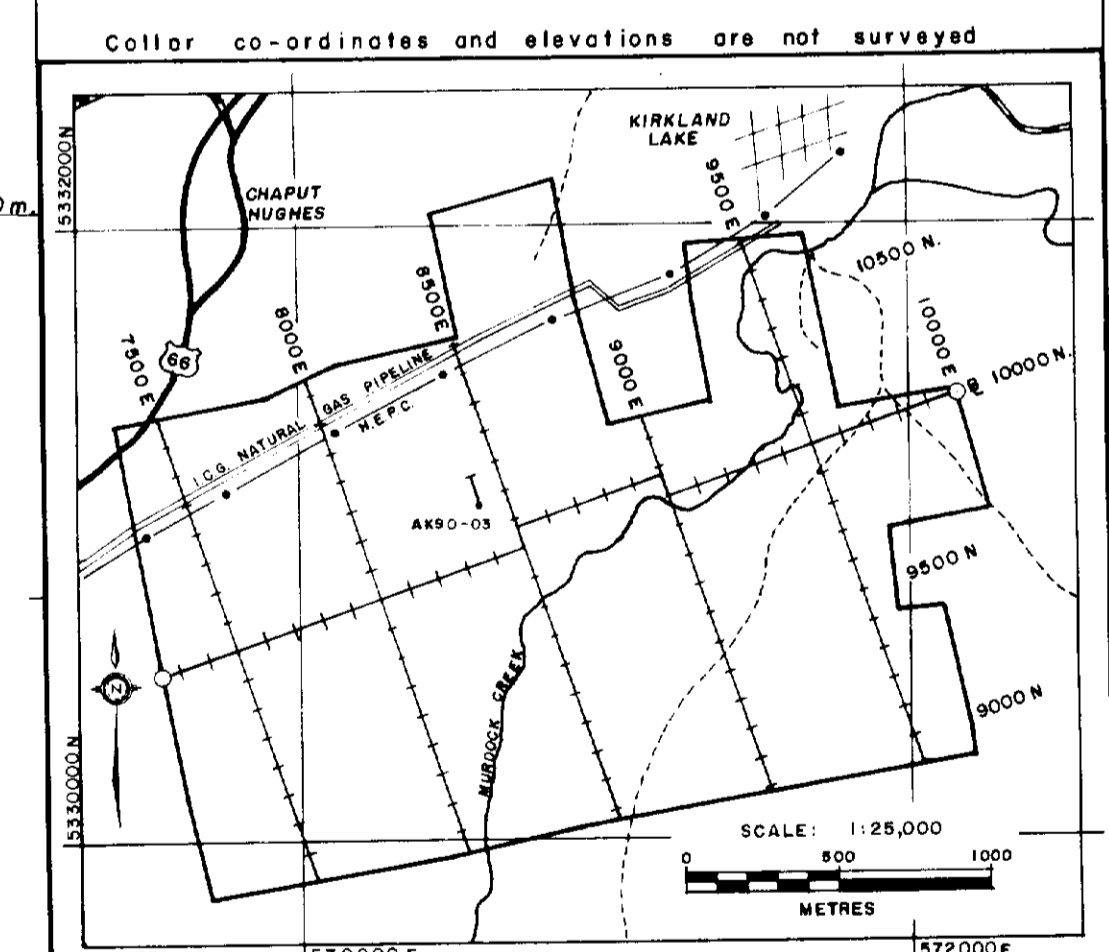
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Black Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

Bedding, contacts	1:42 S/Lt Sh
Breccia	1:60 Breccia
Facing direction	
Foliation	
Fault, Fault Zone	
Drag folding	
Pyrite Mineralization	

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdaloidal	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - sheared
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - calcene	var - varietal
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone	bl - bleached	



BATTLE MOUNTAIN (CANADA) INC.

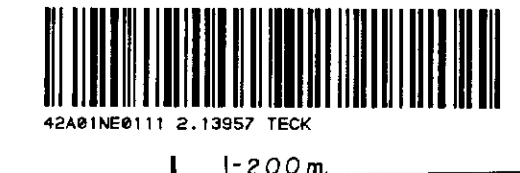
2.13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8400 E
HOLE AK90-03

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: D.C.-017	DATE: December 1990

SCALE: 1:500



390

10100.0 N

10150.0 N

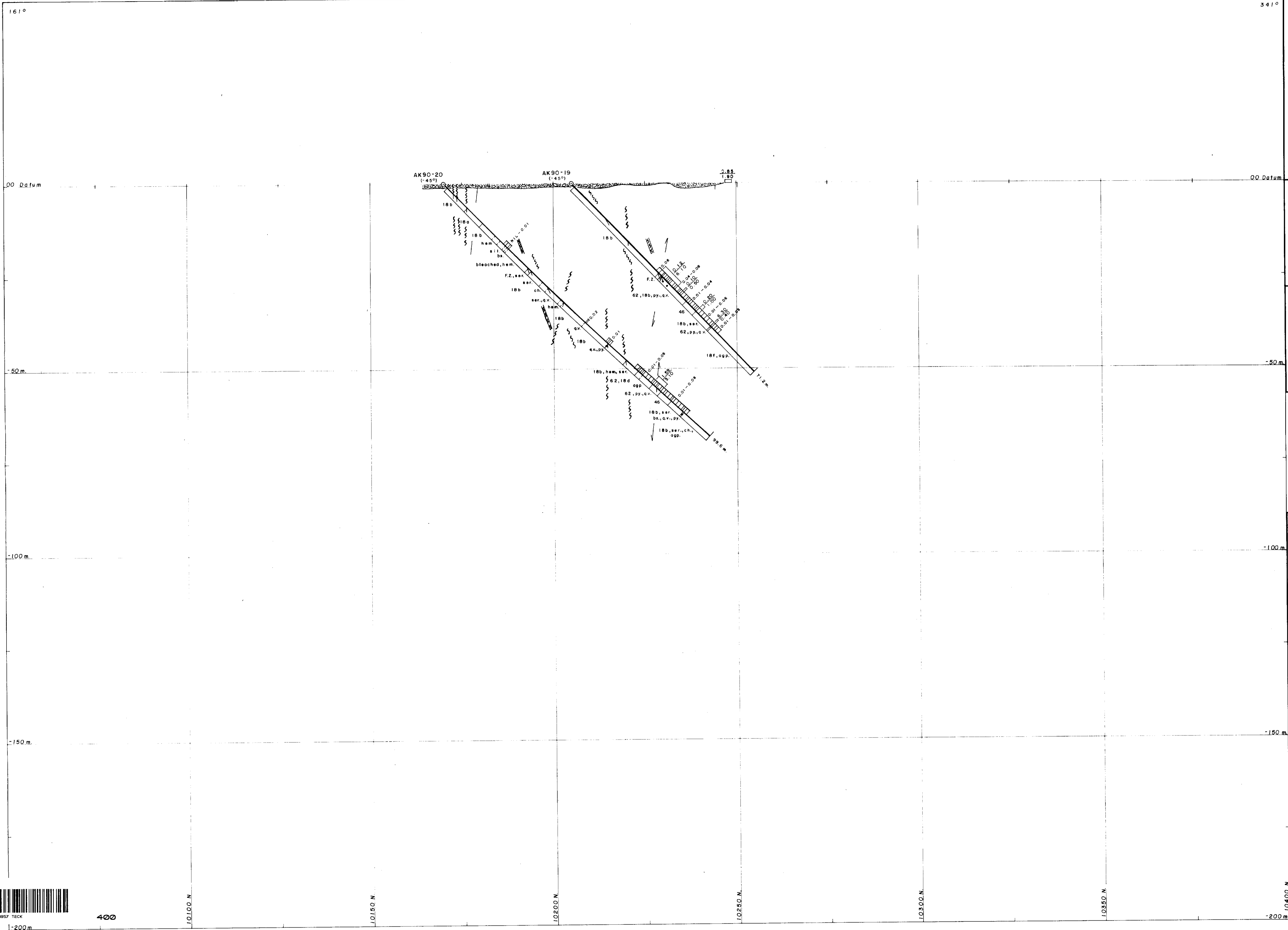
10200.0 N

10250.0 N

10300.0 N

10350.0 N

10400.0 N



LEGEND

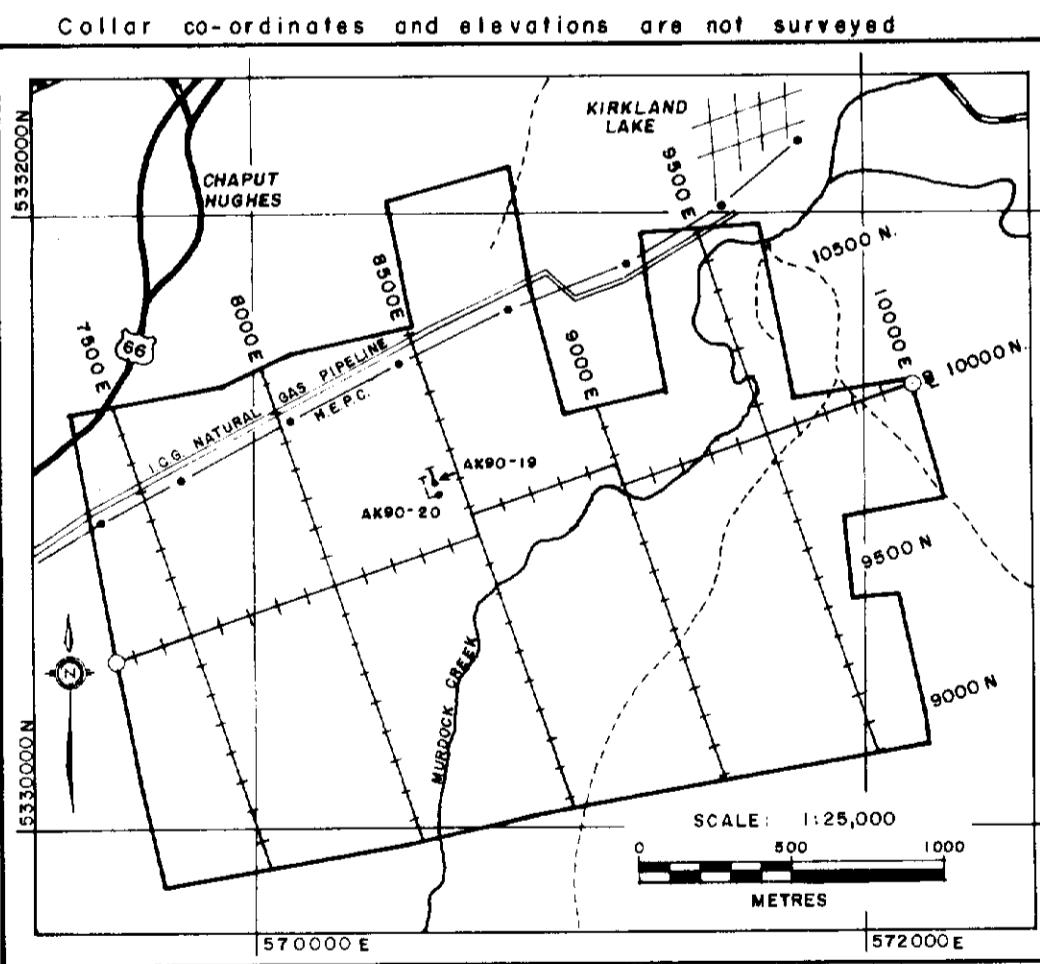
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicific	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Black Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

Bedding, contacts	
Breccia	
Facing direction	
Foliation	
Fault, Fault Zone	
Drag folding	
Pyrite Mineralization	

ABBREVIATIONS

agg - augite porphyritic	fp - feldspar porphyritic	q.v. - quartz vein
amg - amygdales	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicific
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - shales
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoidite
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	v.g. - visible gold
fz - fault zone	bl - bleached	



BATTLE MOUNTAIN (CANADA) INC.

2013

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO

AMALGAMATED KIRKLAND PROPERTY

SECTION 8425 E
HOLES AK90-19,20

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Mod III, Tech.
DRAWING No.: DC-O18	DATE: January 1991

SCALE: 1:500

161°

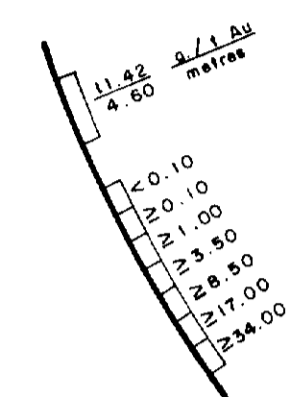
341°

LEGEND

- | | |
|-----------------------|---------------------|
| 60 ALTERATION | 20 SEDIMENTS |
| 61 Chloritic | 21 Conglomerate |
| 62 Sericitic | 22 Graywacke |
| 63 Hematitic | 25 Siltstone |
| 64 Silicic | 26 Mudstone |
| 65 Carbonatized | |
| 40 INTRUSIVES | 10 VOLCANICS |
| 41 Diabase | 18 Trachytes |
| 42 Lamprophyre | 18a Ash Tuff |
| 45 Syenite | 18b Lapilli Tuff |
| 461 Augite Syenite | 18c Block Tuff |
| 462 Mafic Syenite | 18d Lithic Tuff |
| 465 Feldspar Porphyry | 18e Monolithic Tuff |

SYMBOLS

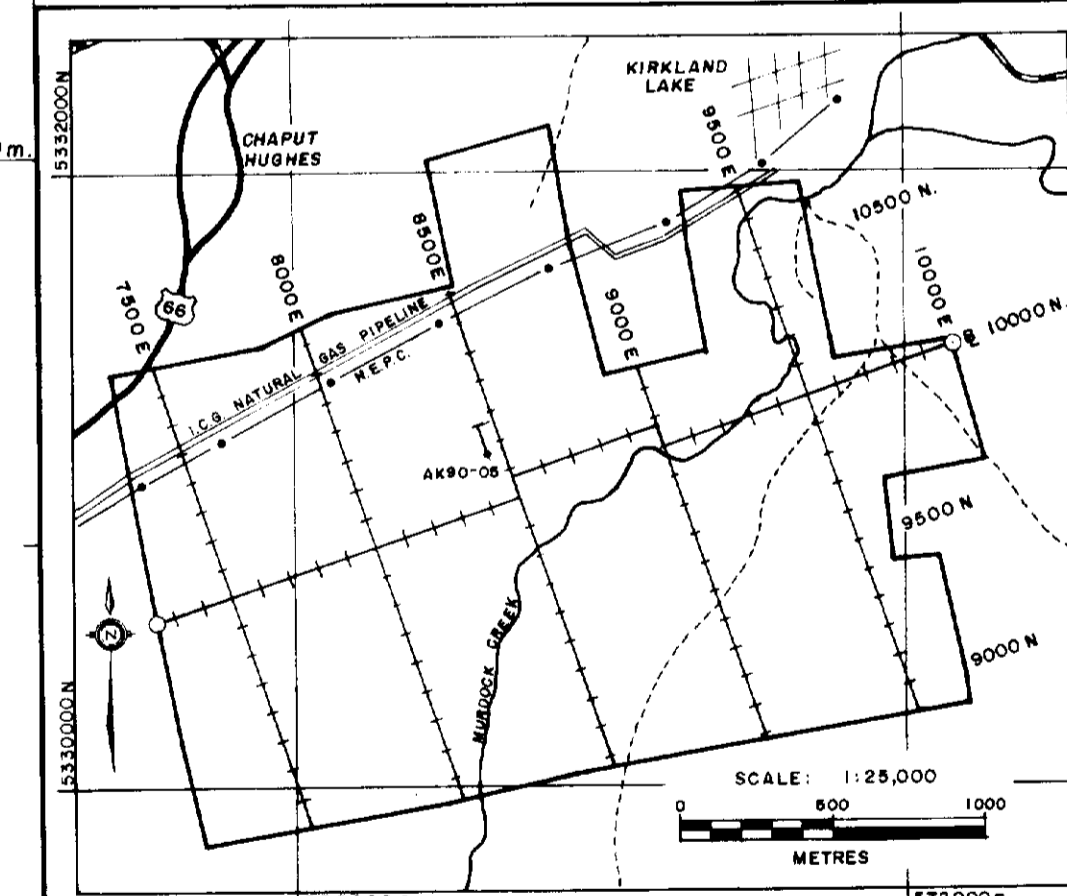
- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

- | | | |
|--------------------------|---------------------------|-------------------|
| agp - augite porphyritic | fp - feldspar porphyritic | qv - quartz vein |
| amg - amygdales | fsp - feldspathic | ser - sericitic |
| amp - amphibolite | gf - graphitic | sil - silicic |
| ank - ankerite | hem - hematite | sp - sphalerite |
| bx - breccia | lom - lamination | sh - sheared |
| cc - calcite | m - massive | sz - shear zone |
| cb - carbonate | mag - magnetite | trc - trachoidite |
| ch - chlorite | pb - galena | var - variolitic |
| cp - chalcopyrite | py - pyrite | ves - vesicular |
| fc - fractured | mo - molybdenite | vq - visible gold |
| fz - fault zone | | |

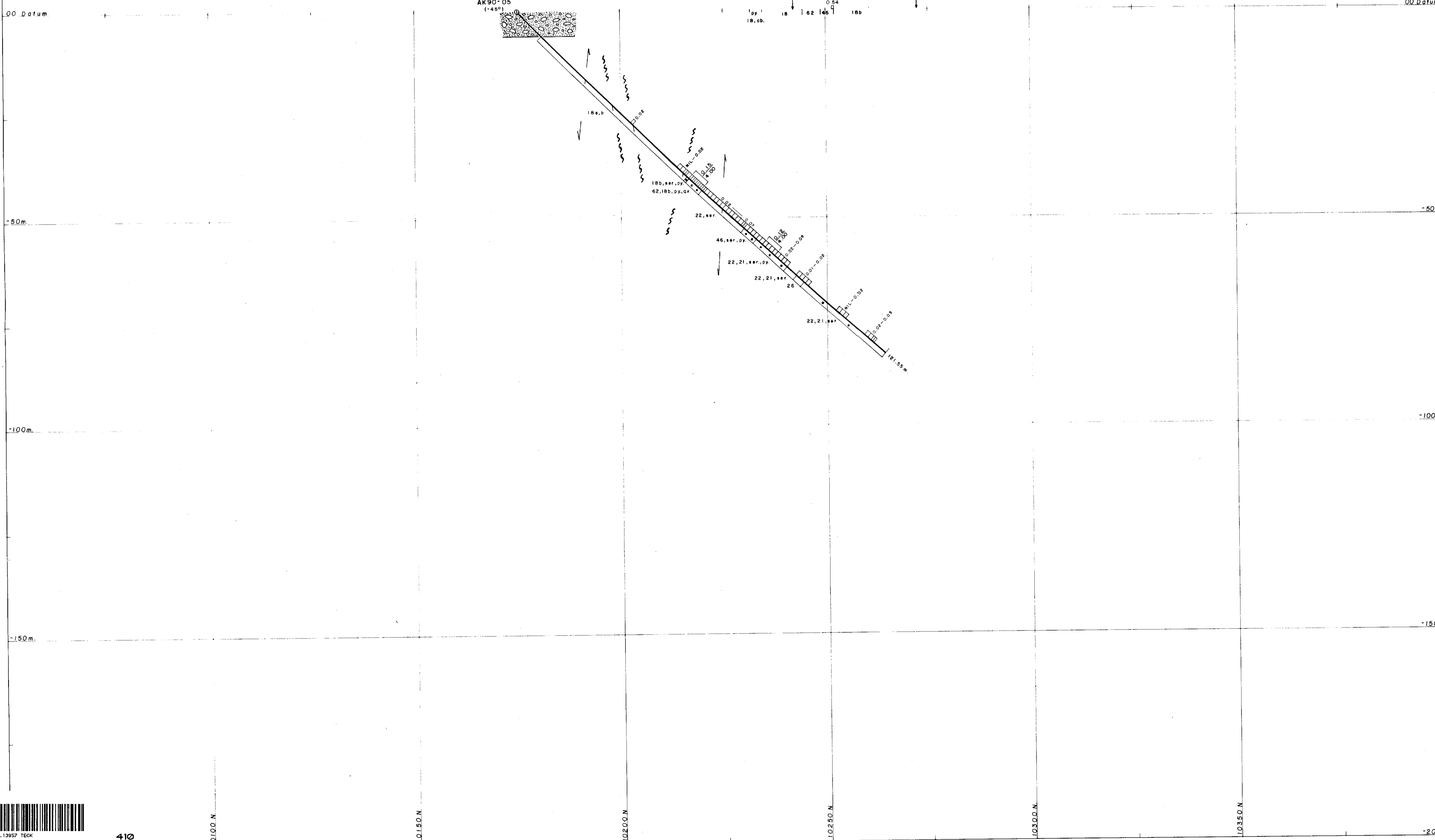
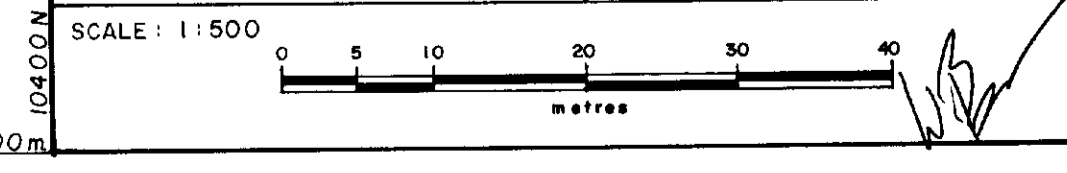
Collar co-ordinates and elevations are not surveyed

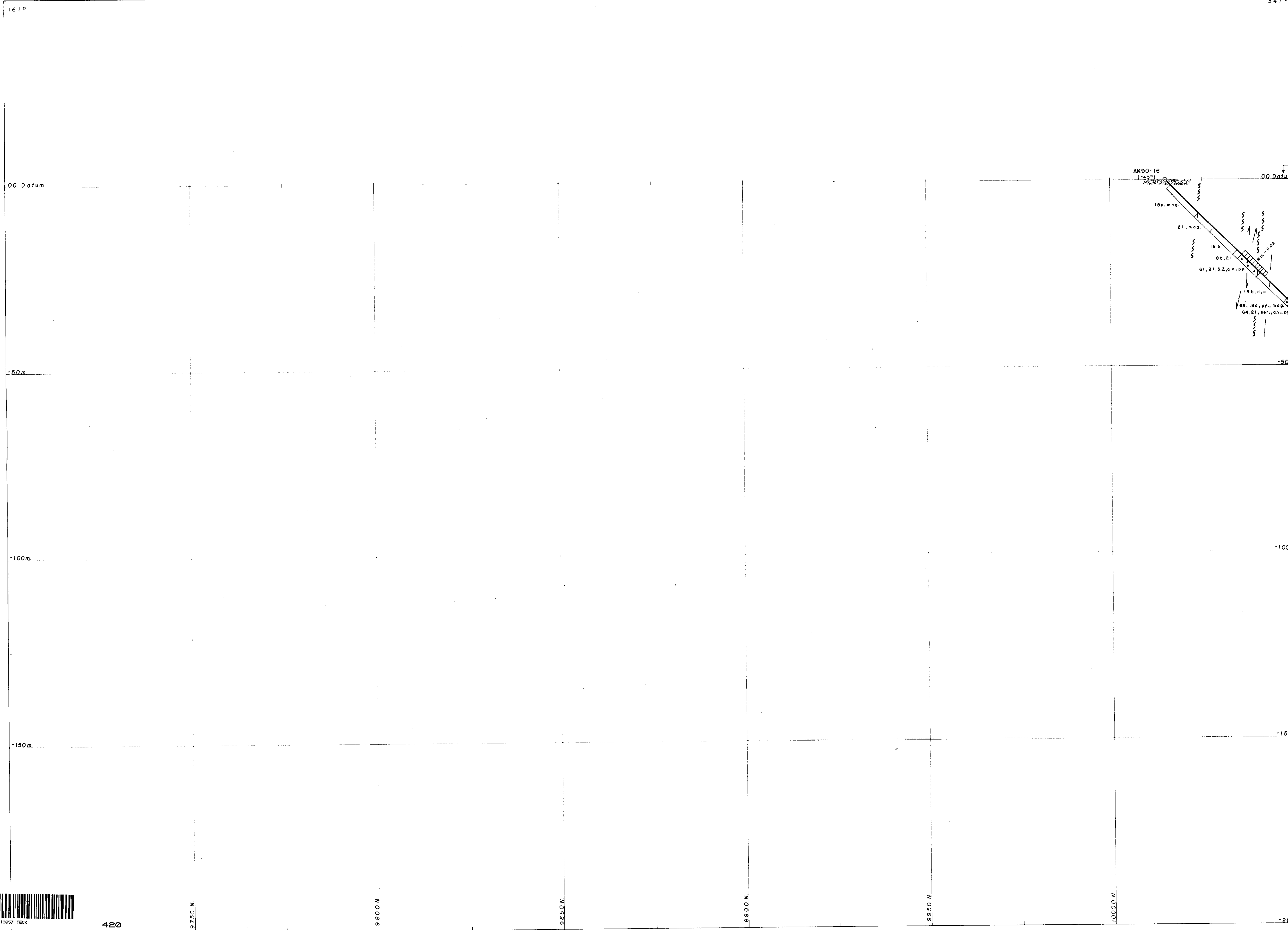


BATTLE MOUNTAIN (CANADA) INC.
2-13957

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY
SECTION 8450 E
 HOLE AK90-05

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: DC-019	DATE: January 1991





LEGEND

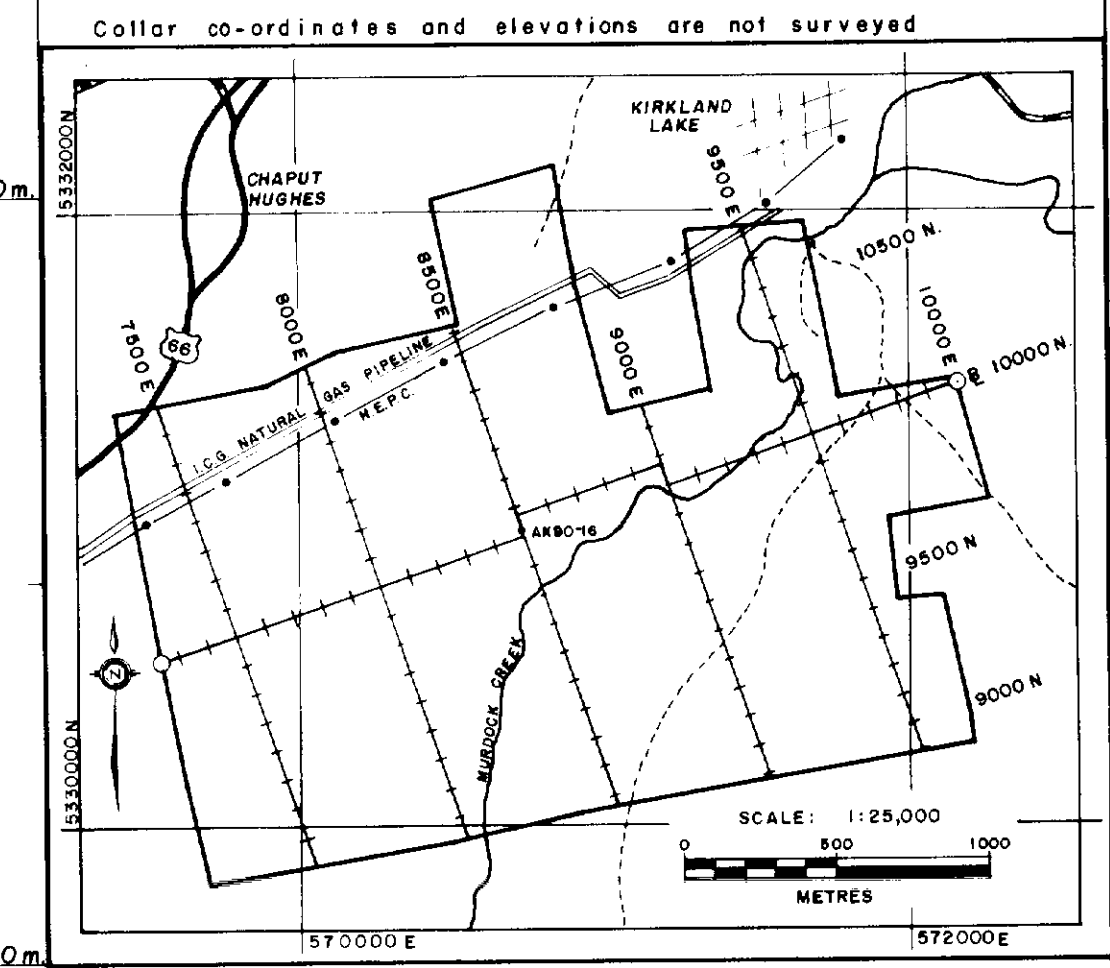
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

	Bedding, contacts
	Breccia
	Facing direction
	Foliation
	Fault, Fault Zone
	Drag folding
	Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdales	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - sheared
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoid
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
fz - fault zone		



BATTLE MOUNTAIN (CANADA) INC.

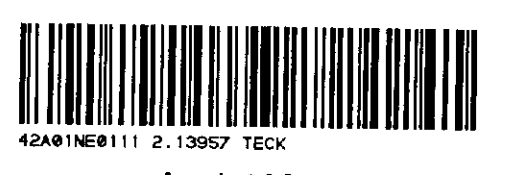
2 057

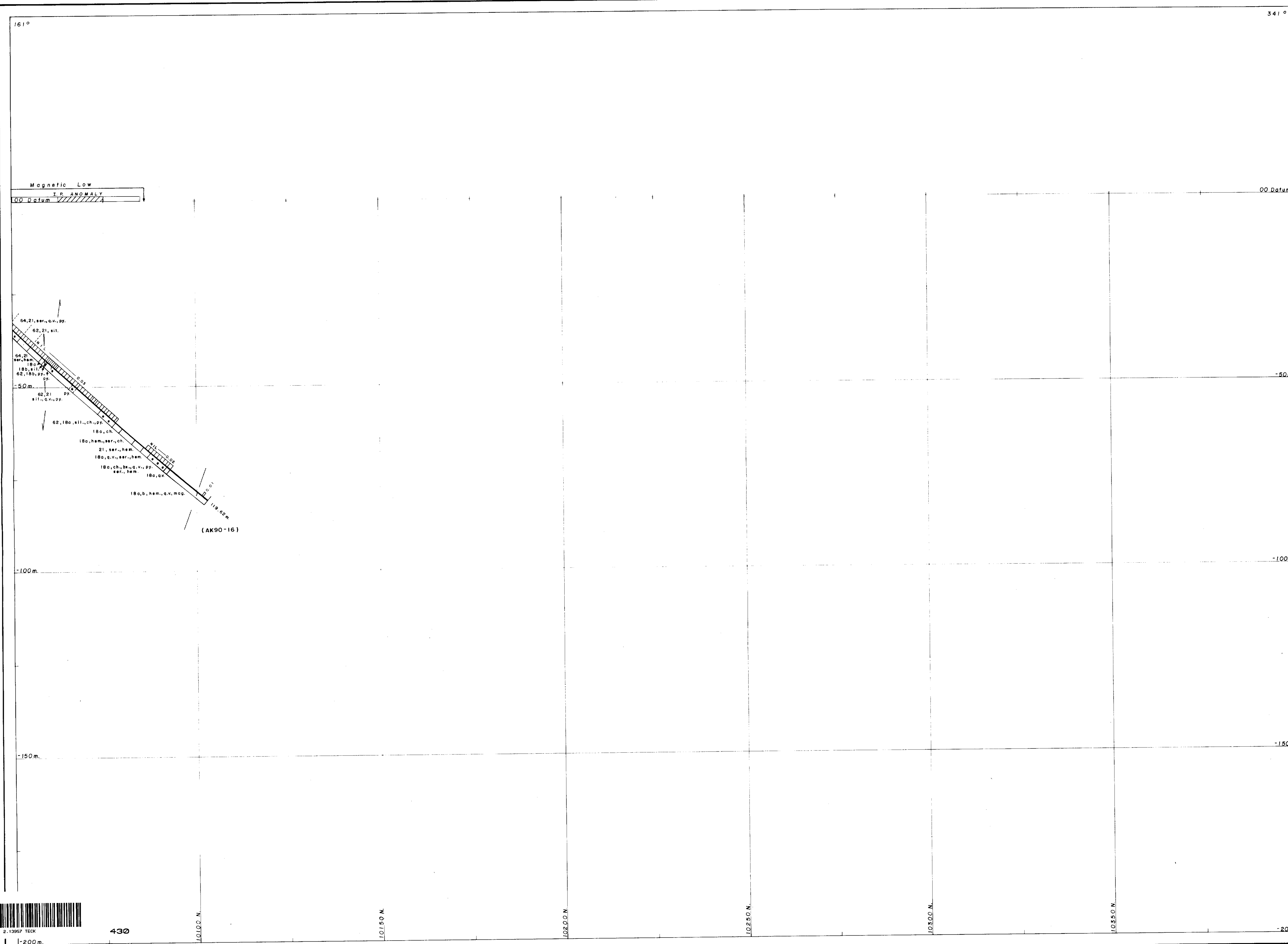
KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8500E
HOLE AK90-16

PROJECT No: 75-JV-28	DATA BY: W. Benham
NTS: 42 A / 1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: DC-020	DATE: January 1991

SCALE: 1:500





LEGEND

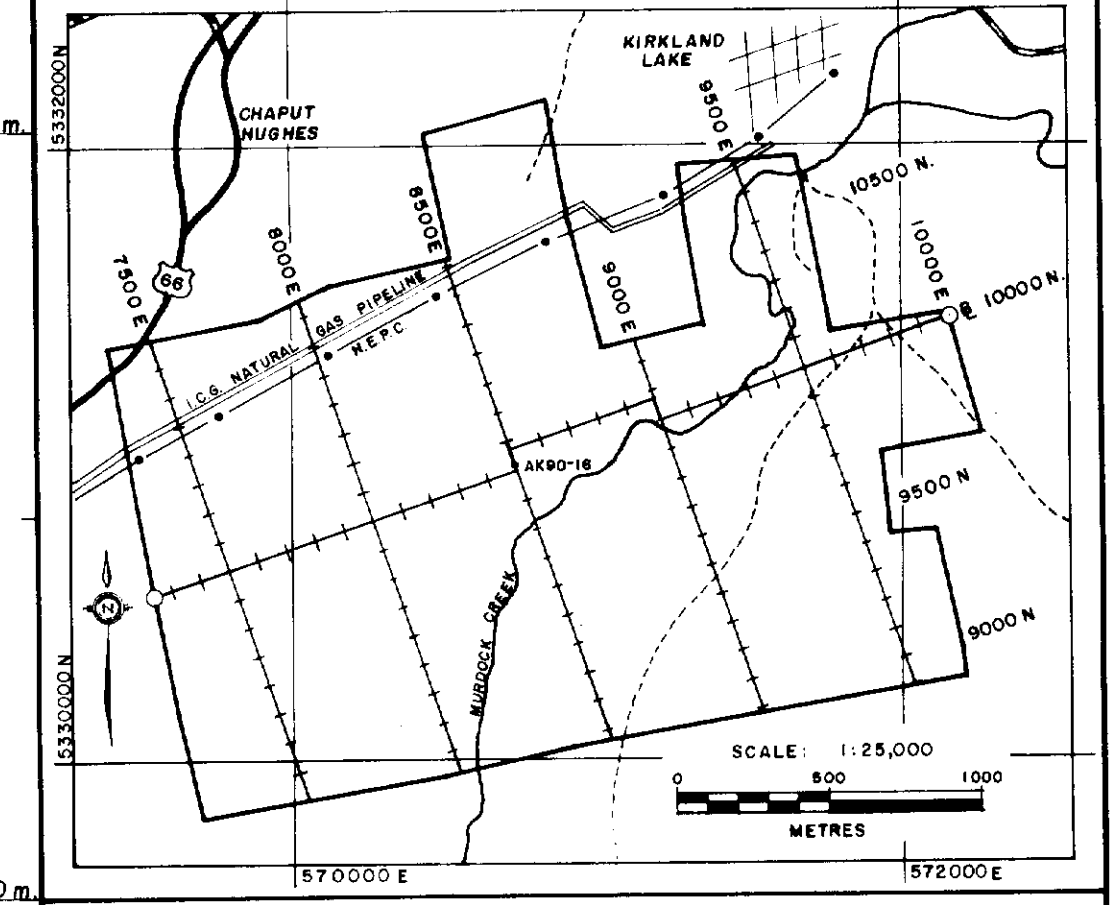
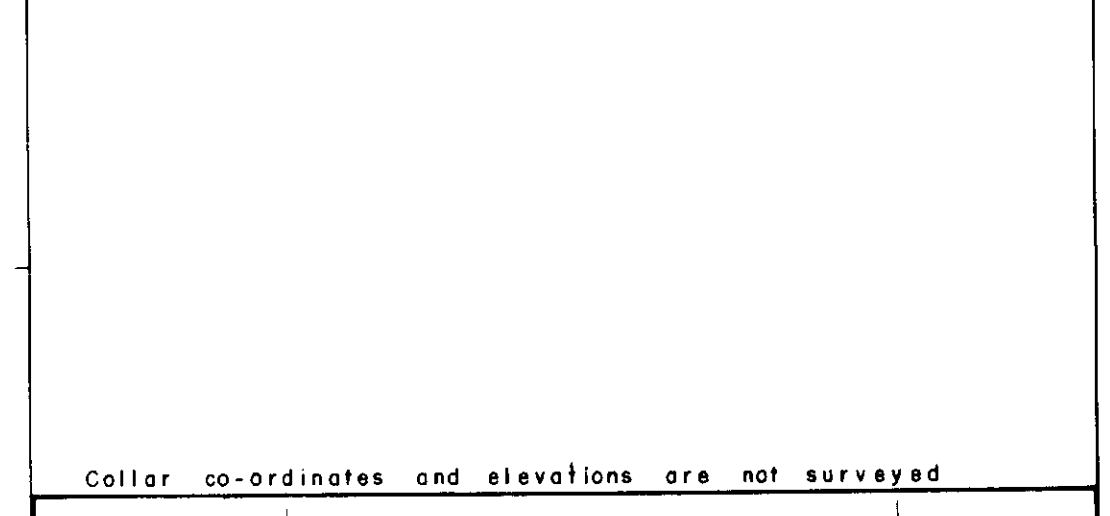
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
412 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

—	Bedding, contacts
△	Breccia
→	Facing direction
↖	Foliation
—	Fault, Fault Zone
~	Drag folding
H	Pyrite Mineralization

ABBREVIATIONS

agg - augite porphyritic	fp - feldspar porphyritic	q.v. - quartz vein
amg - amygdaloidal	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - shored
ca - calcite	m - massive	sz - shear zone
cb - carbonate	mag - magnetite	trc - trachoidot
ch - chlorite	pb - galena	var - variolitic
cp - chalcopyrite	py - pyrite	ves - vesicular
f.c. - fractured	mo - molybdenite	v.g. - visible gold
f.z. - fault zone		



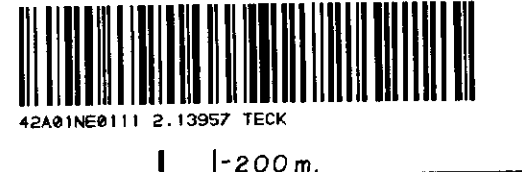
BATTLE MOUNTAIN (CANADA) INC.
2.13957

KIRKLAND LAKE PROJECT
 Queenston Mining Inc.
 ONTARIO
 AMALGAMATED KIRKLAND PROPERTY

SECTION 8500E
 HOLE AK90-16

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Modill, Tech.
DRAWING No: DC-021	DATE: January 1991

SCALE: 1:500



161°

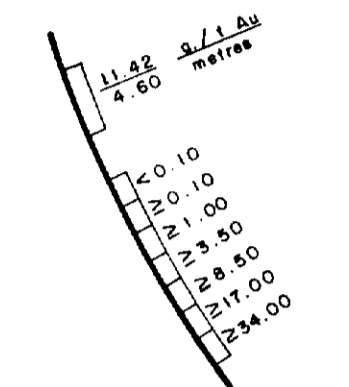
341°

LEGEND

- | | |
|-----------------------|---------------------|
| 60 ALTERATION | 20 SEDIMENTS |
| 61 Chloritic | 21 Conglomerate |
| 62 Sericitic | 22 Graywacke |
| 63 Hematitic | 25 Siltstone |
| 64 Silicic | 26 Mudstone |
| 65 Carbonatized | |
| 40 INTRUSIVES | 10 VOLCANICS |
| 41 Diabase | 18 Trachytes |
| 42 Lamprophyre | 18a Ash Tuff |
| 46 Syenite | 18b Lapilli Tuff |
| 461 Augite Syenite | 18c Block Tuff |
| 462 Mafic Syenite | 18d Lithic Tuff |
| 465 Feldspar Porphyry | 18e Monolithic Tuff |

SYMBOLS

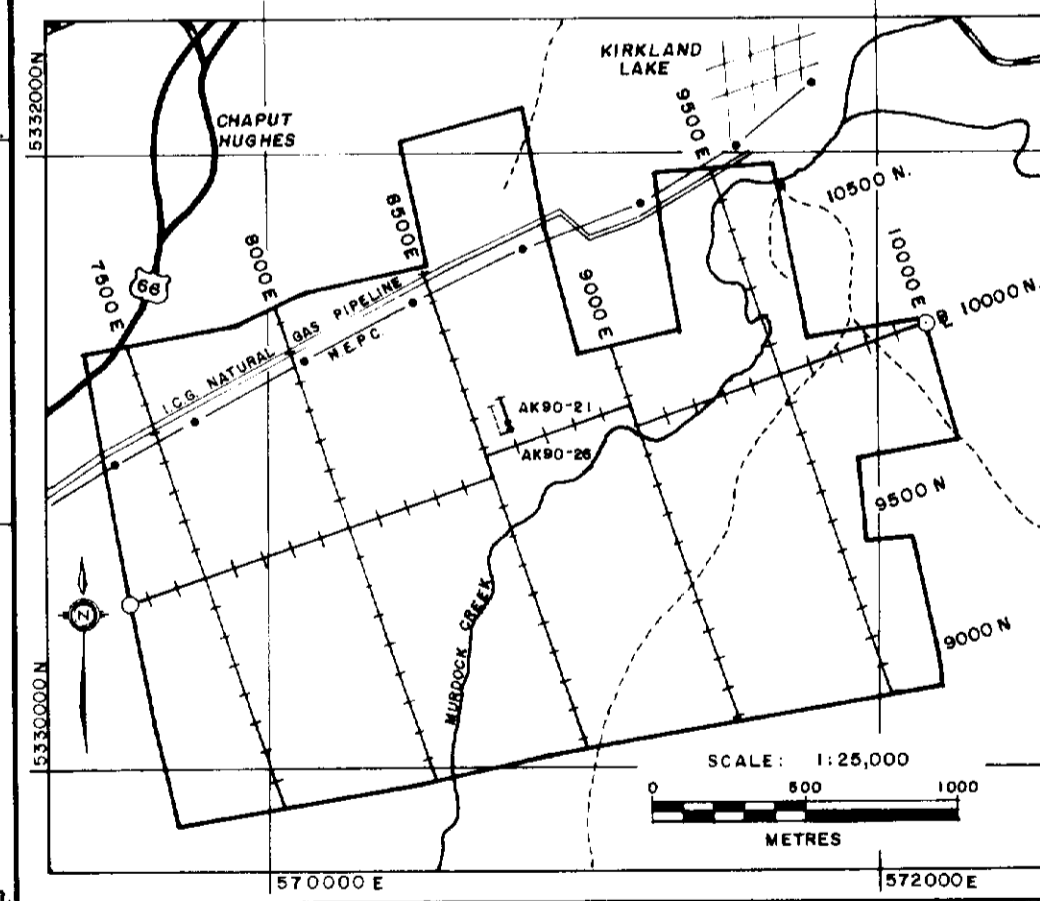
- Bedding, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization



ABBREVIATIONS

- | | | |
|--------------------------|---------------------------|-------------------|
| agp - augite porphyritic | fp - feldspar porphyritic | qv - quartz vein |
| amg - amygdaloid | fsp - feldspathic | ser - sericitic |
| amp - amphibolite | gf - graphitic | sil - silicic |
| ank - ankerite | hem - hematite | sp - sphalerite |
| bx - breccia | lam - laminated | sh - sheared |
| co - calcite | m - massive | s.z - shear zone |
| cd - carbonate | mag - magnetite | trc - trachoidal |
| ch - chlorite | pb - galena | var - variolitic |
| cp - chalcopyrite | py - pyrite | ves - vesicular |
| fc - fracture | mo - molybdenite | vg - visible gold |
| fz - fault zone | | |

Collar co-ordinates and elevations are not surveyed



BATTLE MOUNTAIN (CANADA) INC.

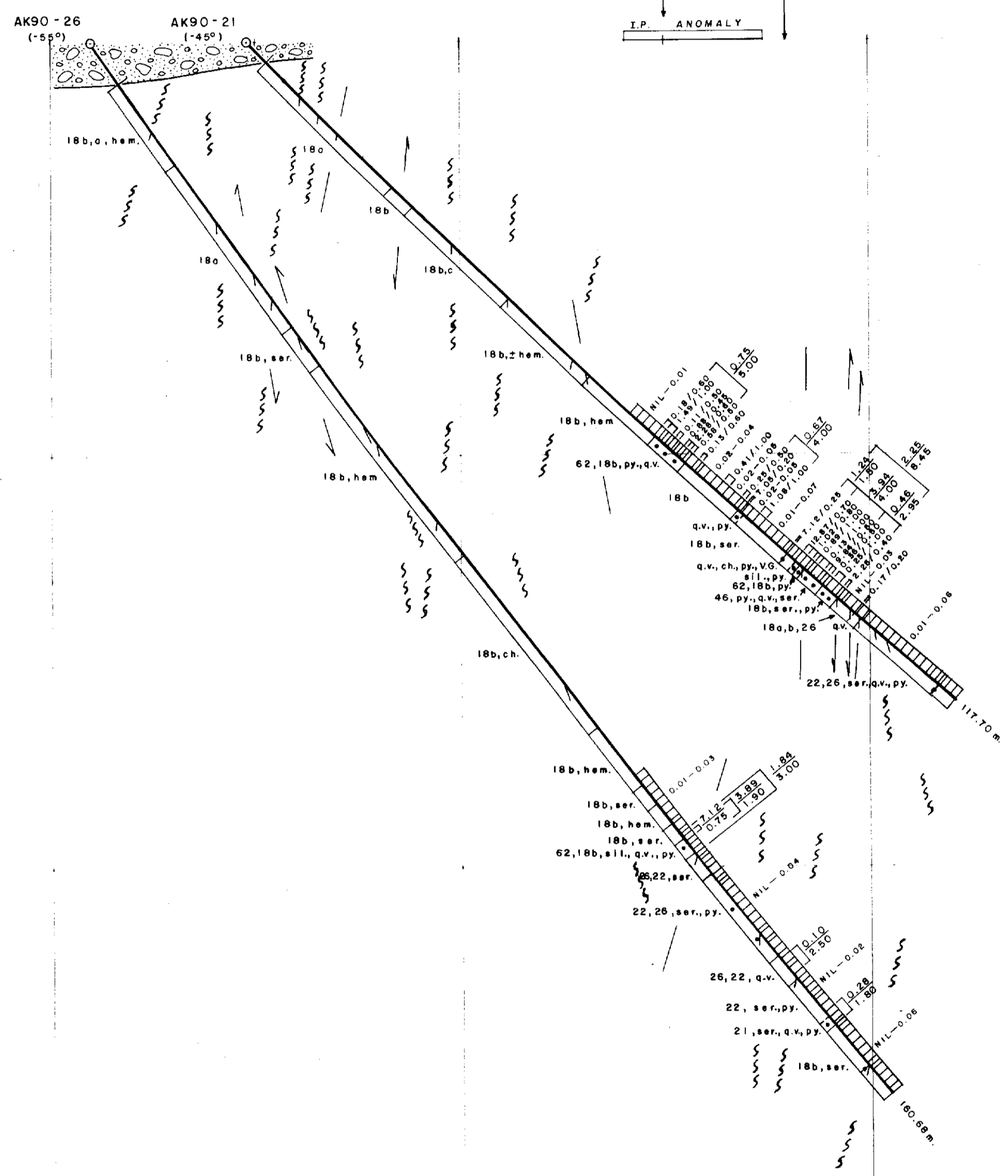
2-13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
AMALGAMATED KIRKLAND PROPERTY

SECTION 8600 E
HOLE AK90-21, 26

PROJECT No.: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No.: DC-O22	DATE: January 1991

SCALE: 1:500



00 Datum.

00 Datum.

-50m

-50m

-100m

-100m

-150m

-150m

10100 N

10150 N

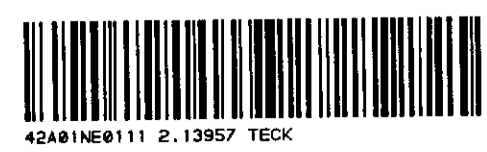
10200 N

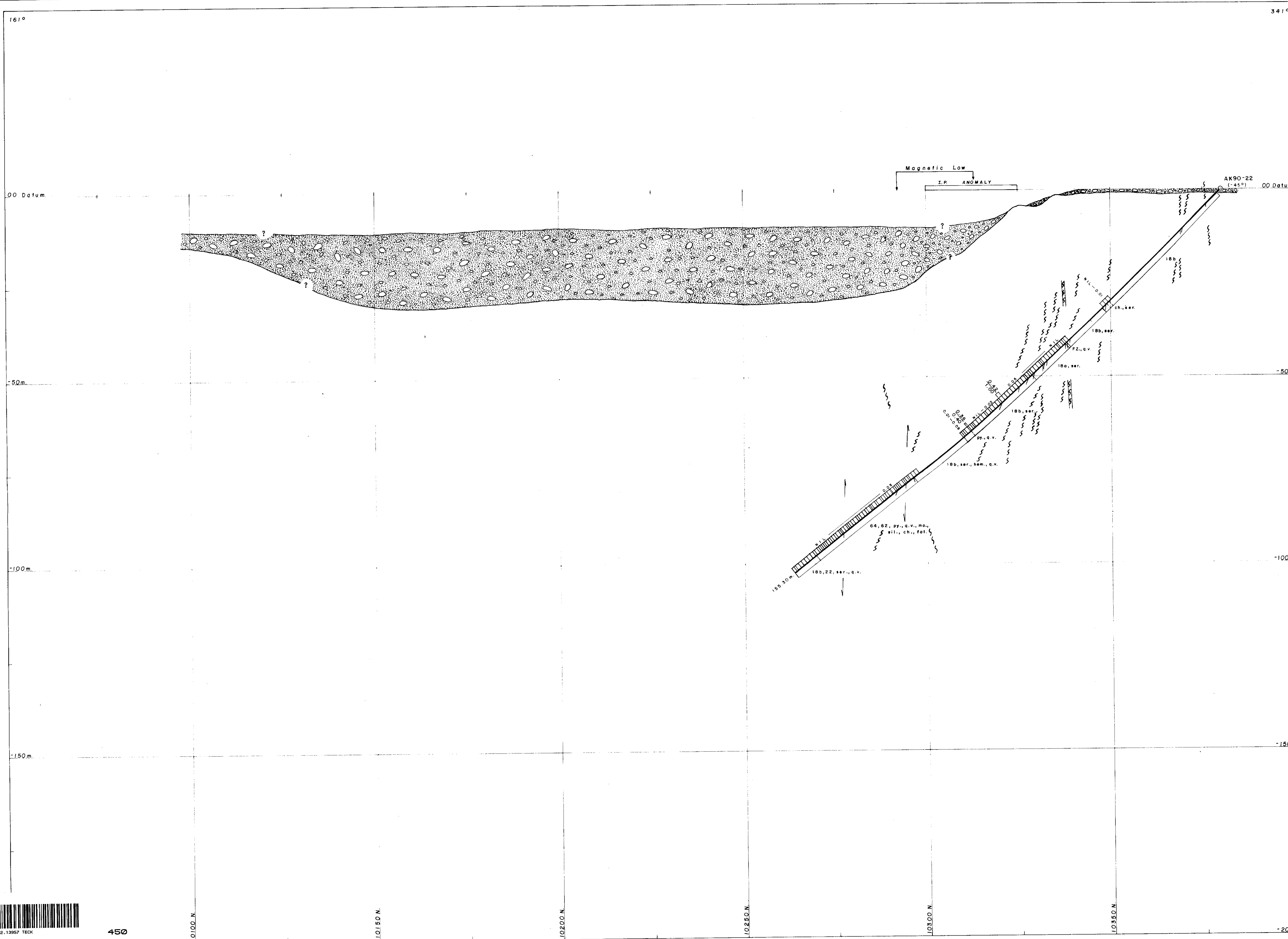
10250 N

10300 N

10350 N

10400 N





LEGEND

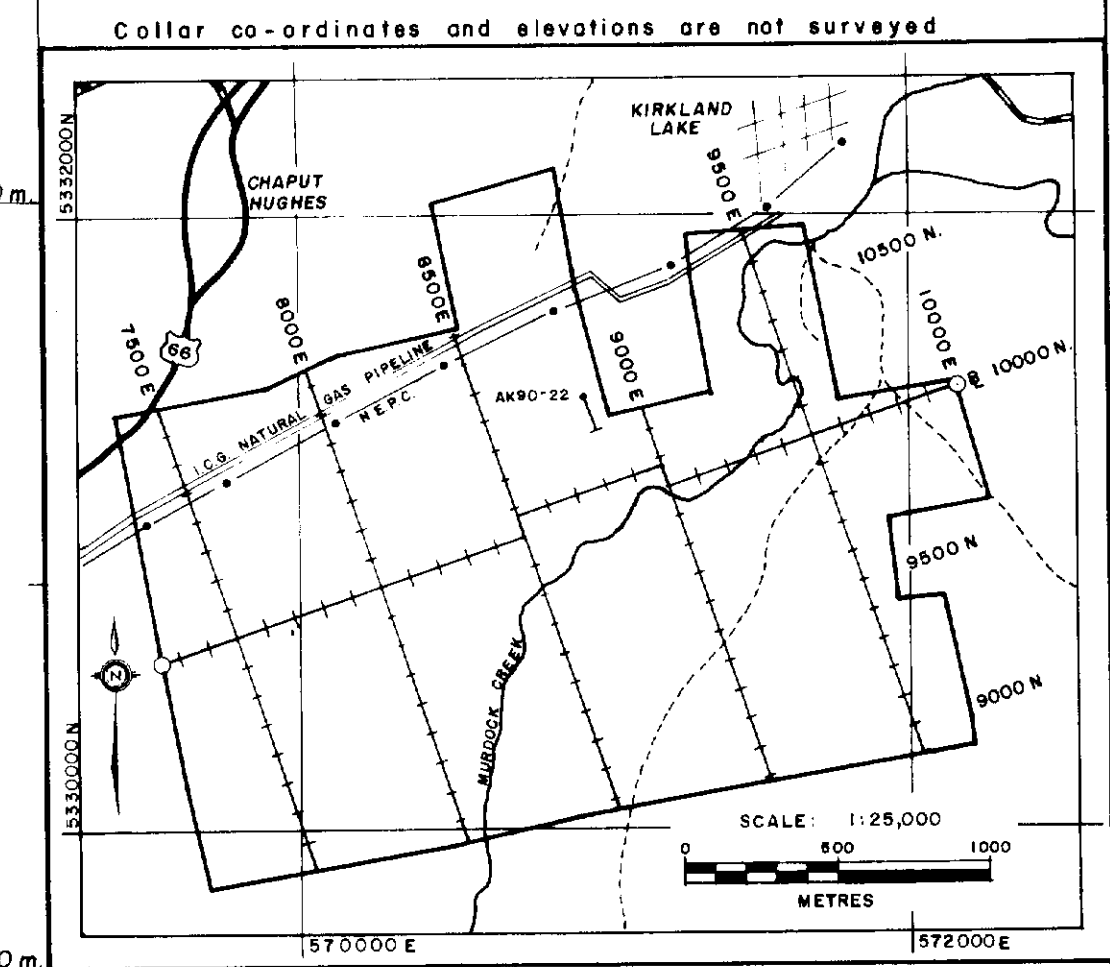
60 ALTERATION	20 SEDIMENTS
61 Chloritic	21 Conglomerate
62 Sericitic	22 Graywacke
63 Hematitic	25 Siltstone
64 Silicic	26 Mudstone
65 Carbonatized	
40 INTRUSIVES	10 VOLCANICS
41 Diabase	18 Trachytes
42 Lamprophyre	18a Ash Tuff
46 Syenite	18b Lapilli Tuff
461 Augite Syenite	18c Block Tuff
462 Mafic Syenite	18d Lithic Tuff
465 Feldspar Porphyry	18e Monolithic Tuff

SYMBOLS

- Beading, contacts
- Breccia
- Facing direction
- Foliation
- Fault, Fault Zone
- Drag folding
- Pyrite Mineralization

ABBREVIATIONS

agp - augite porphyritic	fp - feldspar porphyritic	qv - quartz vein
amg - amygdales	fsp - feldspathic	ser - sericitic
amp - amphibolite	gf - graphitic	sil - silicic
ank - ankerite	hem - hematite	sp - sphalerite
bx - breccia	lam - laminated	sh - sheared
co - calcite	m - massive	s.z. - shear zone
cd - carbonate	mag - magnetite	trc - trachoidal
ch - chlorite	pb - galena	var - variolite
cp - chalcopyrite	py - pyrite	ves - vesicular
fc - fractured	mo - molybdenite	vg - visible gold
f.z. - fault zone		



BATTLE MOUNTAIN (CANADA) INC.

0.13957

KIRKLAND LAKE PROJECT
Queenston Mining Inc.
ONTARIO
(AMALGAMATED KIRKLAND PROPERTY)

SECTION 8825 E
HOLE AK90-22

PROJECT No: 75-JV-28	DATA BY: W. Benham
NTS: 42 A/1	DRAWN BY: B.H. Madill, Tech.
DRAWING No: D C - 023	DATE: January 1991

SCALE: 1:500

