GEOCHEMICAL REPORT
ON THE STEWART PROPERTIES
ISKUT RIVER AREA, BRITISH COLUMBIA
LIARD AND SKEENA MINING DIVISIONS

NTS : 104 - B / 7 & 10

West Longitude 130° 31' to 130° 49'
North Latitude 56° 22' to 56° 36'

FOR

UNIVERSAL TRIDENT INDUSTRIES LTD.
1030-609 Granville Street
Vancouver, B.C.
V7Y 1G5

BY

ROBERT R. ARNOLD, M.Sc., P.Geol., F.G.A.C.

HI-TEC RESOURCE MANAGEMENT LTD.
1500-609 Granville Street
Vancouver, B.C.
V7Y 1G5

DECEMBER 18, 1989

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES

LIST OF FIGURES

LIST OF FIGURES (CONT'D.)

1.0 SUMMARY

Pursuant to a request by the Directors of Universal Trident Industries Ltd., a limited program of geochemical sampling was conducted on the Stewart Properties during the late September and early October 1989. The writer supervised the exploration programs and researched the literature pertaining to the area.

The properties, divided in eight claim groups totalling 662 units, are located in the Iskut River area, Liard and Skeena Mining Divisions, British Columbia. The claims are located approximately 300 air kilometers northwest of Smithers, British Columbia and 125 air kilometers east of Wrangell, Alaska. Access is via fixed-wing aircraft to the Bronson Creek airstrip on the south side of the Iskut River and then by helicopter to the properties. An alternative route is by road along Highway 37 to Bell II and then by helicopter to the various claim groups.

The subject claims are situated within British Columbia's "Golden Triangle" which contains mumerous significant mineral deposits which are currently being developed by surface and underground exploration as well as Skyline's Stonehouse Gold Zone which is currently in production.

The Stewart properties lie within the westernmost part of the Intermontane Tectonic Belt, close to the boundary of the Coastal Crystalline Tectonic Belt. The properties are underlain mainly by Upper Triassic to Lower Jurassic strata which are part of the Stewart Complex (Grove, 1986). The oldest rocks are a series of epiclastic volcanics, marbles , siltstones, and sandstones which are overlain by volcano-sedimentary

rocks of the Hazelton Group. Grove (1986) refers to the Early to Middle Mesozoic rocks as the Unuk River Formation, the Betty Creek Formation, the Salmon River Formation, and the Nass Formation. Plutonic intrusions of quartz monzonite to quartz diorite composition often intrude the Stewart Complex. These plutonic rocks are generally Late Cretaceous to Early Tertiary in age.

The limited geochemical program, including grab rock samples and heavy mineral stream samples, was conducted by Hi-Tec Resource Management Ltd. A total of 174 rock samples and 30 heavy mineral stream samples were collected on the Stewart properties. Results show several very encouraging precious metal and base metal anomalies in heavy mineral stream samples (6400 ppb Au in Sample HM009, 970 ppb Au in Sample HM008, 720 ppb Au in Sample HM004, and 32 ppm Ag in Sample HM003) and in rock samples (187 ppb Au in Sample KA504, 135 ppb Au in Sample RP005, 373 ppm Cu in Sample RP018, and 276 ppm Zn in Sample RP061). These results warrant additional field work in order to fully evaluate the mineral potential of the claim groups. The exploration work should consist of additional geochemical sampling, detailed geological mapping and ground geophysics in areas of greater interest.

2.0 INTRODUCTION

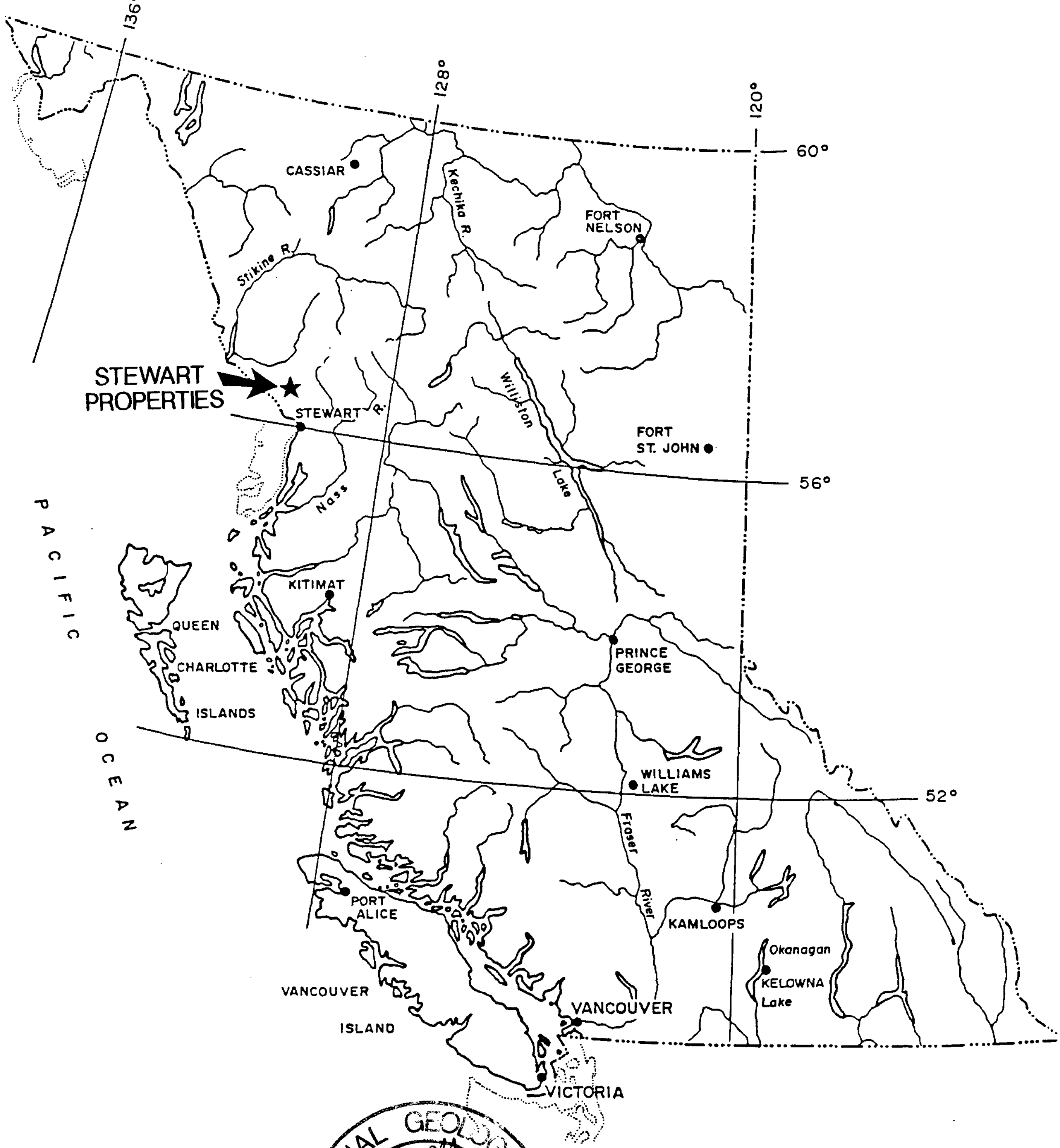
2.1 Objectives

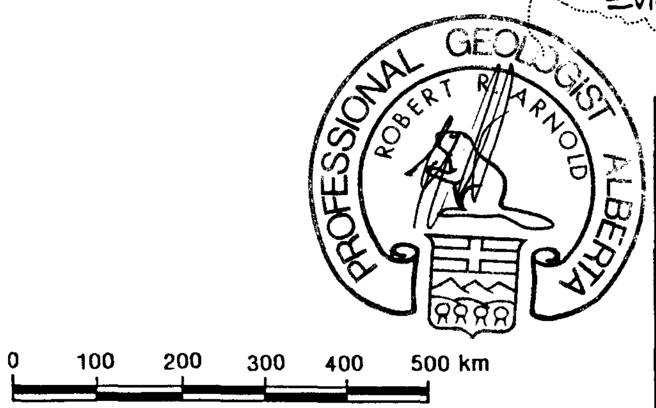
Pursuant to a request by the Directors of Universal Trident Industries Ltd., a limited geological examination and a geochemical sampling program (174 rock and 30 heavy mineral stream samples) were carried out on the Stewart Properties by Hi-Tec Resource Management Ltd. The purpose of the exploration program was to evaluate the precious metal and/or base metal potential of the claims and to propose an exploration program designed to test this potential.

This report is based on the results of the surveys conducted during the late September and early October 1989 and on the available literature pertaining to the area.

2.2 General Location and Access

The Stewart Properties are located approximately 300 air kilometers northwest of Smithers, British Columbia, in the Iskut River area (Figures 1 and 2). The claim groups are situated between longitudes 130^{0} 31' West and 130^{0} 49' West and latitudes 56^{0} 22' North and 56^{0} 36' North. The claims can be accessed by truck from Smithers for a distance of 275 kilometers to Bell II on Highway 37 at the Bell Irving Creek crossing and from there by helicopter. An alternative route is via fixed-wing aircraft to the Bronson Creek airstrip, approximately 20 air kilometers northwest of the northern boundary of the Stewart claims, then by helicopter to the various properties.





UNIVERSAL TRIDENT INDUSTRIES LTD

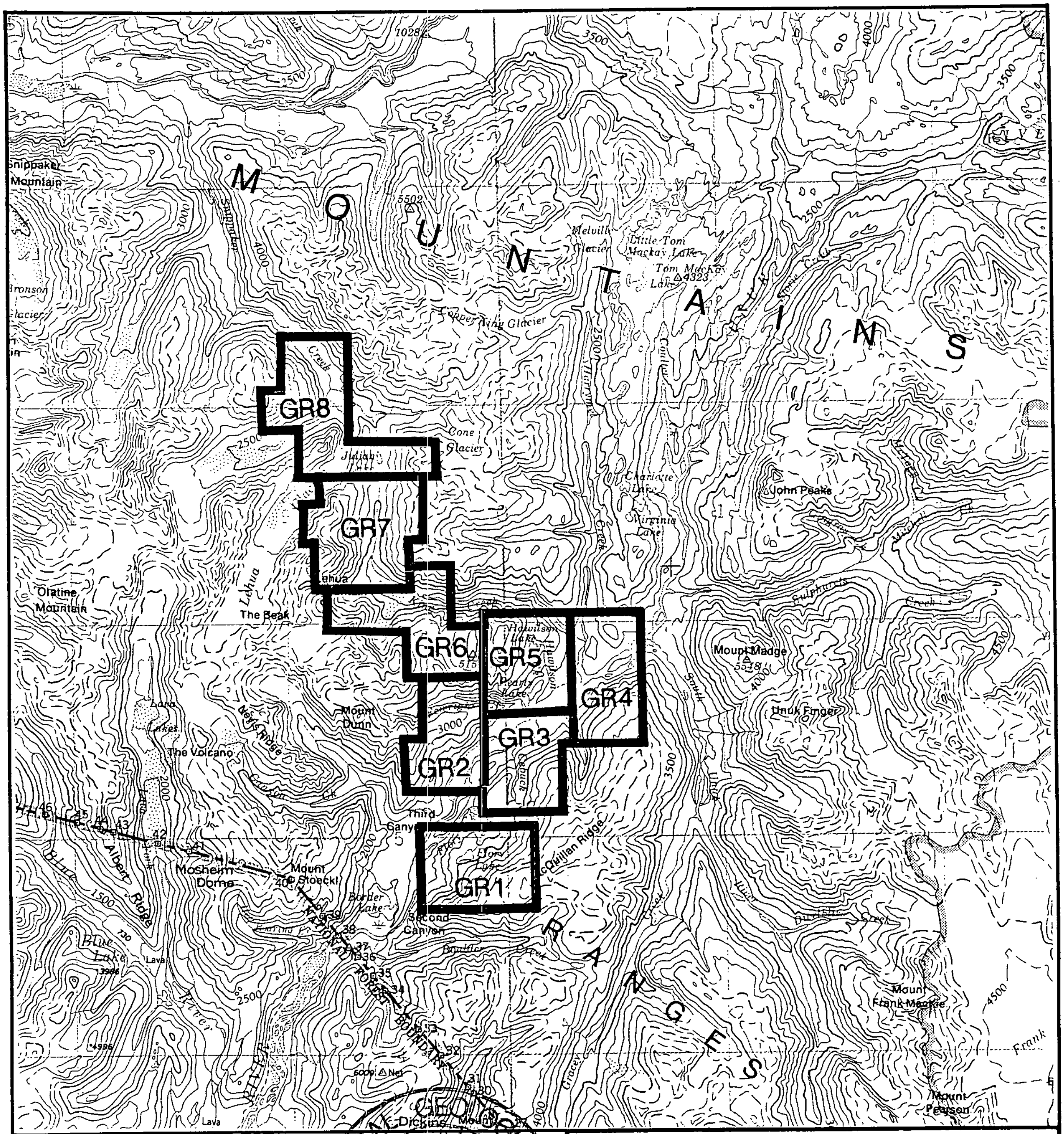
STEWART PROPERTIES

LIARD M.D. & SKEENA M.D., B.C.

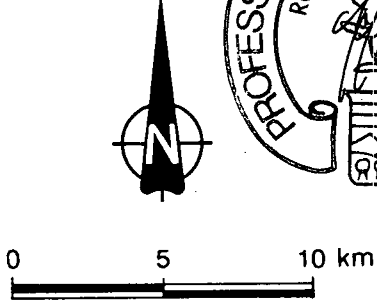
GENERAL LOCATION MAP

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE: As shown	N.T.S.: 104B/7&10	FIGURE No: 1
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:



PROFESSIONAL GEOLOGIST ALBERTA
ROBERT R. ARNOLD



UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES

LIARD M.D. & SKEENA M.D., B.C.

TOPOGRAPHIC MAP

HI-TEC RESOURCE MANAGEMENT LTD.	SCALE: 1:250 000	N.T.S.: 104B/7&10	FIGURE No: 2
	DWN. BY: H.V.	DATE: Oct./1989	
	CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:

2.3 Operations and Communications

Field work was carried out during the months of September and October 1989. The field crew established a base camp on the south shore of Virginia Lake, just 3 kilometers north of the Group IV's northern boundary. A Northern Mountain Hughes 500 D helicopter, based in Calpine's camp (13 kilometers to the northeast of Virginia Lake) was used to reach the various parts of the properties. Telephone communications were maintained with the office in Vancouver, British Columbia, on a regular basis using a Treager radio.

Due to adverse weather conditions (heavy fog and rain), rugged topography, dense vegetation at lower elevations, and limitations of helicopter access (few landing areas relative to rock exposures), only limited prospecting was conducted during the field work.

2.4 Physiography

Local topographic relief is moderate to very steep with elevations ranging from approximately 120 meters (400 feet) along the South Unuk River (Groups 1, 2, 3, 4 and 5) to over 1,950 meters (6,400 feet) in the southeastern part of Group 1. The area exhibits the characteristics of typical glaciated physiography, which includes wide U-shaped, drift-filled valleys flanked by steep rugged mountains and deeply incised V-shaped upland valleys.

Vegetation consists mainly of dense alder, willow, devil's club, and mature conifers such as spruce, fir, and hemlock along the valley slopes. At higher altitudes above timberline, generally between 1,000 meters and 1,400 meters above sea level (3,300 feet and 4,600 feet), the vegetation changes to subalpine and alpine vegetation. The highest parts of the properties support only moss and lichen. Glaciers and snowfields occur frequently throughout the area, usually above 1,600 meters (5,200 feet). The period of least snow cover occurs between July and mid-September and summers are relatively cool and wet.

3.0 PROPERTY AND OWNERSHIP

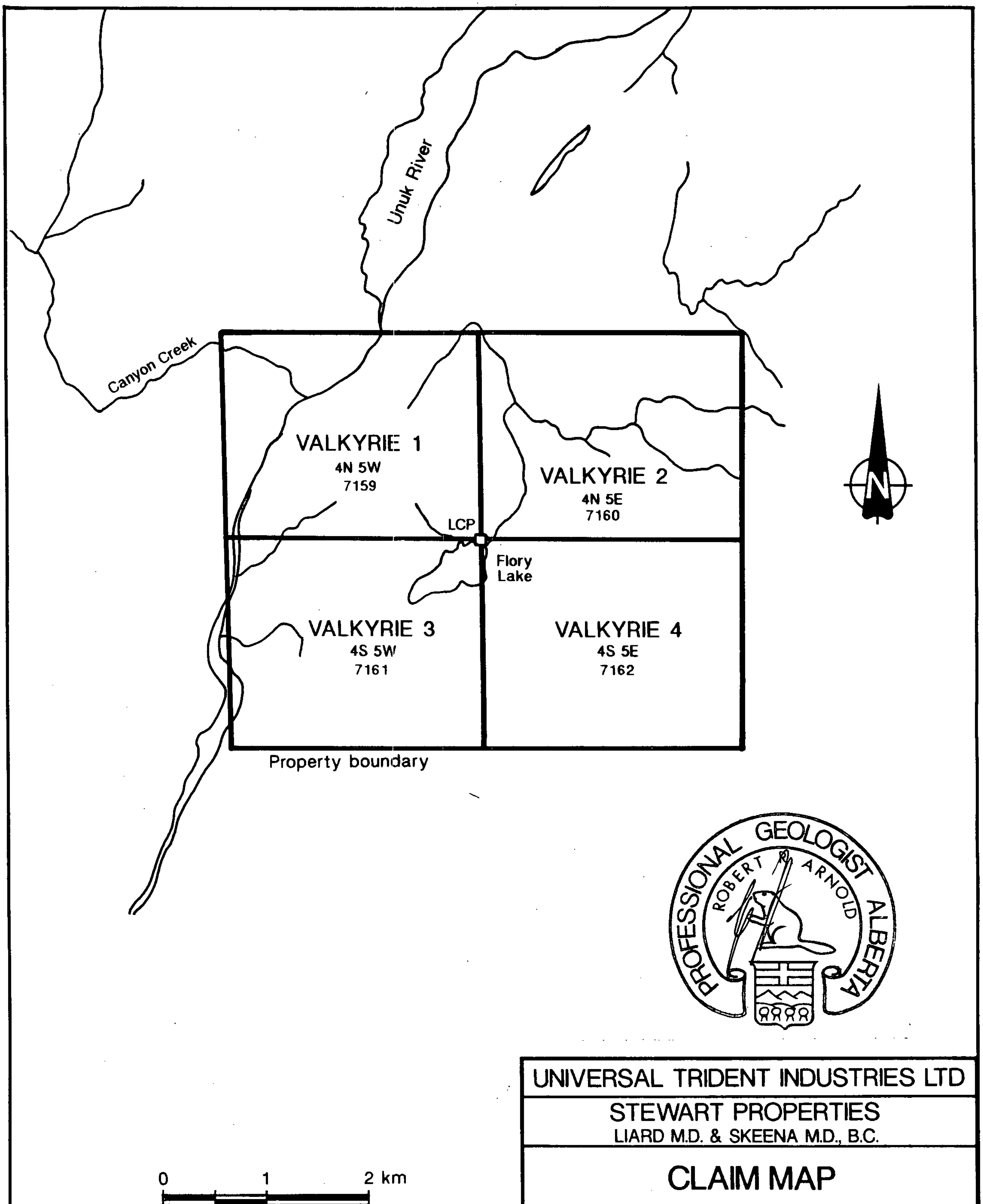
3.1 Group 1

The property consists of four contiguous mineral claims totalling 80 units, located in the Skeena Mining Division on NTS sheet 104-B/7.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

CLAIM	UNITS	RECORD No.	RECORD DATE
Valkyrie 1	20	7159	Jan. 26, 1989
Valkyrie 2	20	7160	Jan. 26, 1989
Valkyrie 3	20	7161	Jan. 26, 1989
Valkyrie 4	20	7162	Jan. 26, 1989

The entire property is shown on the Mineral Claim Map 104-B/7E and on Figure 4 of the present report.



UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES

LIARD M.D. & SKEENA M.D., B.C.

CLAIM MAP
GROUP 1

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE: 1 : 50,000	N.T.S.: 104B/7&10	FIGURE No: 4
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 037	FILE No:

3.2 Group 2

The property consists of four contiguous mineral claims totalling 71 units located in the Skeena Mining Division on NTS sheet 104-B/7.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

CLAIM	UNITS	RECORD No.	RECORD DATE
Loki 4	18	7143	Jan. 27, 1989
Loki 5	18	7144	Jan. 27, 1989
Loki 6	20	7145	Jan. 27, 1989
Loki 7	15	7146	Jan. 27, 1989

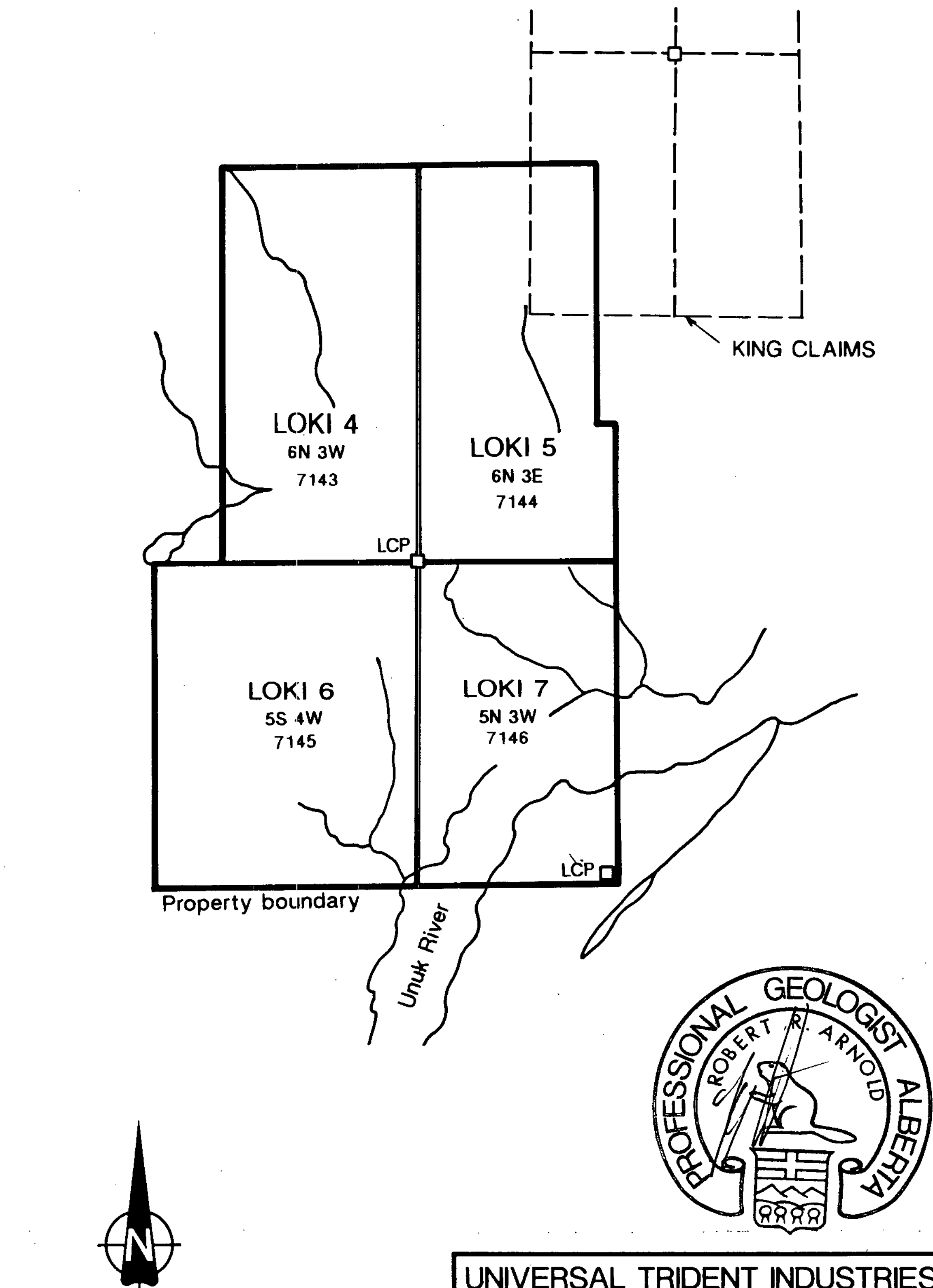
The entire property is shown on the Mineral Claim Map 104-B/7E and on Figure 5 of the present report.

3.3 Group 3

The property consists of four contiguous mineral claims totalling 67 units located in the Skeena Mining Division on NTS sheet 104-B/7.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

CLAIM	UNITS	RECORD No.	RECORD DATE
Grendel 5	16	7151	Jan. 26, 1989
Grendel 6	16	7152	Jan. 26, 1989
Grendel 7	20	7153	Jan. 26, 1989
Grendel 8	15	7154	Jan. 26, 1989



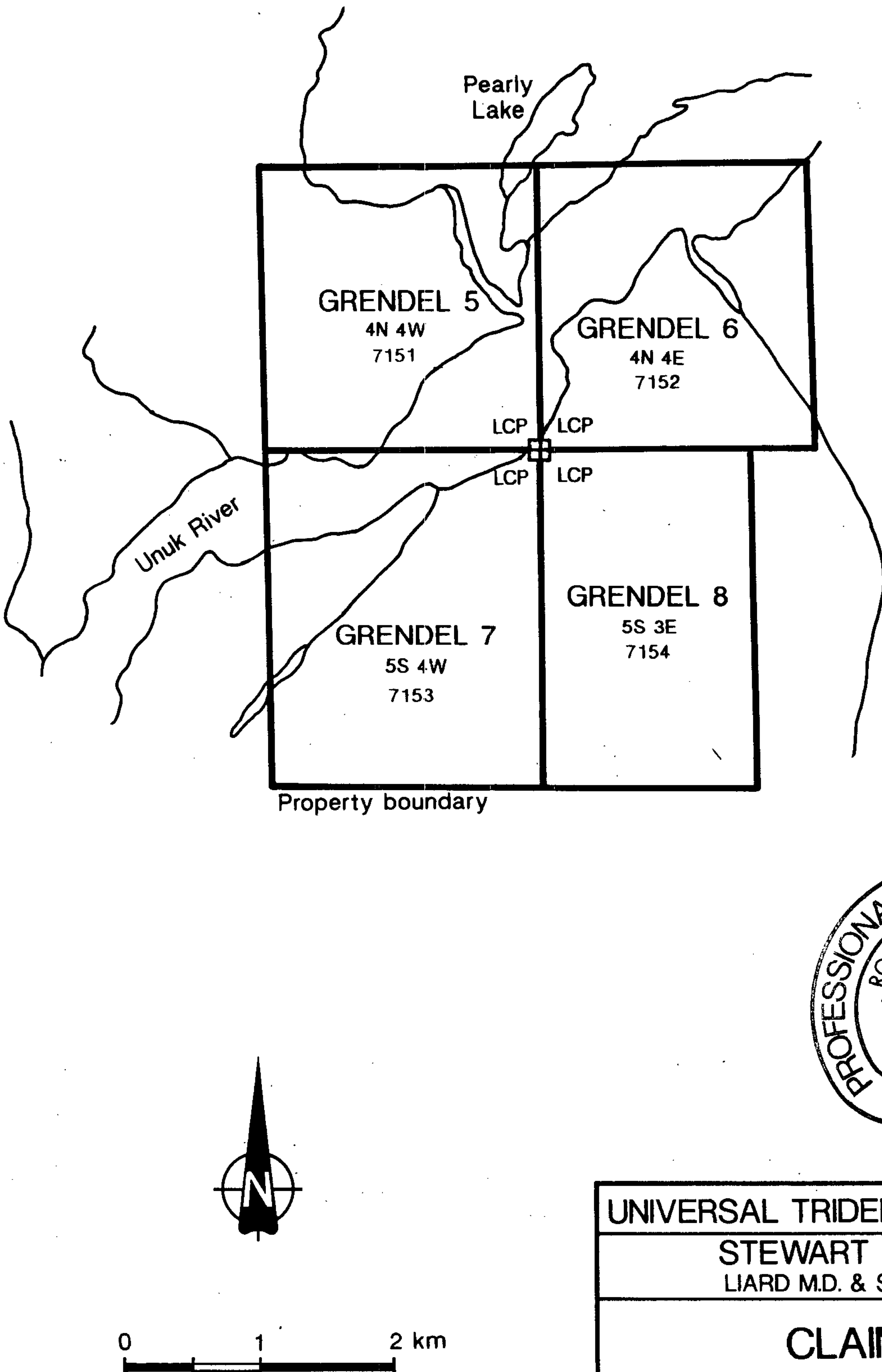
UNIVERSAL TRIDENT INDUSTRIES LTD

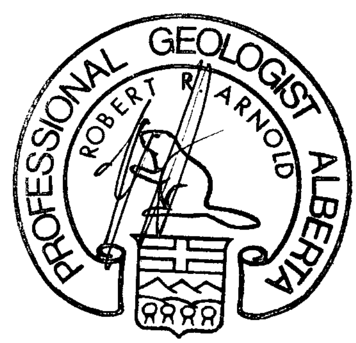
STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.

CLAIM MAP
GROUP 2

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE:	N.T.S.:	FIGURE No:
1 : 50,000	104B/7&10	5
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 037	FILE No:





UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES

LIARD M.D. & SKEENA M.D., B.C.

CLAIM MAP
GROUP 3

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE: 1 : 50,000	N.T.S.: 104B/7&10	FIGURE No: 6
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 037	FILE No:

The entire property is shown on the Mineral Claim Map 104-B/7E and on Figure 6 of the present report.

3.4 Group 4

The property consists of four contiguous mineral claims totalling 72 units located in the Skeena Mining Division on NTS sheet 104-B/7.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

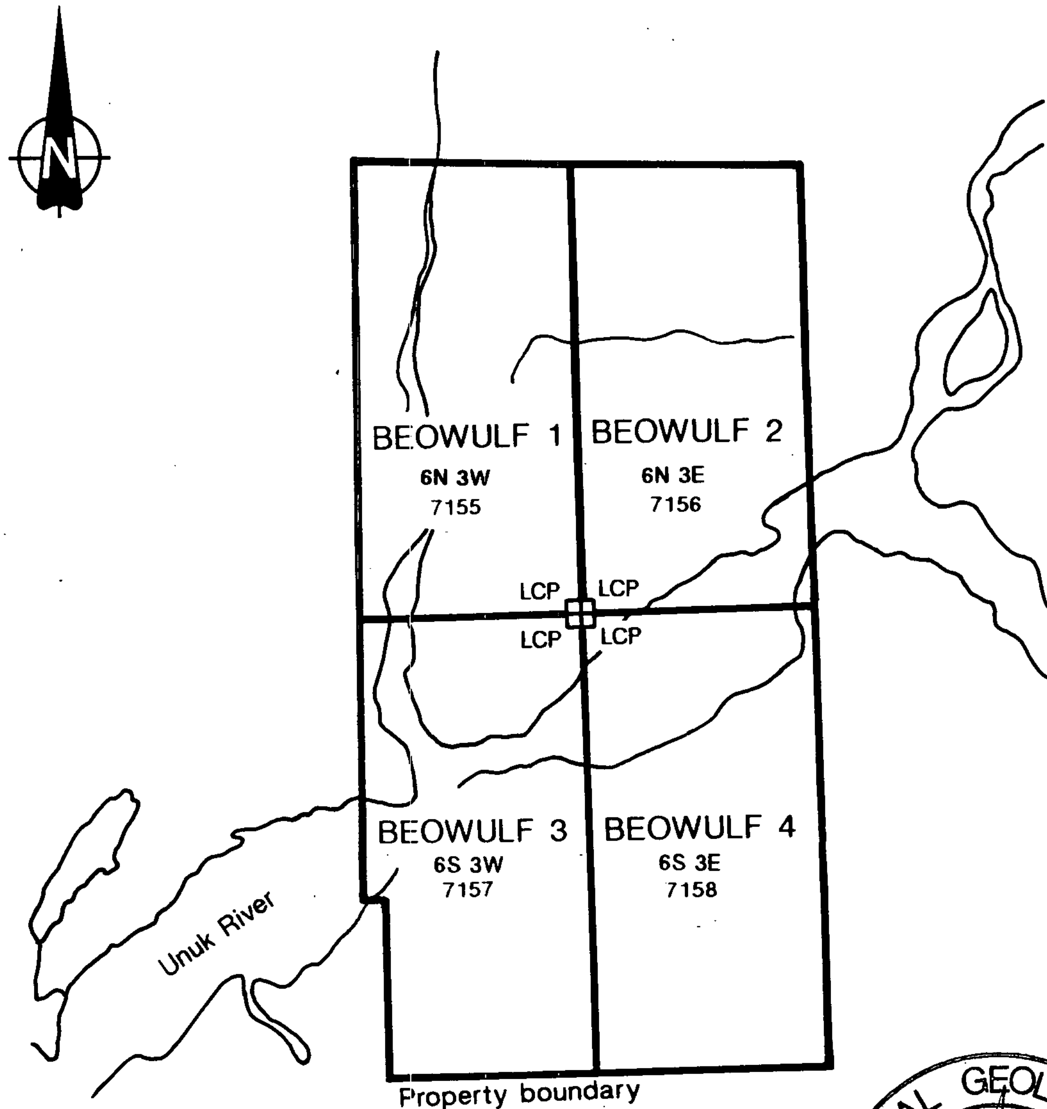
CLAIM	UNITS	RECORD No.	RECORD DATE
Beowulf 1	18	7155	Jan. 26, 1989
Beowulf 2	18	7156	Jan. 26, 1989
Beowulf 3	18	7157	Jan. 26, 1989
Beowulf 4	18	7158	Jan. 26, 1989

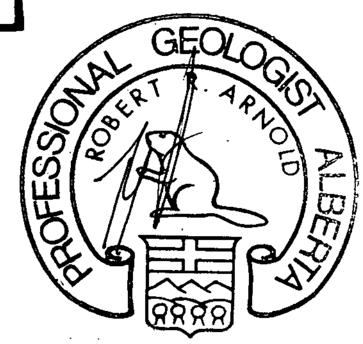
The entire property is shown on the Mineral Claim Map 104-B/7E and on Figure 7 of the present report.

3.5 Group 5

The property consists of four contiguous mineral claims totalling 80 units located in the Skeena Mining Division on NTS sheet 104-B/7.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:





0 1 2 km

UNIVERSAL TRIDENT INDUSTRIES LTD			
STEWART PROPERTIES LIARD M.D. & SKEENA M.D., B.C.			
CLAIM MAP GROUP 4			
HI-TEC RESOURCE MANAGEMENT LTD.	SCALE: 1 : 50,000	N.T.S.: 104B/7&10	FIGURE No: 7
	DWN. BY: H.V.	DATE: Oct./1989	
	CHKD. BY: R. Arnold	PROJECT No: 89BC 037	FILE No:

CLAIM	UNITS	RECORD No.	RECORD DATE
Grendel 1	20	7147	Jan. 24, 1989
Grendel 2	20	7148	Jan. 26, 1989
Grendel 3	20	7149	Jan. 26, 1989
Grendel 4	20	7150	Jan. 26, 1989

The entire property is shown on the Mineral Claim Map 104-B/7E and on Figure 8 of the present report.

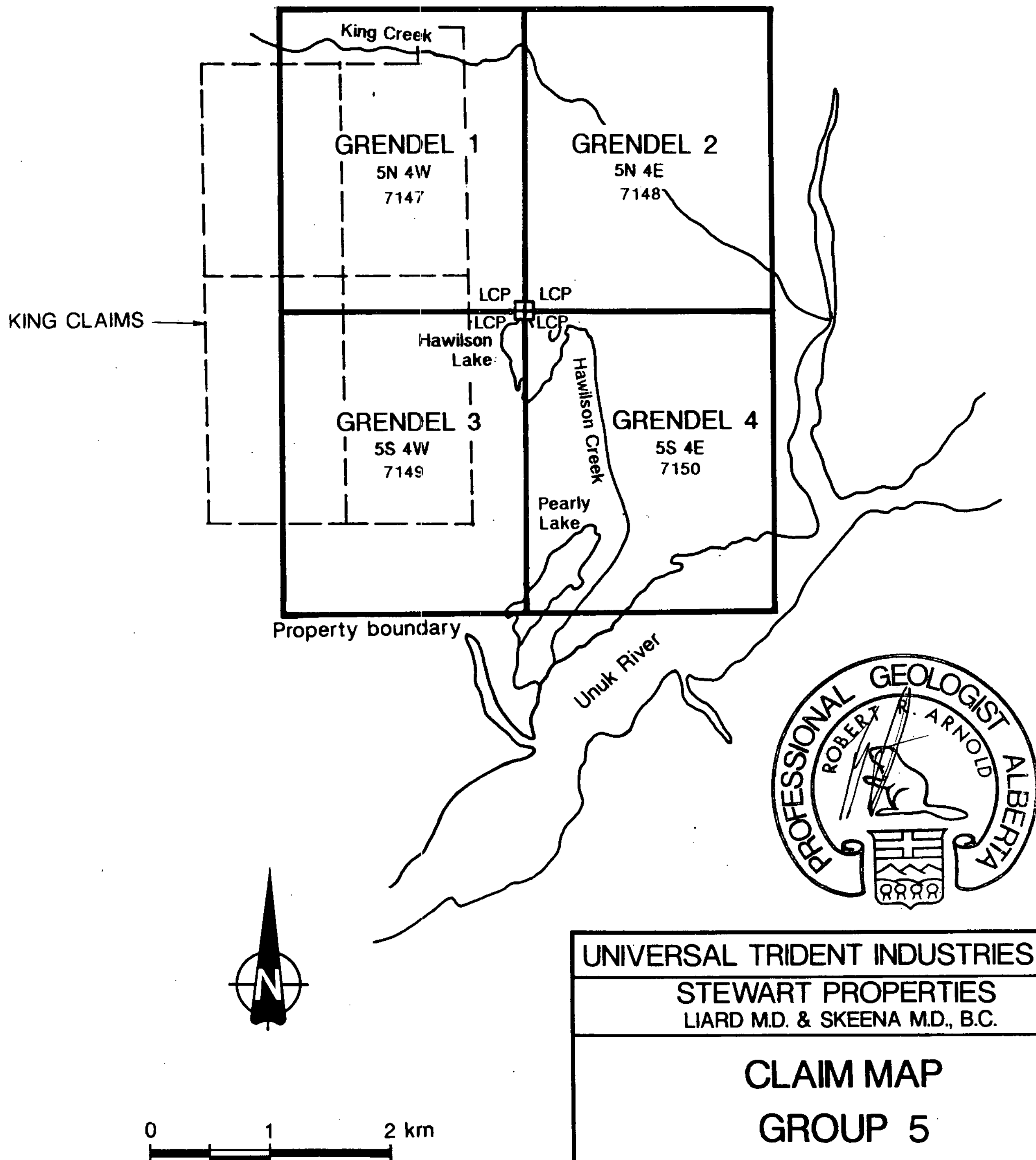
3.6 Group 6

The property consists of five contiguous mineral claims totalling 95 units located in the Skeena Mining Division on NTS sheets 104-B/7 and 104-B/10.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

CLAIM	UNITS	RECORD No.	RECORD DATE
Odin 9	20	7138	Jan. 23, 1989
Odin 10	20	7139	Jan. 23, 1989
Loki 1	20	7140	Jan. 23, 1989
Loki 2	20	7141	Jan. 23, 1989
Loki 3	15	7142	Jan. 23, 1989

The entire property is shown on the Mineral Claim Maps 104-B/7E and 104-B/10E and on Figure 9 of the present report.



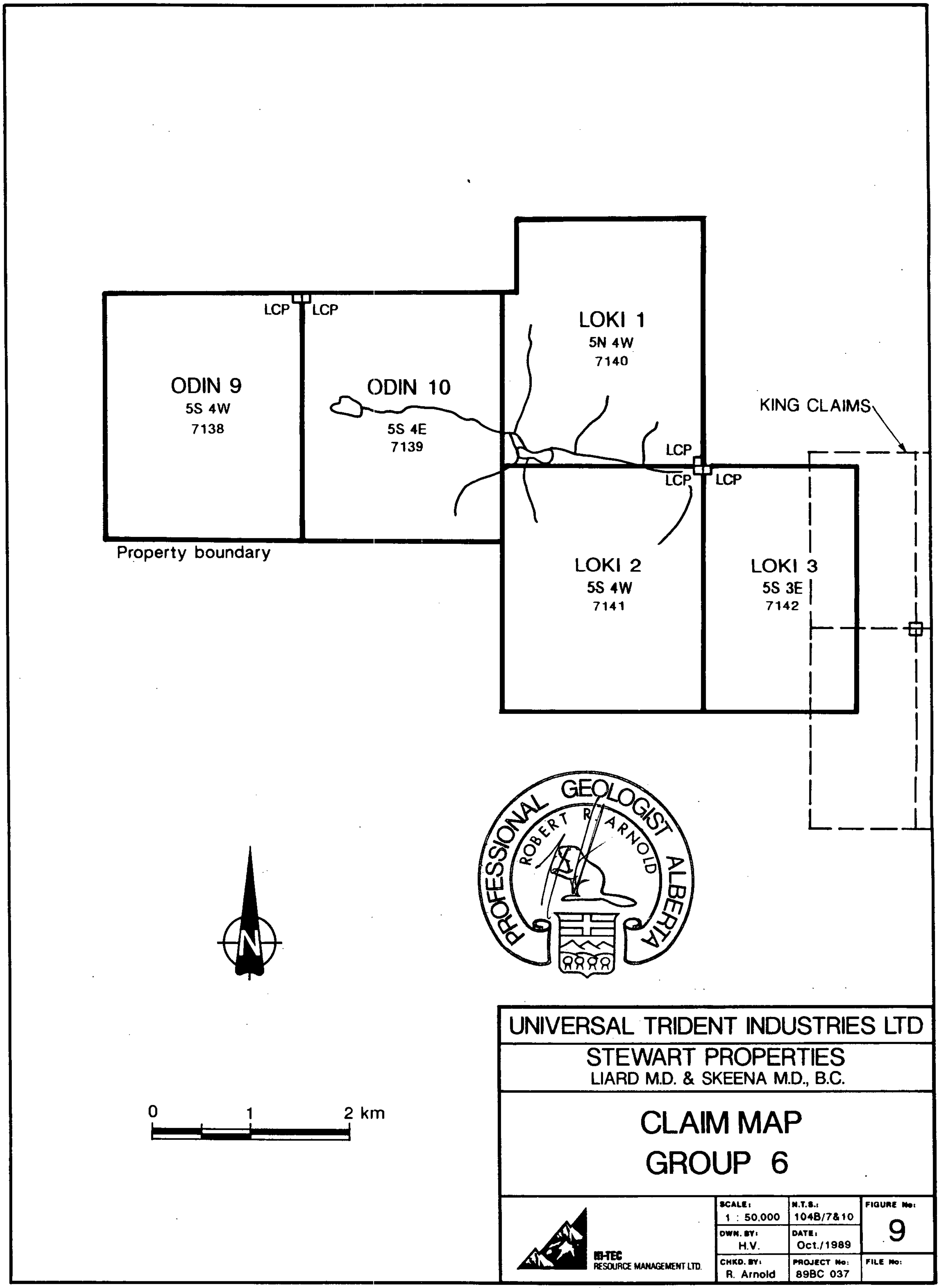
UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.

CLAIM MAP
GROUP 5

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE:	N.T.S.:	FIGURE No:
1 : 50,000	104B/7&10	8
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 037	FILE No:



ODIN 9
5S 4W
7138
ODIN 10
5S 4E
7139
LCP
LCP
LOKI 1
5N 4W
7140
LOKI 2
5S 4W
7141
LOKI 3
5S 3E
7142
LCP
LCP
LCP
KING CLAIMS
Property boundary
PROFESSIONAL GEOLOGIST ALBERTA
ROBERT R. ARNOLD
N
0 1 2 km
UNIVERSAL TRIDENT INDUSTRIES LTD
STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.
CLAIM MAP
GROUP 6
HI-TEC
RESOURCE MANAGEMENT LTD.
SCALE: 1 : 50,000
N.T.S.: 104B/7&10
FIGURE No: 9
DWN. BY: H.V.
DATE: Oct./1989
CHKD. BY: R. Arnold
PROJECT No: 89BC 037
FILE No:

3.7 Group 7

The property consists of six contiguous mineral claims totalling 99 units located in the Skeena and Liard Mining Divisions on NTS sheet 104-B/10.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

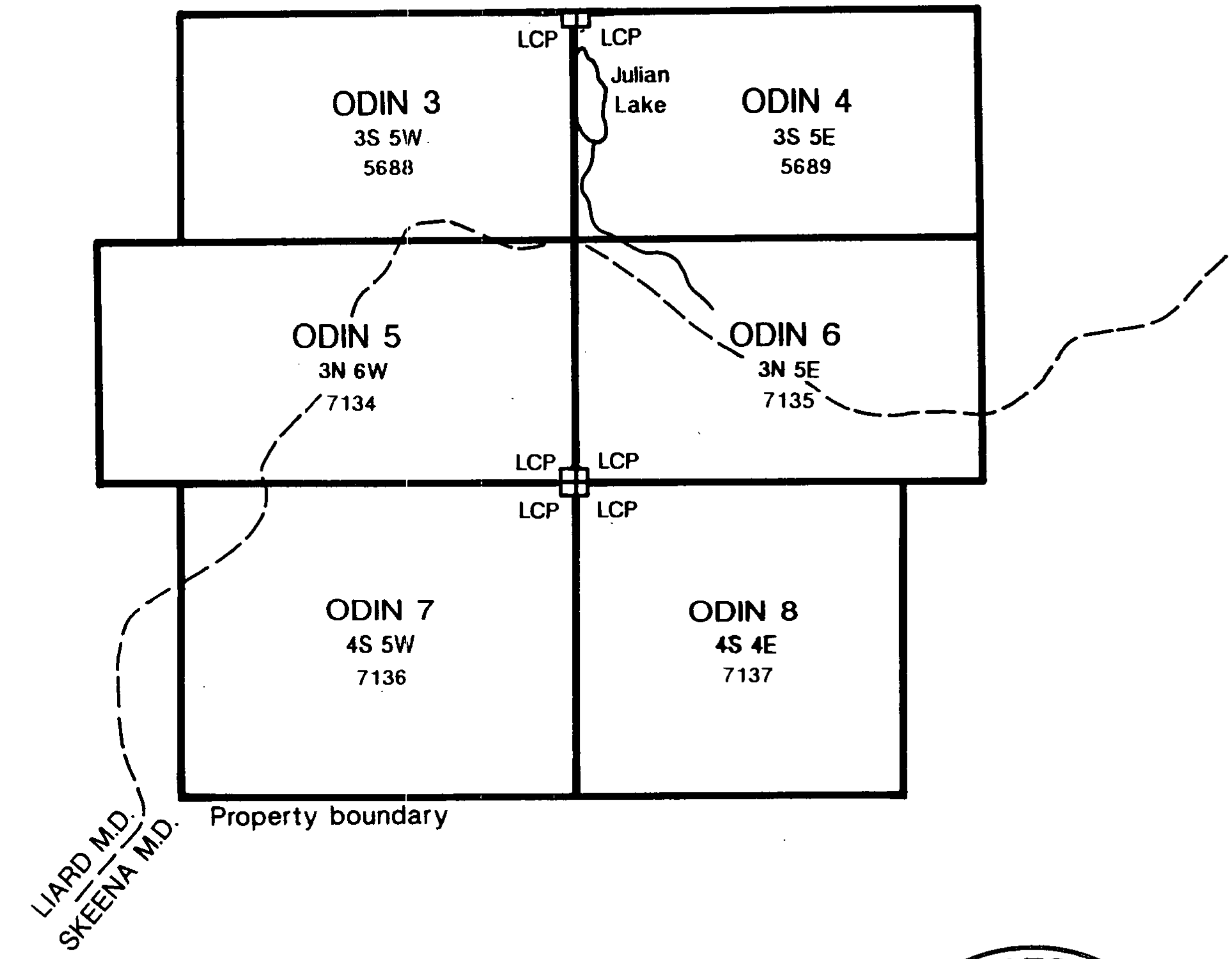
CLAIM	UNITS	RECORD No.	RECORD DATE
Odin 3	15	5688	Jan. 23, 1989
Odin 4	15	5689	Jan. 23, 1989
Odin 5	18	7134	Jan. 23, 1989
Odin 6	15	7135	Jan. 23, 1989
Odin 7	20	7136	Jan. 23, 1989
Odin 8	16	7137	Jan. 23, 1989

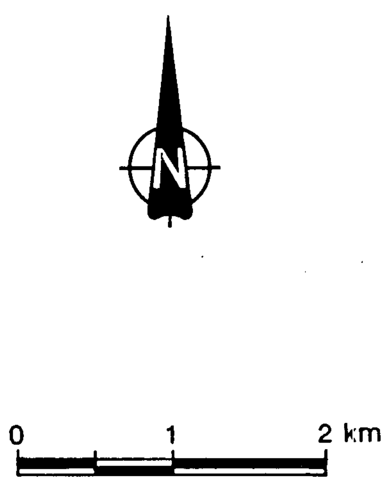
The entire property is shown on the Mineral Claim Map 104-B/10E and on Figure 10 of the present report.

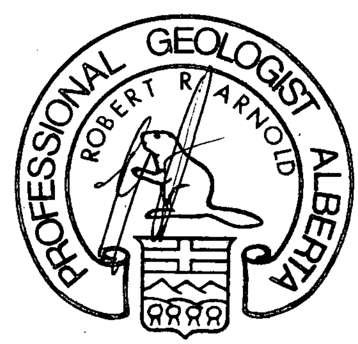
3.8 Group 8

The property consists of six contiguous mineral claims totalling 98 units located in the Liard Mining Division on NTS sheet 104-B/10.

The property is recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:







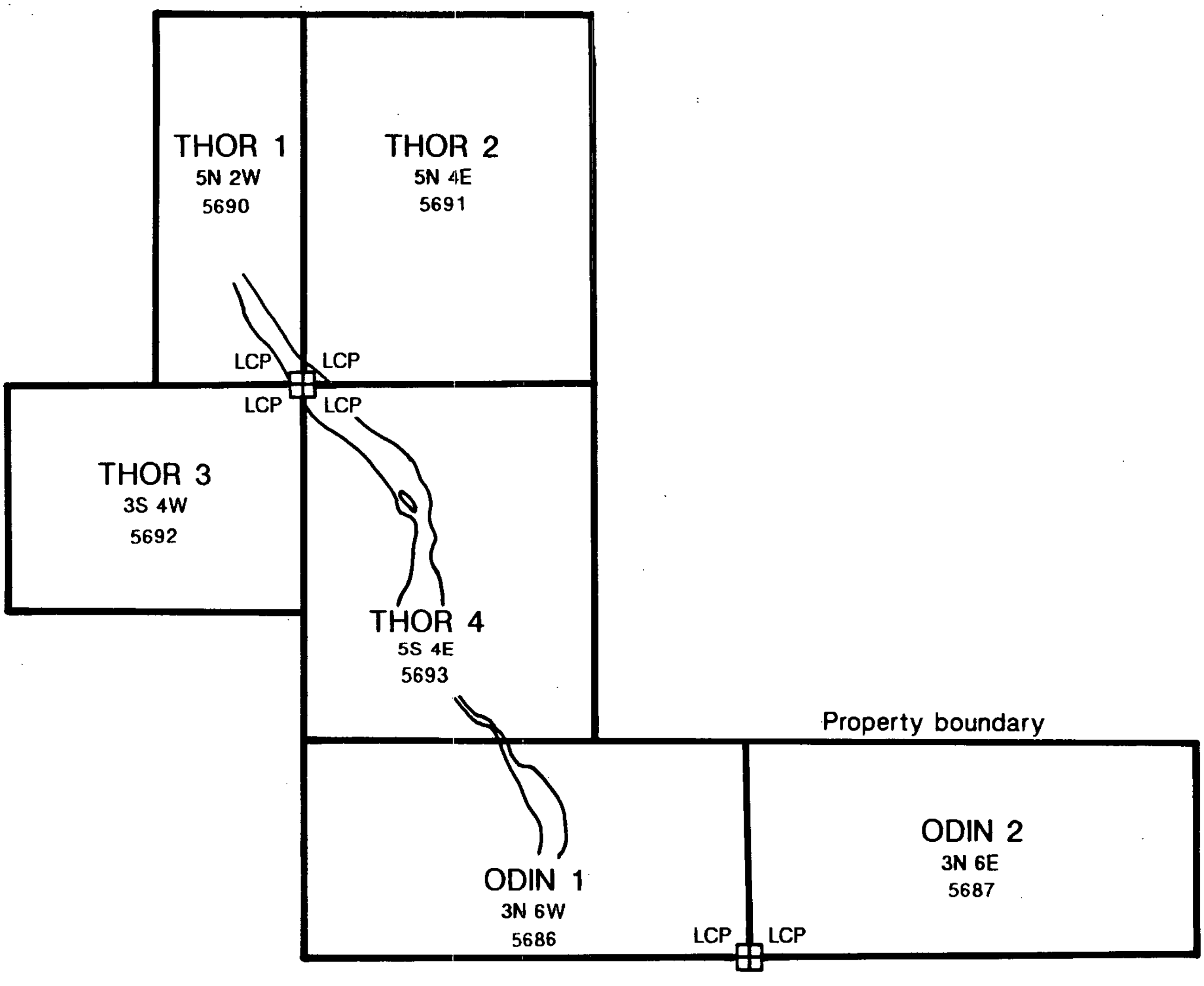
UNIVERSAL TRIDENT INDUSTRIES LTD

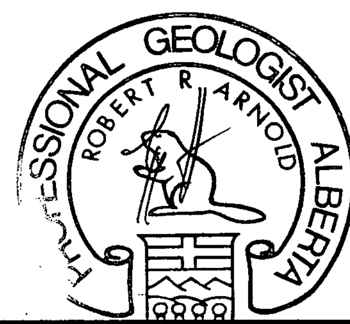
STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.

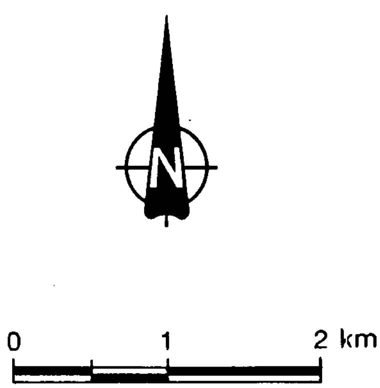
CLAIM MAP
GROUP 7

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE: 1 : 50,000	N.T.S.: 104B/7&10	FIGURE No: 10
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 037	FILE No:







UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES

LIARD M.D. & SKEENA M.D., B.C.

CLAIM MAP

GROUP 8

HI-TEC RESOURCE MANAGEMENT LTD.	SCALE: 1 : 50,000	N.T.S.: 89BC 037	FIGURE No: 11
	DWN. BY: H.V.	DATE: Oct./1989	
	CHKD. BY: R. Arnold	PROJECT No: 104B/7&10	FILE No:

CLAIM	UNITS	RECORD No.	RECORD DATE
Thor 1	10	5690	Jan. 24, 1989
Thor 2	20	5691	Jan. 24, 1989
Thor 3	12	5692	Jan. 24, 1989
Thor 4	20	5693	Jan. 24, 1989
Odin 1	18	5686	Jan. 24, 1989
Odin 2	18	5687	Jan. 24, 1989

The entire property is shown on the Mineral Claim Map 104-B/10E and on Figure 11 of the present report.

4.0 HISTORY AND PREVIOUS WORK

Although the Stikine River served as the access route to the placer deposits of the Cassiar area which were discovered in 1873, there is no record of any prospecting activity in the lower Iskut River area until 1907. In that year, F.E. Bronson and Associates of Wrangell, Alaska, staked nine claims on the lower reaches of Bronson Creek, to the north of Johnny Mountain. The Iskut Mining Company was incorporated in 1910 and in 1911 it undertook a program of trenching and drifting on the Iskoot and Red Bluff claims. A report from that program states that a ton of ore from one cut yielded $1.20 in Au, 44.2 ounces of Ag and 12.45% of Cu.

The Iskut Mining Company's claims were subsequently crown granted in 1914 and 1915 and by 1920, numerous trenches had been dug on these claims, along with a 30 foot adit. The latter revealed a number of veins and stringers hosting galena and gold-silver mineralization.

Little work was done in the area until 1954 when Hudson's Bay Mining and Smelting located the Pickaxe showing and found high grade Au-Ag-Pb-Zn float on the upper slopes of Johnny Mountain. After performing exploration work on them in the mid-1950's, Hudson's Bay Mining and Smelting allowed these claims to lapse. These showings are now part of Skyline Exploration's Reg property.

During the 1960's, several major mining companies conducted airborne geophysical surveys in the region, on a reconnaissance basis, for potential porphyry copper-molybdenum deposits. Several new claims were staked on Johnny Mountain and along Sulphurets Creek in that period, while Kennco and Noranda investigated the original showings on Johnny Mountain. The original crown grants and surrounding claims were explored by a consortium of Cominco, Copper Soo Mining Ltd., and Tuksi Mining and Development Ltd. in 1965. Approximately 555 meters (1,800 feet) of diamond drilling in 10 holes was completed by this group.

Many mining companies conducted exploration work elsewhere in the Iskut River area in the 1960's and 1970's. Among these were Iskut Silver Mines, which conducted programs involving geological and geochemical surveys, trenching and packsack drilling on a property located north of the Iskut River and between the Twin and Verrett Rivers.

Between 1962 and 1972 Newmont Mining Corporation of Canada Ltd. investigated several Cu-bearing skarn zones northwest of Newmont Lake. They also conducted exploration programs involving geological mapping, geophysics and limited diamond drilling on several prospects in an area near the headwaters of Forrest Kerr Creek.

In 1965, Silver Standard Mines commenced work on the E & L prospect, a Ni-Cu deposit on Nickel Mountain near the headwaters of Snippaker Creek. This prospect was later optioned by Sumito Metal Mining and by the end of 1971, 1,500 feet of underground work had been completed in addition to intensive trenching, and surface and underground drilling programs.

In 1969, Skyline Explorations Ltd. restaked the Inel property, after having discovered massive sulphide float originating from the head of Bronson Glacier. In 1974, Texasgulf Inc. investigated the porphyry copper potential of Johnny Mountain.

The Reg property was restaked by Skyline in 1980, and in 1981, a program of trenching and limited diamond drilling was carried out on this property. The Reg property was optioned to Placer Development Ltd. in 1982, which formed a joint venture program with Anaconda Canada Ltd. to carry out various surveys in addition to trenching and diamond drilling in 1983. Exploration was continued on the property by Anaconda in 1984, after which season it reverted to Skyline Explorations Ltd.

In 1980 DuPont staked the Bach and Bax claims as a result of a 10 kg anomalous Au stream sediment sample of 1,350 ppb (-100 mesh) from a tributary of Verrett River. A limited follow-up silt sampling program encountered some anomalous Au values, but subsequently no further work was done. In 1980 DuPont of Canada Explorations Ltd. staked the McLymont property (formerly Warrior claims), located approximately two kilometers to the northeast, on the basis of a regional stream sediment survey. A number of geophysical and geochemical targets and Au-Ag bearing quartz veins were discovered (Kowalchuk, 1982). A two day program of geochemical sampling was completed by DuPont that year, along with a minor geological examination.

Gulf International Minerals Ltd. acquired the major part of the McLymont claims and conducted a diamond drill program during 1987. Previous drilling results gave values averaging 0.164 Au oz./ton (5.6 g./tonne) over 4.3 feet (1.31 meter) for three holes (Yeager and Ikona, 1987). During the 1987 drilling program Gulf International intersected high-grade Au mineralization including 28.1 grams per tonne over 3.96 meters (Lefebure, 1987).

The Bax claims of DuPont of Canada Explorations Ltd. included some of the ground that is now within the Joy 2 claim of Brenwest Mining Ltd. Anomalous Au values were obtained from samples of sulphide-bearing quartz veins and shear zones in andesitic volcanics in several locations on the Joy 2 claim during their 1987 exploration program. A grab sample from a pyrite and chalcopyrite bearing shear zone yielded an assay value of 190.0 grams/tonne Au (5.542 oz. Au/ton), a geochemical value of 226.3 ppm Ag (6.6 oz. Ag/ton), and over 0.5% Cu (King, 1987).

During 1987, Skyline completed 13,665 meters of diamond drilling, 226 meters of underground raise development, 551.4 meters of drifting on the Stonehouse Gold Zone. This work confirmed the presence of high grade Au mineralization besides Ag and Cu with good lateral and depth continuity over mineable widths. The proven reserves to date are 876,000 tons grading 0.55 oz./ton

Au, with a cut-off grade of 0.3 oz. Au used to develop the estimate.

Further development work was carried out on their airstrip in 1987, which was extended to 1,700 meters, and on a mill site as Skyline prepared to bring the Reg deposit into production. During June 1989 production figures were 4,230 oz. Au, 7,487 oz. Ag and 134,960 lb. Cu from 9,364 tons of ore (312 ton/day). The success of Skyline's program has provided the impetus for an extremely active mining exploration scene in the Iskut River area over the past few years. In 1987, companies such as Western Canadian Mining Corporation, Gulf International Minerals Ltd., Tungco Resources, and Newhawk Gold Mines among others, carried out extensive drilling programs in the area. Delaware Resources Corporation, in joint venture with Cominco Exploration Ltd., conducted a 13,857 meters drilling program on the Snip property near Bronson Creek and announced plans to go into production in 1988. The Snip property is presently owned by Prime Resources and Cominco Exploration and it is not in production to date (Dec. 1989). The geological possible reserves for this deposit are 1.1 M metric tonnes @ 24.0 g./t. Au (1.2 M short tons @ 0.7 oz. Au/t.).

Exploration for precious metals in the Sulphurets Creek area dates back to the late 1800's when placer gold was discovered in the upper reaches of the Unuk River. By 1898, several prospectors had entered the area and the first mineral claims, the Cumberland and Globe Groups, were staked by H.W. Ketchum and L. Brant. These claims proved to be attractive and by 1901, the Unuk River Mining and Dredging Company had purchased them and established a stamp mill on the Globe group. A road between Burroughs Bay and Sulphurets Creek was also begun by this company, but was never completed.

Extensive gossans in the upper reaches of Sulphurets Creek attracted Bruce and Jack Johnson to stake claims in this area in 1935. Hence, the name "Brucejack Lake".

The region was quiet again until 1960 when the search for porphyry copper deposits led Newmont Mines to conduct a helicopter borne magnetic survey in the Sulphurets area. Claims were staked on behalf of Granduc Mines Ltd. at the Sulphurets Creek headwaters and between 1961 and 1967, Granduc and Newmont conducted geological and geophysical work on this ground. More claims were acquired by Granduc and its exploration effort continued until 1970.

A jump in precious metal prices renewed activity in the period of 1975 to 1977. Texasgulf Inc. and Granduc Mines both conducted exploration in the Sulphurets area. In 1979, Granduc optioned its claims to Esso Resources Canada Ltd., who spent more than $2 million over 5 years in exploration for precious metals.

The Esso-optioned claims reverted to Granduc and were subsequently optioned under joint venture to Lacana Mining Corporation and Newhawk Gold Mines Ltd.

In 1985, the Lacana/Newhawk joint venture drilled 13,066 feet in the Brucejack Lake area. This effort, along with the 26,068 feet previously drilled, has outlined mineral reserves of 1,011,543 tonnes grading 0.826 oz. Au equivalent per tonne (Ag:Au ratio = 50:1).

Besides these mineral reserves, the 1985 Lacana/Newhawk project located the new Snowfields Zone. Company reports state that limited drilling on this bulk tonnage target has indicated over 7,000,000 tonnes grading 0.083 oz. Au/tonne (Sorbara, 1987).

During 1986, 1,500 feet of underground development drifting and crosscutting was completed on the West Zone in order to obtain a bulk sample. The results showed an average grade of 0.225 oz. Au/ton over 52.5 feet without including several high-grade pockets. These results were very encouraging and a winter road to Brucejack Lake was started early in 1987. A permanent camp has been established and more drilling and underground work is conducted.

Catear Mines established recently a pilot test mill on their Gold Wedge property, located 2 kilometers east of the Brucejack Zone. Published reserves are 373,224 tons grading 0.753 oz. Au/ton and 1.07 oz. Ag/ton; the geological potential is 1,000,000 tons grading 0.5 oz. Au/ton.

C.R. Harris (1985) summarizes the exploration's history of the Unuk River area and more particularly of the Calpine Resources Inc./Consolidated Stikine Silver Ltd.'s Eskay Creek property as follows:

> " The property has a long history of exploration by various companies since discovery in 1932 by a party headed by Tom MacKay. The exploration has been principally directed to the location of high grade precious metal mineralization. Following is a brief summary of the work to date.
>
> 1934 Unuk Valley Gold Syndicate did some surface work on the #21 and #22 zones.
>
> 1935-38 Premier Mines drilled 10 diamond drill holes totaling 1,727' on the #21, #5 and #22 zones and added to the trenching.

1953 American Standard Mines did some surface work.

1963 Western Resources drove the Emma Crosscut and Drift for 360'.

1964 Canex Aerial Exploration drilled six underground diamond drill holes from the Emma Adit totaling 735".

1965-72 Stikine Silver extended the Emma Drift 265' and added to trenching on the #22 zone.

1973 Kalco Valley Mines drilled seven diamond drill holes, totaling 983' on the north end of the #22 zone.

1975 Texasgulf performed geological, E.M. and magnetometer surveys.

1976 Texasgulf drilled seven diamond drill holes totaling 1,225 feet on the #5 and Emma Creek zones.

1979 May Ralph Industries high-graded trenches of the #22 zone and shipped 9.65 tons of picked ore to the Trail smelter.

1980-83 Ryan Exploration (U.S. Borax) performed soil and rock geochemical surveys and drilled three holes totaling 496m on the #22 zone.

Only two ore shipments have been recorded although several small test shipments are thought to have been made during the 1930's.

1971 Stikine Silver shipped 1.68 tons of picked ore, yielding: 0.3 oz Au, 239 oz Ag, 64 lb Pb, 94 lb Zn; assaying: 0.2 oz/t Au, 142.3 oz/t Ag.

1979 May Ralph Industries shipped 9.65 tons of picked ore yielding: 40.62 oz Au, 819.54 oz Ag, 907 lb Pb, 2220 lb Zn; assaying: 4.208 oz/t Au, 84.90 oz/t Ag."

In 1985, Kerrisdale Resources Ltd. carried out diamond drilling on the #21 and #22 zones, and in 1987 Consolidated Stikine Silver Ltd. conducted a soil sampling and trenching program on the Eskay Creek property.

During 1988 and 1989, the Eskay Creek property was extensively drilled by Calpine Resources Inc./Consolidated Stikine Silver Ltd. and extremely promising results were reported from the #21 zone since hole 88-6 hit 96.5 feet grading 0.73 oz. Au and 1.1 oz. Ag (Northern Miner, Nov. 7/88). In August 1989, Calpine released a 46 foot interval (hole 89-87) grading 1.67 oz. Au (Northern Miner, Aug 14/89) and on August 28, 1989, results from hole 89-109 were reported in the Northern Miner as follows: "682 foot interval grading an average of 0.875 oz. Au, 0.97 oz. Ag, 1.12% Pb and 2.26% Zn. Within this interval is a 200.1 foot section averaging 2.877 oz. Au, 0.85 oz. Ag, 1.86% Pb and 3.44% Zn". Also reported in the Northern Miner (Sept. 4/89) is massive sulphide intersection located at the north end of the #21 Zone consisting of a 30 foot section and a 26 foot section of pyrite-galena-sphalerite-chalcopyrite massive sulphide mineralization. To date, no assays are available on this zone.

Previous work done on the Stewart Properties is summarized by P. Hawkins et al. (1988) as follows: (Please note that the Iliad, Homer and Maxwell Smart claim groups refers to Group 1; the Priam, Patroclus and Achilles claim groups refer to Group 2, 5 and 6, and the Agamemnon, Paris and Hector claim groups refer to Groups 7 and 8 of this report)

"The Unuk River area has attracted prospectors, geologists and entrepreneurs in search of mineral deposits since 1893 (Grove, 1986, p.111). Some of the mineral deposits prospected in the early decades of the twentieth century have been worked periodically and work on some continues today. Assessment reports filed on claim groups within the immediate area of interest date from 1959 when Granduc Mines Ltd. carried out exploration in the area of the Iliad, Homer and Maxwell Smart claim groups. This work was precipitated by a airborne magnetometer survey flown the previous year (Assessment Reports Nos. 345 and 346). Granduc maintained an interest in the area throughout the '60's and '70's; in 1968 Granduc carried out airborne electromagnetic and magnetometer surveys over McQuillan ridge (Assessment Report No. 1835) and in 1969 staked claims and carried out work in the area of the Flory Claims (Assessment Report No. 2503). Further work was carried out over their MAX iron-copper deposit in the mid '70's (Assessment Report Nos. 5496 and 6690). In 1971 Great Plains Development Company of Canada, Ltd. carried out a reconnaissance geochemical program in the Mt. Dunn and neighbouring areas which resulted in staking a copper anomaly in the area of the Priam, Petroclus and Achilles claims between King and Fewright Creeks (Assessment Report No. 5616). Work carried out in this area in 1974 and 1975 led to the extension to the north and south into the areas of the Ginny and Homer claims (Assessment Report No. 6234). In 1981 DuPont of Canada Exploration Limited staked claims in the area of the Achilles claims to follow up a heavy mineral survey carried out in 1980 (Assessment Report No. 10,474). Further work was carried out on this claim group in 1983 while under option to Placer Development and Skyline Exploration (Assessment Report No. 11,673).

No other work covering the current claims is documented in assessment reports; however, some work peripheral to the Agamemnon, Paris and Hector claims is on file. Silver Standard Mines Ltd. carried out work on their iron-nickel-copper property to the east of the Agamemnon claim group and to the north of the Paris 1 claim group in 1965 (Assessment Report No. 741). No further work on the claim group is on file; however, the claims appear to be held as patented claims. Observations during reconnaissance flights in the area suggest more work was done than is documented in assessment files. Great Plains Development Company of Canada Ltd. carried out geological, geophysical and geochemical surveys for chalcopyrite-galena-sphalerite mineralization on their Kim claims southwest of Hector 3 claims from 1971 to 1974 (Assessment Reports Nos. 3981 and 5142). Cobre Exploration Ltd. carried out geological, geochemical and geophysical surveys for copper mineralization over their Pins claims southwest of Paris 4 and west of Paris 3 claim groups from 1971 to 1973 (Assessment Reports Nos. 3982, 4748 and 4749). In 1983 Active Mineral Explorations Ltd. carried out a reconnaissance mapping and geochemical sampling program for Lonestar Resources Ltd. which resulted in staking in the Snippaker Creek area. Several companies including Brinco (Assessment Report No. 14,972) and Western Canadian Mining Ltd. (Assessment Report No.

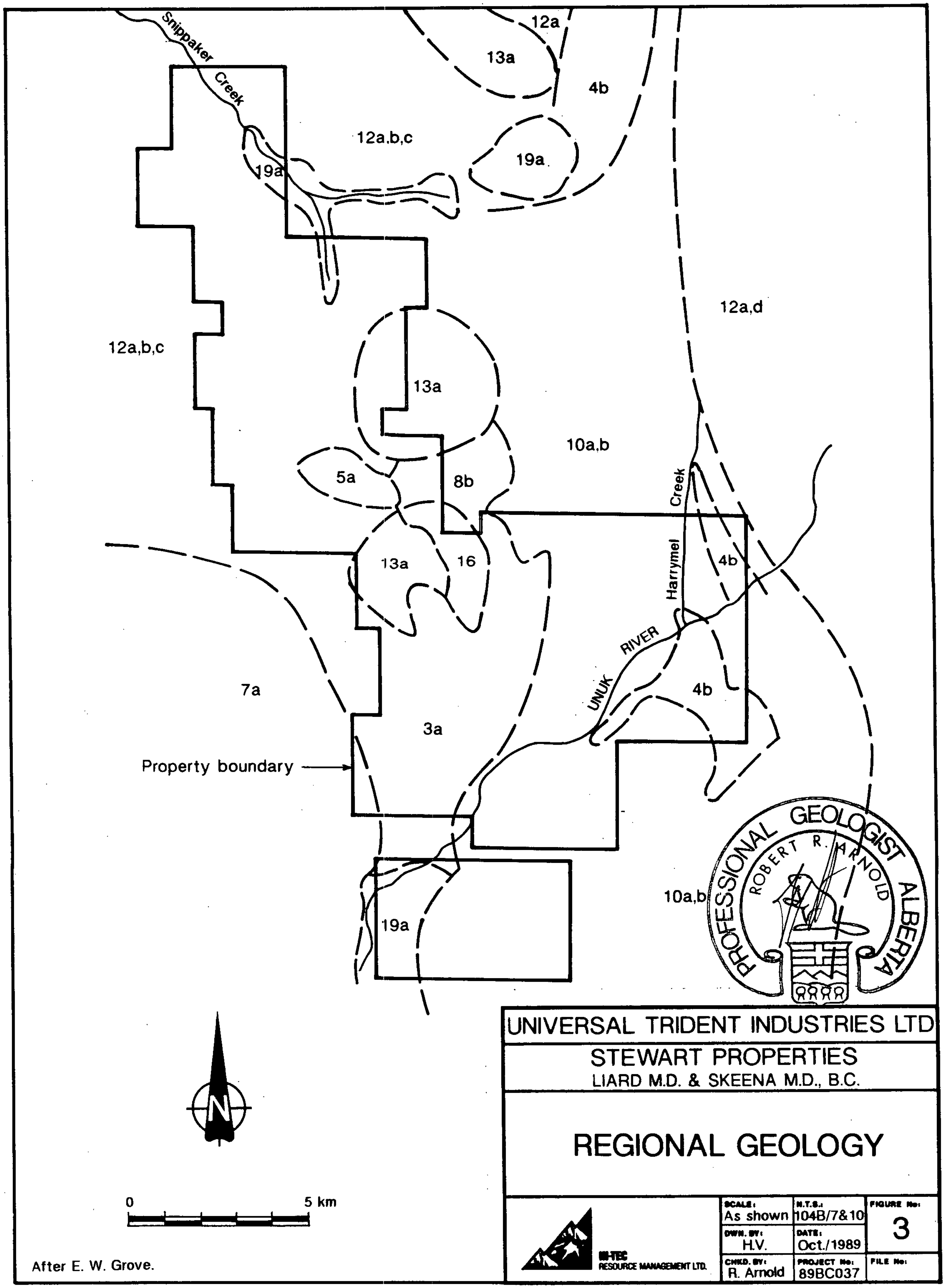
15,238) have carried out work on these claims located southwest of the Hector and west of the Paris claim groups."

5.0 REGIONAL GEOLOGY AND MINERALIZATION

The subject properties lie within the western most part of the Intermontane Tectonic Belt, close to its boundary with the Coastal Crystalline Tectonic Belt. As a result of the proximity of this area to a regional tectonic boundary, geologic relationships tend to be quite complex. The geology of this area (Figure 3) has been studied by Kerr (1930, 1948), by Grove (1986), and by Britton (1989) and is represented in Geological Survey of Canada Maps 9-1957, 1418A, 1505A and on Open File Map 1989-10.

The properties are underlain mainly by Upper Triassic to Lower Jurassic strata which are part of the Stewart Complex (Grove, 1986). The oldest rocks are a series of epiclastic volcanics, marbles , siltstones, and sandstones which are overlain by volcano-sedimentary rocks of the Hazelton Group. Grove (1986) refers to the Early to Middle Mesozoic rocks as the Unuk River Formation, the Betty Creek Formation, the Salmon River Formation, and the Nass Formation. Plutonic intrusions of quartz monzonite to quartz diorite composition often intrude the Stewart Complex. These plutonic rocks are generally Late Cretaceous to Early Tertiary in age.

The first mineral showing to be discovered in the western Iskut River area was located on Bronson Creek, two miles upstream from its confluence with the Iskut River. This is in the vicinity of the Snip property currently being explored by Prime Resources-Cominco


Snippaker Creek
12a
13a
4b
12a,b,c
19a
19a
12a,d
12a,b,c
13a
10a,b
5a
8b
Harrymel Creek
13a
16
4b
UNUK RIVER
7a
4b
3a
Property boundary
10a,b
19a
PROFESSIONAL GEOLOGIST ALBERTA
ROBERT R. ARNOLD
N
0
5 km
After E. W. Grove.
UNIVERSAL TRIDENT INDUSTRIES LTD
STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.
REGIONAL GEOLOGY
HI-TEC RESOURCE MANAGEMENT LTD.
SCALE: As shown
N.T.S.: 104B/7&10
FIGURE No: 3
DWN. BY: H.V.
DATE: Oct./1989
CHKD. BY: R. Arnold
PROJECT No: 89BC037
FILE No:

joint venture. The original showing was marked by a prominent zone of gossan and extensive alteration peripheral to an orthoclase porphyry intrusion. In this vicinity, there is a zone of sheared and altered volcanic and sedimentary rocks which is 3.2 kilometers (2 miles) long by 305 to 610 meters (1,000 to 2,000 feet) wide. In this alteration zone, pyritization varies from fracture fillings and disseminations to nearly massive pyrite. Other sulphides which occur in lesser abundance include arsenopyrite, chalcopyrite, galena, sphalerite, tetrahedrite and molybdenite in fractures and quartz veinlets within and adjacent to the intrusion. Significant values of Au, Cu and Ag were revealed by early work on this zone.

Many quartz-sulphide veins and skarn deposits have been reported from various locations along the Iskut River. Low Au values, and good grades of Ag, Cu, Pb and Zn have been reported from these. Mineralized float has been observed below several glaciers in the area.

Near the headwaters of Snippaker Creek, Silver Standard Mines Ltd. and later Sumitomo Metal Mining did extensive surface and underground work on a Cu and Ni bearing gabbro intrusion. A total of 3.2 million tons of 0.80% Ni and 0.60% Cu have been confirmed in this deposit. However, this has been a low priority target over the past several years, as a result of depressed base metal prices and the relative remoteness of the location.

The two most significant mineral deposits subject to current investigation in the Iskut River area are the Skyline Explorations Ltd. Reg property on the north slope of Johnny Mountain and the Prime Resources-Cominco Ltd. joint venture Snip property near Bronson

Creek. These properties are only five kilometers apart and appear to be similar in nature.

At least seven auriferous, mineral rich quartz veins are known to occur on Skyline's Reg property (Grove, 1986). These are collectively known as the Stonehouse Gold Zone. This zone is hosted in an east-west striking, northerly dipping sequence of Jurassic volcaniclastics and porphyritic flows. A sequence of Middle Jurassic volcanic breccias and well stratified volcanic tuffs and sediments unconformably overlie the mineralized unit. Steeply dipping veins trending 050^0-060^0 and dipping 70^0 NE along major fractures are the only known mineralization environment in the Stonehouse Gold Zone. These are developed in a zone some 1,450 meters (4,700 feet) long and 277 meters (900 feet) wide. The mineralized zones consist of pods, lenses and quartz veins which contain 20% to 80% sulphides plus K-feldspar, besides native gold and electrum. Adjacent to the zones, extensive wallrock alteration includes very fine biotite and sericite, as well as extensive massive orthoclase with minor carbonates (Grove, 1986).

Besides Au, Cu and Ag also occur in significant quantities in the Stonehouse deposit. Grove (1988) estimated the known reserves to be 1,087,875 tons grading 0.70 oz. Au/ton, 1+ oz. Ag/ton and 1% Cu. Probable reserves were estimated at 4,000,000 tons at similar grades. After further detailed work was completed, this reserve calculation was modified to 876,000 tons grading 0.55 oz. Au/ton with a cut-off grade of 0.3 oz. Au. As of June 1989 this deposit had a production rate of 312 tons/day.

On the Prime-Cominco joint venture Snip property, native gold occurs in a 1-10 meters thick discordant banded shear zone cutting a massively bedded feldspathic greywacke-siltstone sequence. This strikes 110^0 to 120^0 and dips 60^0 to the southwest. It consists of alternating bands of massive streaky calcite with abundant disseminated to massive pyrite mineralization. Biotite-chlorite, quartz, pyritic to non-pyritic, fault gouge related alteration is associated with this zone. It has been traced over a 1,000 meter distance between the 150 meter and 650 meter elevations of the lower slopes of Johnny Mountain and by drilling, to depths of 150 meters to 250 meters. Recent data from underground development and drilling suggests that the Twin Zone is open at depth and along strike to the east (Northern Miner, June 13, 1988).

In the Sulphurets area, Shroeter (1983) examined the geology and mineralization in the Brucejack Lake area where hornblende syenites, alkali feldspar syenites, and country rocks are cut by many north to northwesterly faults and are intensely altered with sericite, K-feldspar, silica, carbonate, and chlorite. Five separate sulphide zones occur along a 7 kilometer belt with mineralization occurring in several styles, including low grade disseminations, epithermal stockworks and veins. Found within these zones are pyrite, chalcopyrite, molybdenite, ruby silver, stephanite, ceragyrite, electrum, native gold, tetrahedrite, freibergite, argentite, galena, sphalerite, and bornite.

Within this area, two principal zones were identified. The Peninsula Zone (or Shore Zone) had been traced for 265 meters on surface and to a depth of 140 meters by intersections in 22 drill holes and was still open, when Shroeter visited the property in 1983. By the end of 1985, mineral reserves from this zone were reported to be 490,000 tonnes grading 0.890 oz. Au-e/tonne (Au-e = Au equivalent with an Ag:Au ratio of 50:1).

The West Zone, located about 700 meters southwest of the Peninsula Zone, had been tested by 21 drill holes at the time of Shroeter's visit. It measured 310 meters on surface, extended to a depth of 60 meters and was also still open. Shroeter reported ruby silver, freibergite, electrum, native gold, stephanite, galena, pyrite, and sphalerite occurring in a stockwork of quartz veinlets in sericitic andesitic tuff. Mineral reserves to the end of 1985 for the West Zone are 496,452 tonnes grading 0.694 oz. Au-e/tonne.

During 1986, Newhawk put in 1,500 feet of development drifting and crosscutting to obtain a bulk sample from the West Zone. Two crosscuts have shown that the width and grade of the body is generally uniform with intermittent spectacular high grade sections. The first crosscut assayed 0.234 oz. Au/ton and 6.2 oz. Ag/ton over a true width of 50 feet and 0.216 oz. Au/ton with 14.25 oz. Ag/ton over a true width of 17 feet (Stockwatch, November 13, 1986). The second crosscut averaged 0.225 oz. Au/ton and 16.60 oz. Ag/ton over a true width of 52.5 feet (Stockwatch, December 2, 1986). Grab samples reported from within this zone returned up to 5.786 oz. Au/ton with 890.45 oz. Ag/ton, but these results were not included in the grade calculations of 0.225 oz. Au/ton over 52.5 feet.

Drilling has implied this body is 1,000 feet long and extends at least 1,000 feet down dip. High grade pockets and veins within the mineralized zone are reported to run up to 3 or 4 oz. of Au and hundreds of oz. of Ag.

The Gossan Hill Zone had apparently not been found until after Shroeter's 1983 visit, but lies only 400 meters west of the Peninsula Zone. To the end of 1985, mineral reserves from this high grade area totalled 25,091 tonnes grading 2.209 oz. Au-e/tonne over a true width of 10.5 feet.

Together, the 3 zones described above comprise the reported 1,011,543 tonnes of mineral reserves in the Brucejack Lake area, which have a weighted average of 0.826 oz. Au-e/tonne. Two more zones, the Spine and Galena, lie just south of the Gossan and West Zones. Here galena, sphalerite, pyrite, chalcopyrite, and native gold are reported in altered andesite.

Some 5.5 kilometers northwest of Brucejack Lake lies the Snowfield Gold Zone, which had not been discovered until 1985. Based on 625 feet of surface trenching and 5 drill holes, preliminary estimates by Newhawk Gold Mines Ltd. are that this bulk tonnage zone could host 7,000,000 tonnes grading 0.083 oz. Au/tonne (Sorbara, 1987). More work is needed, however, before these figures can be confirmed.

In the Unuk River Area, a geological cross section of the Calpine/Consolidated Stikine's Eskay Creek property is as follows: The hanging wall consists of interbedded breccias, pillow lavas and andesites up to 100 meters thick. The contact zone, a black argillite containing felsic fragments up to 2 inches across, is 10 to 15 meters thick with mineralization occurring at the base of the unit. In the north section of the contact #21 Zone, mineralization consists of electrum, aktashite (Cu-Pb-Zn-Ag-Hg sulphosalt) and honey coloured blebs of sphalerite rimmed with chlorite alteration. Free gold was observed in the core. Disseminations and needles of arsenopyrite predominate in the south section of the #21 contact zone with sections of massive stibnite, veinlets of stibnite and blebby realgar. Gold assays from this contact zone vary from .25 oz. Au/ton to several oz. Au/ton. The footwall belongs to the Dillworth Formation and consists of a 100 to 150 meters thick rhyolite breccia lapilli tuff. Along strike to the north the lapilli fragments are finer. Alteration observed is silicification, strong K-spar and white mica. Au assays from this section vary up to .25 oz. Au/ton. A 10 to 20 meters thick argillite layer separates the lapilli tuffs from a felsic lithic tuff, which varies from 60 to 100 meters thick. This latter unit, which may be the equivalent of the Betty Creek Formation, forms large gossans of pyritic material assaying from .15 to .25 oz. Au/ton. The bottom of the footwall is formed by thickly bedded siltstone containing pelecypods (dating in progress) and locally developed conglomerates. Drill intersections of the north part of the #21 Zone (hole 89-109) were recently reported in the Northern Miner as follows: "682 foot interval grading an average of 0.875 oz. Au, 0.97 oz. Ag, 1.12% Pb and 2.26% Zn. Within this interval is a 200.1 foot section averaging 2.877 oz. Au, 0.85 oz. Ag, 1.86% Pb and 3.44% Zn (Northern Miner, Aug. 28/1989)". The South Zone has been outlined for 300 meters along strike and 200 meters down dip and reserves have been calculated at 2.8 million metric tonnes at 0.25 oz. Au/ton and 3.0 oz. Ag/ton were reported. This South Zone is to be mined by open pit methods. No published reserves for the North Zone are available yet. The Northern Miner reports (Sept. 4, 1989) that drill hole

89-126 intersected at the far north end of the #21 Zone a disseminated to massive sulphide mineralized section of 445 feet in width, of which a 30-ft and a 26-ft section consisted of pyrite-galena-sphalerite massive sulphide mineralization. No assays are available to date on this hole. This may indicate a volcanogenic massive sulphide lense off the #21 Zone.

6.0 GEOLOGY OF THE STEWART PROPERTIES

The limited geological mapping-prospecting conducted during the 1989 field season has tentatively confirmed the regional scale compilation geology map (See figures 12 to 19). The geology of the properties has not yet been investigated in detail and can only be inferred from the public survey maps.

The properties are underlain mainly by volcanic and sedimentary rocks varying in age from Middle Jurassic to Upper Triassic.

Rocks of the Triassic Stuhini Group consist of a volcanosedimentary sequence described by Britton (1989) as follows: "Brown, black and grey mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcaniclastic rocks." The sedimentary rocks consist of siltstone, shale, wacke, conglomerate, and limestone whereas the volcanic rocks consist of andesitic tuff, andesitic breccia, and basalt.

The Upper Triassic to Lower Jurassic Unuk River Formation is an andesitic sequence which is sometimes interbedded with immature sediments, minor conglomerate, and limestone. The volcanics consist of porphyritic andesite, andesitic lapilli and ash tuff and the sediments consist of tuffaceous siltstone, shale, argillite, limestone and conglomerate.

The Lower Jurassic Betty Creek Formation is a pyroclastic-epiclastic sequence defined by Britton as heterogeneous, grey, green, locally purple or maroon, massive to bedded pyroclastic and sedimentary rocks with pillow lavas being present. Andesite, dacitic tuff, lapilli tuff, crystal tuff, lithic tuff, felsic tuff, andesitic pillow lava, and pillow breccia represent the volcanics. The sedimentary rocks found in this rock formation are siltstone, shale and argillite.

The Salmon River Formation is a siltstone sequence of Middle Jurassic age which consists of usually well bedded siltstone, with minor sandstone and conglomerate. Thinly bedded wacke and shale are also found in this rock formation. Andesitic pillow lavas and pillow breccias were also mapped in the Salmon River Formation.

Pleistocene to Recent basalt flows and tephra, with minor pillow lavas were mapped along Snippaker Creek and King Creek by Britton.

Jurassic and tertiary intrusive rocks were mapped by Britton on most of the claim groups. The intrusives consist mainly of diorite, quartz diorite, granodiorite, and syenite. Post-tectonic dykes were also recognized especially on the King Claim.

7.0 GEOCHEMISTRY

The geochemical sampling program consisted of rock grab sampling and heavy mineral sampling. A total of 174 rock samples and 30 heavy mineral samples were collected on the various claim groups. All of the samples were submitted to Min-En Laboratories Ltd., in North Vancouver, British Columbia, for Ag, Ba, Cu, Pb, Sb, and Zn analysis by the Induced Couple Plasma (ICP) method. Au was determined by the Fire Assay (FA) method. Geochemical preparation and analytical procedures are reported in Appendix I and analytical data for rock and heavy mineral samples can be found in Appendix II. The rock samples are described in Appendix III.

Statistical treatment of data was possible for the rock and the heavy mineral samples. Histograms and calculated results are listed in Appendix IV. Anomalous values for the various elements were chosen as follows:

Element	Rock	Heavy Mineral
Gold	50 ppb	100 ppb
Silver	2.0 ppm	4.0 ppm
Barium	650 ppm	650 ppm
Copper	350 ppm	500 ppm
Lead	130 ppm	500 ppm
Antimony	16 ppm	25 ppm
Zinc	180 ppm	500 ppm

7.1 Group 1 Geochemistry

A total of 16 rock grab samples and 6 heavy mineral samples were collected on the Valkyrie 1-4 claims (See

Figure 12). No anomalous Au values were recorded in the samples collected within claim group 1. Two rock grab samples (89BC037BA023 and 89BC037RP025) show anomalous Ag values (2.0 and 2.2 ppm respectively). Background values were recorded for the analyzed base metals.

TABLE 1

ANALYTICAL RESULTS OF GROUP 1

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA019	3	0.8	33	6	12	3	13
89BC037BA020	1	1.4	32	93	50	3	76
89BC037BA021	1	0.7	183	4	43	1	120
89BC037BA022	1	1.8	24	232	28	1	83
89BC037BA023	2	2	22	107	46	1	157
89BC037BA024	1	1.8	65	109	31	1	87
89BC037RP025	2	2.2	58	92	45	1	121
89BC037RP026	4	1.4	20	88	31	1	66
89BC037RP027	3	1.9	99	122	29	1	91
89BC037RP028	18	1.1	31	153	48	1	87
89BC037RP029	2	1.7	60	84	23	1	80
89BC037RP030	5	1	35	11	29	1	38
89BC037R-001	2	1.4	232	101	23	1	65
89BC037R-002	3	1.2	232	92	40	1	86
89BC037KA501	1	1.9	27	103	47	1	80
89BC037KA502	1	1.4	90	52	25	1	72
89BC037HM-020	17	2.8	35	185	46	2	75
89BC037HM-021	39	2.5	14	177	52	3	75
89BC037HM-022	8	2.8	28	286	45	1	75
89BC037HM-023	30	1.6	22	193	36	1	65
89BC037HM-024	70	1.4	55	103	37	1	64
89BC037HM-025	7	1.9	19	127	28	1	74

7.2 Group 2 Geochemistry

A total of 28 rock grab samples and 1 heavy mineral sample were collected on the Loki 4-7 claims (See Figure 13). Two rock grab samples showed anomalous Au values: samples KA-510 (51 ppb) and KA-530 (60 ppb);

both these samples present a base metal anomaly (KA-510: 442 ppm Cu; and KA-530: 17 ppm Sb). Barium was highly anomalous in two samples (R-015: 1,536 ppm and KA-516: 1,499 ppm). One Zn anomaly was recorded in sample BA-037 (182 ppm).

TABLE 2

ANALYTICAL RESULTS OF GROUP 2

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA034	2	0.7	220	25	16	1	61
89BC037BA035	1	0.6	114	19	16	1	39
89BC037BA036	14	1.3	72	86	29	1	178
89BC037BA037	10	1.3	149	49	12	1	182
89BC037BA038	1	1	23	45	6	1	27
89BC037BA039	15	1.4	245	105	40	1	156
89BC037RP037	2	1.7	92	35	25	6	65
89BC037RP042	4	0.7	119	20	17	1	48
89BC037RP043	3	0.9	187	77	21	1	59
89BC037RP044	2	1.3	85	74	9	1	107
89BC037RP045	1	1.3	105	44	15	1	119
89BC037RP046	5	1.6	278	8	35	1	48
89BC037RP047	8	1.6	141	70	37	1	118
89BC037RP064	1	1.8	60	59	129	6	116
89BC037RP065	3	0.8	85	51	31	7	64
89BC037R-013	1	0.3	142	12	36	1	83
89BC037R-014	1	1.1	525	72	40	1	128
89BC037R-015	1	1.6	1536	43	50	1	143
89BC037R-016	19	0.2	80	8	26	1	16
89BC037R-017	9	0.8	200	103	35	1	107
89BC037KA510	51	0.5	67	442	28	4	71
89BC037KA513	3	0.8	66	15	12	1	32
89BC037KA514	2	0.5	52	16	16	1	66
89BC037KA515	3	1.2	1499	7	37	1	66
89BC037KA516	1	0.3	36	8	14	1	33
89BC037KA517	8	0.8	146	91	25	1	121
89BC037KA529	21	0.7	128	40	40	3	62
89BC037KA530	60	0.7	215	50	63	17	58
89BC037HM-030	12	1.1	144	34	29	1	90

7.3 Group 3 Geochemistry

A total of 18 rock grab samples and 2 heavy mineral samples were collected on the Grendel 5-8 claims (See Figure 14). No samples were anomalous in Au but three rock grab samples displayed anomalous Ag values: samples RP-060 (2.6 ppm Ag), RP-057 (2.3 ppm Ag), and R-025 (2.3 ppm Ag); none of these samples present a base metal anomaly. Two rock samples recorded Pb-Zn anomalous values: RP-059 (145 ppm Pb and 219 ppm Zn) and KA-524 (906 ppm Pb and 180 ppm Zn). All of the anomalous samples were collected within the Unuk River Formation.

TABLE 3

ANALYTICAL RESULTS OF GROUP 3

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA046	1	1.1	153	46	37	1	80
89BC037BA047	12	0.5	167	43	20	1	42
89BC037BA048	1	1	27	8	70	16	131
89BC037BA049	1	1.3	38	8	35	10	24
89BC037BA050	1	0.7	74	8	42	1	123
89BC037BA051	1	1.4	53	44	58	1	97
89BC037RP055	2	1	204	22	26	1	64
89BC037RP056	1	1.7	55	108	63	1	127
89BC037RP057	2	2.3	26	163	58	1	104
89BC037RP058	3	0.9	238	25	64	9	126
89BC037RP059	2	0.5	60	76	145	1	219
89BC037RP060	1	2.6	55	191	50	1	111
89BC037R-023	1	1.3	20	179	30	1	35
89BC037R-024	1	1.8	35	155	54	1	85
89BC037R-025	1	2.3	17	62	33	1	115
89BC037KA522	15	1.7	20	54	24	1	93
89BC037KA523	1	1.4	34	46	51	1	93
89BC037KA524	1	1.8	341	177	906	1	180
89BC037HM-005	13	2.5	8	168	50	1	89
89BC037HM-006	16	1.5	20	154	37	1	69

7.4 Group 4 Geochemistry

A total of 23 rock grab samples were collected on the Beowulf 1-4 claims (See Figure 15). Only one oxidized rhyolite sample showed a Au anomaly (BA-042: 52 ppb Au) and no samples displayed anomalous Ag values. Two samples recorded Cu anomalous values: R-020 (651 ppm Cu) and R-022 (357 ppm Cu) and one sample BA-045 showed a very high barium anomaly (2598 ppm Ba).

TABLE 4

ANALYTICAL RESULTS OF GROUP 4

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA040	1	1.3	30	94	25	1	48
89BC037BA041	1	1.1	22	125	38	1	76
89BC037BA042	52	1.1	38	171	8	1	35
89BC037BA043	12	0.7	26	7	30	1	54
89BC037BA044	1	0.4	55	4	13	1	35
89BC037BA045	10	0.9	2598	195	6	1	77
89BC037RP007	5	1.7	17	19	81	1	103
89BC037RP048	2	1.5	48	28	31	1	51
89BC037RP049	4	1.4	12	170	14	1	40
89BC037RP050	3	0.5	78	11	24	1	42
89BC037RP051	32	1.4	70	9	6	1	23
89BC037RP052	1	0.8	29	5	27	1	49
89BC037RP053	2	1.1	36	92	28	1	52
89BC037RP054	4	0.2	11	6	3	1	11
89BC037R-018	1	0.8	43	23	10	1	38
89BC037R-019	1	1.3	488	90	57	1	103
89BC037R-020	1	0.4	68	651	28	1	57
89BC037R-021	1	0.2	6	29	5	1	12
89BC037R-022	8	1.6	17	357	57	24	65
89BC037KA518	1	0.5	37	28	20	1	77
89BC037KA519	1	1.4	18	13	24	1	87
89BC037KA520	2	1.1	21	26	10	1	31
89BC037KA521	1	1	6	172	13	1	43

7.5 Group 5 Geochemistry

Three grab rock samples and four heavy mineral samples were collected on the Grendel 1-4 claims (See Figure 16). Only one heavy mineral sample showed a Cu anomaly (sample HM-026: 743 ppm Cu).

In addition, thirteen reconnaissance rock samples were collected on the King Claim. Extremely high Au values were recorded: values ranging from 63 ppb to 3250 ppb in 11 samples.

TABLE 5

ANALYTICAL RESULTS OF GROUP 5

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA006	9	0.7	181	31	21	1	101
89BC037BA030	1980	4.6	66	1544	39	13	57
89BC037BA031	3250	5.8	44	8222	44	9	59
89BC037BA032	63	2	205	240	48	1	100
89BC037BA033	10	0.6	85	111	43	2	61
89BC037RP031	4	0.5	271	12	6	1	36
89BC037RP032	1	0.5	183	13	18	1	38
89BC037RP038	440	1	71	33	29	7	59
89BC037RP039	240	0.9	108	35	32	5	46
89BC037RP040	182	1	138	72	31	6	53
89BC037RP041	5	0.5	171	72	45	1	108
89BC037R-010	136	0.9	268	67	28	1	23
89BC037R-011	95	0.8	189	316	11	1	20
89BC037R-012	118	0.6	199	54	22	2	42
89BC037KA511	225	1.4	123	333	12	1	15
89BC037KA512	387	1.5	97	291	19	2	66
89BC037HM-026	24	1.6	165	743	117	13	490
89BC037HM-027	11	1.4	51	205	59	6	227
89BC037HM-028	5	1.4	103	57	45	1	77
89BC037HM-029	93	1.6	207	164	54	1	93

7.6 Group 6 Geochemistry

A total of thirty-one rock grab samples and four heavy mineral stream samples were collected on the Odin 9-10 and Loki 1-3 claims (See Figure 17). Only sample RP-033 showed a slight Ag anomaly (2.2 ppm Ag). Several rock samples presented base metal anomalous values (sample RP-018: 373 ppm Cu and 228 ppm Zn; sample RP-061: 28 ppm Sb and 276 ppm Zn; sample BA-025: 145 ppm Pb). No precious metal or base metal anomaly was recorded in the heavy mineral stream samples.

TABLE 6

ANALYTICAL RESULTS OF GROUP 6

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA012	1	1	529	20	49	1	81
89BC037BA013	1	0.5	108	9	4	1	21
89BC037BA014	1	1.1	125	22	42	1	88
89BC037BA015	1	0.4	98	6	29	1	52
89BC037BA016	1	1.3	162	104	77	1	162
89BC037BA017	1	0.3	90	4	15	1	64
89BC037BA018	11	0.6	170	7	25	1	76
89BC037BA025	1	1	184	116	145	1	127
89BC037BA026	2	0.7	143	60	79	1	172
89BC037BA027	1	1.6	321	42	53	1	107
89BC037BA028	1	1	58	35	39	1	113
89BC037BA029	20	0.4	86	7	9	1	58
89BC037RP014	3	1	316	11	29	1	70
89BC037RP015	2	1.6	199	235	26	1	43
89BC037RP016	1	1.2	94	96	36	1	61
89BC037RP017	3	0.7	143	97	29	1	78
89BC037RP018	1	1.5	52	373	67	1	228
89BC037RP019	1	0.2	56	6	31	1	42
89BC037RP022	2	0.6	74	24	32	1	35
89BC037RP023	2	1.9	46	20	49	1	92
89BC037RP024	1	1.7	186	39	35	3	73
89BC037RP033	2	2.2	289	27	45	6	56
89BC037RP034	3	1	102	3	23	4	48
89BC037RP035	1	0.9	215	39	34	1	62
89BC037RP036	1	1.4	96	29	20	5	46
89BC037RP061	1	0.9	151	73	81	28	276
89BC037RP062	2	0.7	150	48	50	1	77

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037RP063	3	1	134	68	68	12	78
89BC037KA526	1	0.9	123	27	56	2	58
89BC037KA527	31	0.5	159	96	50	2	101
89BC037KA528	4	0.7	120	83	45	8	82
89BC037HM-016	37	1.7	299	255	49	2	278
89BC037HM-017	72	2.1	414	358	56	2	385
89BC037HM-018	28	2.5	303	190	52	1	177
89BC037HM-019	3	2.3	61	169	54	1	158

7.7 Group 7 Geochemistry

A total of twenty-one rock grab samples and five heavy mineral stream samples were collected on the Odin 3-8 claims (See Figure 18). Rock sample RP-005 shows a multi-element anomaly (135 ppb Au, 4.9 ppm Ag, 4848 ppm Pb, 31 ppm Sb, and 3640 ppm Zn). Two other rock samples show anomalous values (BA-002: 670 ppm Ba and RP-006: 171 ppm Pb). Heavy Mineral stream samples also show above normal values in silver (HM-012: 7.9 ppm Ag) in lead (HM-015: 549 ppm Pb) and barium and zinc (HM-014: 657 ppm Ba, 791 ppm Zn).

TABLE 7

ANALYTICAL RESULTS OF GROUP 7

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA002	8	1.2	670	19	61	1	95
89BC037BA003	1	0.5	282	25	55	1	91
89BC037BA004	1	0.2	262	3	21	1	50
89BC037BA005	4	1.1	105	7	60	6	47
89BC037BA007	2	1.4	158	40	40	1	109
89BC037BA008	1	1.5	587	31	83	1	159
89BC037BA009	5	0.5	150	5	29	1	47
89BC037BA010	2	0.5	142	8	36	1	90
89BC037BA011	1	1.4	116	27	55	1	122
89BC037RP004	7	0.2	22	6	13	1	36

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn
89BC037RP005	135	4.9	39	454	4848	31	3640
89BC037RP006	15	0.7	50	22	171	3	127
89BC037RP009	17	0.7	50	32	56	1	90
89BC037RP010	1	0.5	119	16	26	1	86
89BC037RP011	2	0.4	15	1	4	1	5
89BC037RP012	4	1.6	53	37	40	1	90
89BC037RP013	2	1.8	102	44	56	1	89
89BC037RP020	6	0.6	10	15	45	1	81
89BC037R-008	3	0.5	92	8	29	1	47
89BC037R-009	33	0.7	73	13	60	2	89
89BC037KA509	20	0.4	95	16	45	3	60
89BC037HM-011	3	2	177	80	110	13	119
89BC037HM-012	63	7.9	111	397	229	13	401
89BC037HM-013	42	2.1	159	113	140	11	166
89BC037HM-014	38	2.9	657	389	282	11	791
89BC037HM-015	35	2.9	57	671	549	12	840

7.8 Group 8 Geochemistry

A total of twenty rock grab samples and eight heavy mineral stream samples were collected on the Thor 1-4 and Odin 1-2 claims (See Figure 19). Four samples show anomalous silver values (R-007: 2.4 ppm; R-026: 2.3 ppm; R-028: 2.1 ppm; and KA-504: 2.9 ppm). Only sample KA-504 presents a multi-element anomaly (187 ppb Au, 0.9 ppm Ag, 184 ppm Zn). In addition, sample BA-001 has a Ba anomaly of 665 ppm.

TABLE 8

ANALYTICAL RESULTS OF GROUP 8

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037BA001	40	1.3	665	86	46	1	97
89BC037RP001	1	0.8	205	5	22	1	45
89BC037RP002	1	1.6	21	31	16	1	52
89BC037RP003	20	1.2	345	46	40	1	110

SAMPLE	Au ppb	Ag ppm	Ba ppm	Cu ppm	Pb ppm	Sb ppm	Zn ppm
89BC037RP008	10	0.9	68	9	30	1	97
89BC037R-003	4	0.9	21	4	9	1	29
89BC037R-004	2	0.4	12	4	2	1	9
89BC037R-005	1	0.7	92	11	34	1	77
89BC037R-006	1	2	34	61	54	3	92
89BC037R-007	15	2.4	22	21	111	2	124
89BC037R-026	1	2.3	75	52	55	1	97
89BC037R-027	1	0.7	591	4	48	1	79
89BC037R-028	1	2.1	31	48	49	1	85
89BC037KA503	12	0.7	252	36	2	1	29
89BC037KA504	187	2.9	28	484	74	1	184
89BC037KA505	2	1.6	14	51	41	1	62
89BC037KA506	1	0.2	60	7	21	1	36
89BC037KA507	1	0.2	51	19	37	1	58
89BC037KA508	1	1.9	216	34	57	4	86
89BC037KA525	1	1.9	23	48	48	1	81
89BC037HM-001	15	1.6	209	86	165	22	182
89BC037HM-002	92	1.8	524	151	193	4	224
89BC037HM-003	94	32	674	407	1545	54	671
89BC037HM-004	720	3.2	382	419	227	18	443
89BC037HM-007	24	2.1	154	95	206	15	240
89BC037HM-008	970	2	165	228	73	1	302
89BC037HM-009	6400	1.2	79	198	37	1	150
89BC037HM-010	3	2.6	105	48	135	23	162

8.0 CONCLUSIONS AND RECOMMENDATIONS

The Stewart properties lie approximately 300 air kilometers northwest of Smithers, British Columbia, in the Iskut River Area. Access to the properties is by helicopter from the Bronson Creek airstrip which is located some 20 kilometers north of the Claim Group 8. An alternative route is by road along Highway 37 to Bell II and then by helicopter to the various claim groups.

Mineral exploration in the Stikine River, Unuk River, and Iskut River area dates back to the early 1900's when prospectors staked claims on the lower reaches of Bronson Creek. Since then, several precious metal and base metal deposits and showings have been discovered in the general area. The Stewart claim groups are situated approximately 18 kilometers southeast of the Stonehouse and Snip gold deposits, 20 kilometers west of the Newhawk showing, and 19 kilometers southwest of Calpine's recent Eskay Creek discovery. The Stonehouse gold zone proven reserves to date are 876,000 tons grading 0.55 oz. Au/ton, with a cut-off grade of 0.3 oz. Au. This deposit is currently in production and in June 1989 produced at a rate of 312 tons/day.

The Stewart properties lie within the westernmost part of the Intermontane Tectonic Belt, close to the boundary of the Coastal Crystalline Tectonic Belt. The properties are underlain mainly by Upper Triassic to Lower Jurassic strata which are part of the Stewart Complex (Grove, 1986). The oldest rocks are a series of epiclastic volcanics, marbles, siltstones, and sandstones which are overlain by volcano-sedimentary rocks of the Hazelton Group. Grove (1986) refers to the Early to Middle Mesozoic rocks as the Unuk River Formation, the Betty Creek Formation, the Salmon River Formation, and the Nass Formation. Nearby properties exhibit similar suites of rocks, which host known gold showings and deposits in the region.

The limited geochemical program, including grab rock samples and heavy mineral stream samples, was conducted by Hi-Tec Resource Management Ltd. A total of 174 rock samples and 30 heavy mineral stream samples were collected on the Stewart properties. Results show several very encouraging precious metal and base metal anomalies in heavy mineral stream samples (6400 ppb Au in Sample HM009, 970 ppb Au in Sample HM008, 720 ppb Au in Sample HM004, and 32 ppm Ag in Sample HM003) and in rock samples (187 ppb Au in Sample KA504, 135 ppb Au in

Sample RP005, 373 ppm Cu in Sample RP018, and 276 ppm Zn in Sample RP061). These results warrant additional exploration work.

In order to evaluate the mineral and economic potential of the Universal Trident Industries Ltd. properties, a multi-phase exploration program is recommended.

Phase I should include additional prospecting, detailed geological mapping, geochemical sampling (rocks, soils, and stream sediments), and ground geophysical surveying in the areas of greater interest. Special attention should be paid to areas straddling the contact of any volcanic package with the coarse clastic sedimentary rocks, as this is the contact zone which hosts mineralized horizons in the area.

Dependant upon positive results from the Phase I exploration program, and upon a review of the data, additional ground geophysical surveys should be carried out to help delineate any significant structure, followed by an exploratory diamond drilling program to define the geometry and grade characteristics of any identified mineralization.

Respectfully submitted
HI-TEC RESOURCE MANAGEMENT LTD.

PROFESSIONAL GEOLOGIST ROBERT R. ARNOLD ALBERTA

ROBERT R. ARNOLD, M.Sc., P.Geol., F.G.A.C.

DECEMBER 18, 1989

9.0 REFERENCES

Alldrick, D.J. (1984)
Geological Setting of the Precious Metal Deposits in the Stewart Area. BCDM Fieldwork 1983, Paper 1984-1, pp. 149-163.

Britton, J.M. (1989)
Geology and Mineral Deposits of the Unuk Area, British Columbia. GSC Open File Map 1989-10.

Caufield, D.A. and Ikona, C.K. (1987)
Geological Report on the New 7 & 8 Mineral Claims Located in the Iskut River Area, Liard Mining Division. Unpublished Report for Ticker Tape Resources Ltd. prepared by Pamicon Developments Ltd.

Cavey, G. and LeBel, J.L. (1989)
Report on Julian Lake Property Iskut River Area, British Columbia. Unpublished Report for Golden Nevada Resources Inc.

Collins, D.A. (1988)
Report on the Rob 13 and Rob 14 Mineral Claims, Iskut River Area, British Columbia, Liard Mining Division. Unpublished Report for Magenta Development Corp. prepared by J.P. Sorbara & Associates.

Collins, D.A. and King, G.R. (1987)
Geological, Geochemical, Geophysical and Diamond Drilling Report on the New 7 & 8 Mineral Claims, Iskut River Area, B.C. Unpublished Report for Ticker Tape Resources Ltd. prepared by Hi-Tec Resource Management Ltd.

Collins, D.A. and Sorbara, J.P. (1988)
Report for Endeavour Explorations Inc. on the Ice, New and Ver Mineral Claims, Iskut River Area, British Columbia, Liard Mining Division. Unpublished Report for Endeavour Explorations Inc. prepared by J.P. Sorbara & Associates.

Collins, D.A. and Sorbara, J.P. (1988)
Report on the New 1, 5 and 6 Mineral Claims, Iskut River Area, B. C., Liard Mining Division. Unpublished Report for Adrian Resources Ltd. prepared by J.P. Sorbara & Associates.

Collins, D.A. and Sorbara, J.P. (1988)
Report on the Gab 1-4 Mineral Claims, Iskut River Area, British Columbia, Liard Mining Division. Unpublished Report for Achilles Resources prepared by J.P. Sorbara & Associates.

Collins, D.A. and Sorbara, J.P. (1988)
Report on the Ice, New, and Ver Mineral Claims, Iskut River Area, British Columbia, Liard Mining Division. Unpublished Report for Cheryl Resources Inc. prepared by J.P. Sorbara & Associates.

Collins, D.A. and Sorbara, J.P. (1988)
Report on the Ian 6 & 8 Mineral Claims, Liard Mining Division, British Columbia. Unpublished Report for Pezgold Resource Corporation prepared by J.P. Sorbara & Associates.

Geological Survey of Canada (1957)
Stikine River Area, Cassiar District, British Columbia, Map 9-1957.

Geological Survey of Canada (1988)
GSC Open File 1645; BCRGS # 18

George, R.H. (1983)
Geochemical Report, Tok 1-6 and 7-22, Skeena Mining Division. Unpublished Report for Stikine Silver Ltd. prepared by Ryan Exploration Co. Ltd.

George, R.G. (1983)
Final Report, May Ralph Project, Kay 11 -18 S.I.B. Tok 1-22, Skeena Mining Division. Unpublished Report for Ryan Exploration Co. Ltd.

Grove, E.W. (1986)
Geology and Mineral Deposits of the Unuk River-Salmon River-Anyox Area. Ministry of Energy, Mines and Petroleum Resources, Bulletin 63, 1988 Reprint, 152 pages.

Hardy, J.L. and Chapman, J. (1989)
Compilation Report on the Virginia Lake Property (Dwayne I, Carl J, Patsy Anne, and Jojo M Claims), Iskut River Area, British Columbia. Unpublished Report for Consolidated Regal Resources Ltd. and Consolidated Rhodes Resources Ltd.

Harris, C.R. (1985)
Report on Kay & Tok Claims, Eskay Creek, Unuk River, B.C., Skeena M.D. Unpublished Report for Golden Coin Resources Ltd. prepared by C.R. Harris.

Harris, C.R. (1985)
Report on Kay & Tok Claims, Eskay Creek, Unuk River, B.C., Skeena M.D. Unpublished Report for Kerrisdale Resources Ltd. prepared by C.R. Harris.

Hawkins, P.A., Cullingham, O.R., and Jurcic, P. (1987)
Report on Reconnaissance Mapping and Prospecting in the Unuk River Area, Skeena and Liard Mining Divisions, Northwest British Columbia. Unpublished Report on Behalf of Axiom Exploration Ltd.

Kerr, F.A. (1930)
Preliminary Report on the Iskut River Area, B.C. GSC Summary Report, 1929, Part A, pp. 30-61.

Kerr, F.A. (1948)
Lower Stikine and Western Iskut Rivers Area, B.C. GSC Memoir 246.

King, G.R. (1987)
Geological and Geochemical Report on the Cam 5 and 6 Claims, Iskut River Area, Liard Mining Division, B.C. Unpublished Report for Gigi Resources Ltd. prepared by Hi-Tec Resource Management Ltd.

King, G.R. (1987)
Geological and Geochemical Report on the Ian 1 to 4 Claims, Iskut River Area, Liard Mining Division, B.C. Unpublished Report for Ashburton Oil Ltd. prepared by Hi-Tec Resource Management Ltd.

King, G.R. (1987)
Geological and Geochemical Report on the JP-3 & 4 and Cam 9 & 10 Claims, Iskut River Area, Liard Mining Division, B.C. Unpublished Report for Norman Resources Ltd. prepared by Hi-Tec Resource Management Ltd.

King, G.R. and Demczuk, L. (1988)
Geological, Geochemical and Geophysical Report on the JP-3 & 4 and Cam 9 & 10 Claims, Iskut River Area, Liard Mining Division, B.C. Unpublished Report for Norman Resources Ltd. prepared by Hi-Tec Resource Management Ltd.

Kirkham, R.V. (1963)
The Geology and Mineral Deposits in the vicinity of the Mitchell and Sulphurets Glaciers, Northwest British Columbia. Unpublished M.Sc. Thesis, University of British Columbia.

Kowalchuk, J.M. (1982)
Assessment Report of Geological, Geochemical and Geophysical Work Performed on the Warrior Claims, Liard Mining Division. British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 10, 418.

Kruchkowski, E.R. (1988)
Report on Mikey 1, Lisa 1 and Ralphus Claims, Stewart, British Columbia, Skeena Mining Division. Unpublished Report for South Unuk Gold Corporation.

Kuran, V.M. (1985)
Assessment Report on the Unuk River Property, Kay, Tok and GNC Claims, Skeena Mining Division, British Columbia. Unpublished Report for Stikine Silver Ltd. prepared by Kerrisdale Resources Ltd.

Lefebure, D.V. (1987)
Northwestern District in British Columbia Mineral Exploration Review 1987. British Columbia Ministry of Energy, Mines and Petroleum Resources, Information Circular 1988-1.

Peatfield, G.R. (1975)
Final Report 1975 Geology - Geophysics Programme, Eskay Creek Option. Unpublished Report for Texasgulf Inc.

Polini, J.R. (1987)
Report on the Hag 2, 4 & 8 Mineral Claims, Iskut River Area, Liard Mining Division, British Columbia. Unpublished Report for Cove Energy Corporation prepared by John R. Polini & Associates Ltd.

Schink, E.A. and Peatfield, G.R. (1976)
Final Report 1976 Diamond Drilling Programme, Eskay Creek Property. Unpublished Report for TexasGulf Inc.

Shroeter, T.G. (1983)
Bruce Jack Lake (Sulphurets Prospects), BCDM Fieldwork, 1983-1; pp. 171-174.

Seraphim, R.H. (1983)
Summary Report Tok and Kay Claims, Unuk River, Skeena M.D. Unpublished Report for Stikine Silver Ltd. N.P.L. prepared by R.H. Seraphim.

Sorbara, J.P., Kuran, V.M. and Arnold, R.R. (1989)
Report on the Arc 3 and Arc 4 Claims, Sulphurets Area, Liard Mining Division, British Columbia. Unpublished Report for Buffalo Resources Ltd.

Sorbara, J.P. (1988)
Report on the Rob 6 to 9 Claims, Liard Mining Division, British Columbia. Unpublished Report for Danstar Resources Ltd. prepared by J.P. Sorbara & Associates.

Sorbara, J.P. (1988)
Report on the Rob 1, 2, 3 and 5 Claims, Liard Mining Division, British Columbia. Unpublished Report for Balcor Resource Corp. prepared by J.P. Sorbara & Associates.

Sorbara, J.P. (1988)
Geological Report on the Joy 1 & 2 Mineral Claims, Liard Mining Division, British Columbia. Unpublished Report for Brenwest Mining Limited prepared by J.P. Sorbara & Associates.

Sorbara, J.P. (1988)
Report on the Joy 1 & 2 Mineral Claims, Liard Mining Division, British Columbia. Unpublished Report for International Wildcat Resources Ltd. prepared by J.P. Sorbara & Associates.

Sorbara, J.P. (1987)
Geological Report on the Ice-6 to Ice-17 Mineral Claims, Liard Mining Division, British Columbia. Unpublished Report for Wildfire Resources Ltd. prepared by J.P. Sorbara & Associates.

Sorbara, J.P. (1986)
Report on the Sul-2 Mineral Claim, Skeena Mining Division, B.C. Unpublished Report for Ashworth Explorations Limited prepared by J.P. Sorbara & Associates.

Thompson, D.R.S. (1973)
Upper Unuk River Prospect, Skeena Mining Division, 1973 Geology and Testing Report. Unpublished Report for Kalco Valley Mines Ltd. prepared by D.R.S. Thompson.

Thompson, W.D. (1964)
Exploration of Stikine Silver Property, Unuk River, B.C. Unpublished Report for Stikine Silver Ltd. prepared by Canex Aerial Exploration Ltd.

Wolfe, W.J. and Nichols, R.F. (1988)
Geological Exploration and Development Review of the SNIP Deposit. Cordilleran Roundup, February 4, #5.

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, ROBERT R. ARNOLD, of 1227 Caledonia Avenue, in the District of North Vancouver, in the Province of British Columbia, hereby certify:

1. THAT I am a geologist employed by Hi-Tec Resource Management Ltd. with offices at 1500-609 Granville Street, in the City of Vancouver, in the Province of British Columbia.

2. THAT I obtained a Bachelor of Science degree in Geology from the University of Geneva, in the City of Geneva, Switzerland, in 1976 and a Master of Science degree in Geological Engineering, from the same university in 1978.

3. THAT I am a Registered Professional Geologist, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1981.

4. THAT I am a Fellow Member of the Geological Association of Canada, in good standing since 1985. That I am a associate member of the Mineralogical Association of Canada and of the Society of Economic Geologists.

5. THAT I have been practising my profession as a geologist in Western Europe, West Africa, Southeast Asia and North America, both permanently since 1978 and seasonally since 1971.

6. THAT this report is based upon a thorough review of published and printed reports and maps on the subject property and the surrounding area. I personally supervised the exploration program which is the subject of this report.

7. THAT I have not received, nor do I expect to receive any interests, direct or indirect, or contingent in the securities or properties of Universal Trident Industries Ltd. and that I am not an insider of any company having interest in the Mineral Claims which are the subject of this report, or any other claims within a radius of 10 kilometers.

SIGNED : ______________________
ROBERT R. ARNOLD, M.Sc., P.Geol., F.G.A.C.

December 18, 1989

PROFESSIONAL GEOLOGIST ALBERTA
ROBERT R. ARNOLD

APPENDIX II

GEOCHEMICAL PREPARATION AND ANALYTICAL PROCEDURES

PHONE: (604) 980-5814 or 988-4524

TELEX: 04-352828

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

FIRE GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Fire Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95^{o}C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams are fire assay preconcentrated.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

PHONE 980-5814

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 26 ELEMENT ICP

Ag,Al,As,B,Bi,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Mo,
Na,Ni,P,Pb,Sb,Sr,Th,U,V,Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

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

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formated by routing computer dotline print out.

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ASSESSMENT REPORT FOR:

HEAVY MINERAL SAMPLING AND CONCENTRATIONS

A large sample is collected from stream sediments or soils big enough to yield a minimum of 0.5 kg of the desired minus fraction. After sieving through any of the sieve mesh sizes they are adapted for the survey. After seiving the samples, the minus fraction is grinded to -80 mesh.

Then 0.4 kg of sample is weighed into a suitable centrifuge containers. The prepared concentrations of liquids are added to obtain a 3.1 specific gravity flotation.

The heavy fractions are then washed cleaned and dried. After drying the samples they are separated . The sink float Heavy Minerals are separated into Magnetic and Non Magnetic fractions and both fractions are weighed. The percent of the Magnetic and non Magnetic fractions are calculated and reported with the analytical data.

The analysis are than carried out in the ususal analytical manner by I.C.P. or A.A. method.

APPENDIX III

ANALYTICAL DATA FOR ROCK AND HEAVY MINERAL SAMPLES

COMP: HI TEC RESOURCE MANAGEMENT
PROJ: 89 BC 037
ATTN: P.SORBARA/V.KURAN/R.ARNOLD

MIN-EN LABS — ICP REPORT

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

FILE NO: 9V-1319-RJ1+2
DATE: OCT-30-89
* TYPE ROCK GEOCHEM * (ACT:F31)

SAMPLE NUMBER	AG PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
89BC037BA 001	1.3	665	86	46	1	97	40
89BC037BA 002	1.2	670	19	61	1	95	8
89BC037BA 003	.5	282	25	55	1	91	1
89BC037BA 004	.2	262	3	21	1	50	1
89BC037BA 005	1.1	105	7	60	6	47	4
89BC037BA 006	.7	181	31	21	1	101	9
89BC037BA 007	1.4	158	40	40	1	109	2
89BC037BA 008	1.5	587	31	83	1	159	1
89BC037BA 009	.5	150	5	29	1	47	5
89BC037BA 010	.5	142	8	36	1	90	2
89BC037BA 011	1.4	116	27	55	1	122	1
89BC037BA 012	1.0	529	20	49	1	81	1
89BC037BA 013	.5	108	9	4	1	21	1
89BC037BA 014	1.1	125	22	42	1	88	1
89BC037BA 015	.4	98	6	29	1	52	1
89BC037BA 016	1.3	162	104	77	1	162	1
89BC037BA 017	.3	90	4	15	1	64	1
89BC037BA 018	.6	170	7	25	1	76	11
89BC037BA 019	.8	33	6	12	3	13	3
89BC037BA 020	1.4	32	93	50	3	76	1
89BC037BA 021	.7	183	4	43	1	120	1
89BC037BA 022	1.8	24	232	28	1	83	1
89BC037BA 023	2.0	22	107	46	1	157	2
89BC037BA 024	1.8	65	109	31	1	87	1
89BC037BA 025	1.0	184	116	145	1	127	1
89BC037BA 026	.7	143	60	79	1	172	2
89BC037BA 027	1.6	321	42	53	1	107	1
89BC037BA 028	1.0	58	35	39	1	113	1
89BC037BA 029	.4	86	7	9	1	58	20
89BC037BA 030	4.6	66	1544	39	13	57	1980
89BC037BA 031	5.8	44	8222	44	9	59	3250
89BC037BA 032	2.0	205	240	48	1	100	63
89BC037BA 033	.6	85	111	43	2	61	10
89BC037BA 034	.7	220	25	16	1	61	2
89BC037BA 035	.6	114	19	16	1	39	1
89BC037BA 036	1.3	72	86	29	1	178	14
89BC037BA 037	1.3	149	49	12	1	182	10
89BC037BA 038	1.0	23	45	6	1	27	1
89BC037BA 039	1.4	245	105	40	1	156	15
89BC037BA 040	1.3	30	94	25	1	48	1
89BC037BA 041	1.1	22	125	38	1	76	1
89BC037BA 042	1.1	38	171	8	1	35	52
89BC037BA 043	.7	26	7	30	1	54	12
89BC037BA 044	.4	55	4	13	1	35	1
89BC037BA 045	.9	2598	195	6	1	77	10
89BC037BA 046	1.1	153	46	37	1	80	1
89BC037BA 047	.5	167	43	20	1	42	12
89BC037BA 048	1.0	27	8	70	16	131	1
89BC037BA 049	1.3	38	8	35	10	24	1
89BC037BA 050	.7	74	8	42	1	123	1
89BC037BA 051	1.4	53	44	58	1	97	1
89BC037RP 001	.8	205	5	22	1	45	1
89BC037RP 002	1.6	21	31	16	1	52	1
89BC037RP 003	1.2	345	46	40	1	110	20
89BC037RP 004	.2	22	6	13	1	36	7
89BC037RP 005	4.9	39	454	4848	31	3640	135
89BC037RP 006	.7	50	22	171	3	127	15
89BC037RP 007	1.7	17	19	81	1	103	5
89BC037RP 008	.9	68	9	30	1	97	10
89BC037RP 009	.7	50	32	56	1	90	17

COMP: HI TEC RESOURCE MANAGEMENT
PROJ: 89 BC 037
ATTN: P.SORBARA/V.KURAN/R.ARNOLD

MIN-EN LABS — ICP REPORT

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

FILE NO: 9V-1319-RJ3+4
DATE: OCT-30-89
* TYPE ROCK GEOCHEM * (ACT:F31)

SAMPLE NUMBER	AG PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
89BC037RP 010	.5	119	16	26	1	86	1
89BC037RP 011	.4	15	1	4	1	5	2
89BC037RP 012	1.6	53	37	40	1	90	4
89BC037RP 013	1.8	102	44	56	1	89	2
89BC037RP 014	1.0	316	11	29	1	70	3
89BC037RP 015	1.6	199	235	26	1	43	2
89BC037RP 016	1.2	94	96	36	1	61	1
89BC037RP 017	.7	143	97	29	1	78	3
89BC037RP 018	1.5	52	373	67	1	228	1
89BC037RP 019	.2	56	6	31	1	42	1
89BC037RP 020	.6	10	15	45	1	81	6
89BC037RP 022	.6	74	24	32	1	35	2
89BC037RP 023	1.9	46	20	49	1	92	2
89BC037RP 024	1.7	186	39	35	3	73	1
89BC037RP 025	2.2	58	92	45	1	121	2
89BC037RP 026	1.4	20	88	31	1	66	4
89BC037RP 027	1.9	99	122	29	1	91	3
89BC037RP 028	1.1	31	153	48	1	87	18
89BC037RP 029	1.7	60	84	23	1	80	2
89BC037RP 030	1.0	35	11	29	1	38	5
89BC037RP 031	.5	271	12	6	1	36	4
89BC037RP 032	.5	183	13	18	1	38	1
89BC037RP 033	2.2	289	27	45	6	56	2
89BC037RP 034	1.0	102	3	23	4	48	3
89BC037RP 035	.9	215	39	34	1	62	1
89BC037RP 036	1.4	96	29	20	5	46	1
89BC037RP 037	1.7	92	35	25	6	65	2
89BC037RP 038	1.0	71	33	29	7	59	440
89BC037RP 039	.9	108	35	32	5	46	240
89BC037RP 040	1.0	138	72	31	6	53	182
89BC037RP 041	.5	171	72	45	1	108	5
89BC037RP 042	.7	119	20	17	1	48	4
89BC037RP 043	.9	187	77	21	1	59	3
89BC037RP 044	1.3	85	74	9	1	107	2
89BC037RP 045	1.3	105	44	15	1	119	1
89BC037RP 046	1.6	278	8	35	1	48	5
89BC037RP 047	1.6	141	70	37	1	118	8
89BC037RP 048	1.5	48	28	31	1	51	2
89BC037RP 049	1.4	12	170	14	1	40	4
89BC037RP 050	.5	78	11	24	1	42	3
89BC037RP 051	1.4	70	9	6	1	23	32
89BC037RP 052	.8	29	5	27	1	49	1
89BC037RP 053	1.1	36	92	28	1	52	2
89BC037RP 054	.2	11	6	3	1	11	4
89BC037RP 055	1.0	204	22	26	1	64	2
89BC037RP 056	1.7	55	108	63	1	127	1
89BC037RP 057	2.3	26	163	58	1	104	2
89BC037RP 058	.9	238	25	64	9	126	3
89BC037RP 059	.5	60	76	145	1	219	2
89BC037RP 060	2.6	55	191	50	1	111	1
89BC037RP 061	.9	151	73	81	28	276	1
89BC037RP 062	.7	150	48	50	1	77	2
89BC037RP 063	1.0	134	68	68	12	78	3
89BC037RP 064	1.8	60	59	129	6	116	1
89BC037RP 065	.8	85	51	31	7	64	3
89BC037R- 001	1.4	232	101	23	1	65	2
89BC037R- 002	1.2	232	92	40	1	86	3
89BC037R- 003	.9	21	4	9	1	29	4
89BC037R- 004	.4	12	4	2	1	9	2
89BC037R- 005	.7	92	11	34	1	77	1

COMP: HI TEC RESOURCE MANAGEMENT
PROJ: 89 BC 037
ATTN: P.SORBARA/V.KURAN/R.ARNOLD

MIN-EN LABS — ICP REPORT

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

FILE NO: 9V-1319-RJ5+6
DATE: OCT-30-89
* TYPE ROCK GEOCHEM * (ACT:F31)

SAMPLE NUMBER	AG PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB
89BC037R- 006	2.0	34	61	54	3	92	1
89BC037R- 007	2.4	22	21	111	2	124	15
89BC037R- 008	.5	92	8	29	1	47	3
89BC037R- 009	.7	73	13	60	2	89	33
89BC037R- 010	.9	268	67	28	1	23	136
89BC037R- 011	.8	189	316	11	1	20	95
89BC037R- 012	.6	199	54	22	2	42	118
89BC037R- 013	.3	142	12	36	1	83	1
89BC037R- 014	1.1	525	72	40	1	128	1
89BC037R- 015	1.6	1536	43	50	1	143	1
89BC037R- 016	.2	80	8	26	1	16	19
89BC037R- 017	.8	200	103	35	1	107	9
89BC037R- 018	.8	43	23	10	1	38	1
89BC037R- 019	1.3	488	90	57	1	103	1
89BC037R- 020	.4	68	651	28	1	57	1
89BC037R- 021	.2	6	29	5	1	12	1
89BC037R- 022	1.6	17	357	57	24	65	8
89BC037R- 023	1.3	20	179	30	1	35	1
89BC037R- 024	1.8	35	155	54	1	85	1
89BC037R- 025	2.3	17	62	33	1	115	1
89BC037R- 026	2.3	75	52	55	1	97	1
89BC037R- 027	.7	591	4	48	1	79	1
89BC037R- 028	2.1	31	48	49	1	85	1
89BC037KA	1.9	216	34	57	4	86	1
89BC037KA 001	1.9	27	103	47	1	80	1
89BC037KA 502	1.4	90	52	25	1	72	1
89BC037KA 503	.7	252	36	2	1	29	12
89BC037KA 504	2.9	28	484	74	1	184	187
89BC037KA 505	1.6	14	51	41	1	62	2
89BC037KA 506	.2	60	7	21	1	36	1
89BC037KA 507	.2	51	19	37	1	58	1
89BC037KA 509	.4	95	16	45	3	60	20
89BC037KA 510	.5	67	442	28	4	71	51
89BC037KA 511	1.4	123	333	12	1	15	225
89BC037KA 512	1.5	97	291	19	2	66	387
89BC037KA 513	.8	66	15	12	1	32	3
89BC037KA 514	.5	52	16	16	1	66	2
89BC037KA 515	1.2	1499	7	37	1	66	3
89BC037KA 516	.3	36	8	14	1	33	1
89BC037KA 517	.8	146	91	25	1	121	8
89BC037KA 518	.5	37	28	20	1	77	1
89BC037KA 519	1.4	18	13	24	1	87	1
89BC037KA 520	1.1	21	26	10	1	31	2
89BC037KA 521	1.0	6	172	13	1	43	1
89BC037KA 522	1.7	20	54	24	1	93	15
89BC037KA 523	1.4	34	46	51	1	93	1
89BC037KA 524	1.8	341	177	906	1	180	1
89BC037KA 525	1.9	23	48	48	1	81	1
89BC037KA 526	.9	123	27	56	2	58	1
89BC037KA 527	.5	159	96	50	2	101	31
89BC037KA 528	.7	120	83	45	8	82	4
89BC037KA 529	.7	128	40	40	3	62	21
89BC037KA 530	.7	215	50	63	17	58	60
KA 525	1.9	15	48	41	1	82	2

COMP: HI TEC RESOURCE MANAGEMENT
PROJ: 89 BC 037
ATTN: P.SORBARA/V.KURAN/R.ARNOLD

MIN-EN LABS — ICP REPORT

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

FILE NO: 9V-1319-HJ1
DATE: OCT-31-89
* TYPE HEAVY MINERAL * (ACT:F31)

SAMPLE NUMBER	AG PPM	BA PPM	CU PPM	PB PPM	SB PPM	ZN PPM	AU PPB	HM%
89 BC037 HM-001	1.6	209	86	165	22	182	15	5.82
89 BC037 HM-002	1.8	524	151	193	4	224	92	3.31
89 BC037 HM-003	32.0	674	407	1545	54	671	94	1.79
89 BC037 HM-004	3.2	382	419	227	18	443	720	2.05
89 BC037 HM-005	2.5	8	168	50	1	89	13	11.84
89 BC037 HM-006	1.5	20	154	37	1	69	16	14.35
89 BC037 HM-007	2.1	154	95	206	15	240	24	6.78
89 BC037 HM-008	2.0	165	228	73	1	302	970	9.27
89 BC037 HM-009	1.2	79	198	37	1	150	6400	21.64
89 BC037 HM-010	2.6	105	48	135	23	162	3	2.73
89 BC037 HM-011	2.0	177	80	110	13	119	3	2.50
89 BC037 HM-012	7.9	111	397	229	13	401	63	2.68
89 BC037 HM-013	2.1	159	113	140	11	166	42	2.36
89 BC037 HM-014	2.9	657	389	282	11	791	38	2.98
89 BC037 HM-015	2.9	57	671	549	12	840	35	10.22
89 BC037 HM-016	1.7	299	255	49	2	278	37	7.00
89 BC037 HM-017	2.1	414	358	56	2	385	72	10.23
89 BC037 HM-018	2.5	303	190	52	1	177	28	3.13
89 BC037 HM-019	2.3	61	169	54	1	158	3	12.15
89 BC037 HM-020	2.8	35	185	46	2	75	17	12.48
89 BC037 HM-021	2.5	14	177	52	3	75	39	12.39
89 BC037 HM-022	2.8	28	286	45	1	75	8	6.42
89 BC037 HM-023	1.6	22	193	36	1	65	30	10.14
89 BC037 HM-024	1.4	55	103	37	1	64	70	13.18
89 BC037 HM-025	1.9	19	127	28	1	74	7	11.74
89 BC037 HM-026	1.6	165	743	117	13	490	24	4.09
89 BC037 HM-027	1.4	51	205	59	6	227	11	8.97
89 BC037 HM-028	1.4	103	57	45	1	77	5	4.63
89 BC037 HM-029	1.6	207	164	54	1	93	93	4.80
89 BC037 HM-030	1.1	144	34	29	1	90	12	4.85

• EN
LABORATORIES

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE:
33 EAST IROQUOIS ROAD
P.O. BOX 867
TIMMINS, ONTARIO CANADA P4N 7G7
TELEPHONE: (705) 264-9996

Assay Certificate

9V-1319-RA1

Company: HI TEC RESOURCE MANAGEMENT
Project: 89 BC 037
Attn: P.SORBARA/V.KURAN/R.ARNOLD

Date: OCT-30-89
Copy 1. HI TEC RESOURCE MANAGEMENT, VAN., B.C.

We hereby certify the following Assay of 2 ROCK samples submitted OCT-14-89 by R.ARNOLD.

Sample Number	AU G/TONNE	AU OZ/TON
89BC037BA 030	2.00	.058
89BC037BA 031	3.40	.099

Certified by ____________________

MIN-EN LABORATORIES

APPENDIX IV

ROCK SAMPLE DESCRIPTIONS

ROCK SAMPLE DESCRIPTIONS

BA-001	(Stop 10) Grab sample of highly silicified rhyolite float with extensive iron stains. 1-2% of disseminated pyrite and presence of small randomly oriented quartz veinlets.
BA-002	(Stop 11) Grab sample of slightly silicified andesite with traces of disseminated pyrite.
BA-003	(Stop 12) Grab sample of very altered andesitic tuff with iron and manganese stains. 0.5-1% disseminated sulphides present.
BA-004	(Stop 13) Grab sample of rhyolite with approximately 1% of disseminated pyrite.
BA-005	(Stop 13) Grab sample of andesitic breccia float, polymictic with clasts up to 5 cm in diameter. Traces of sulphides in matrix.
BA-006	(Stop 15) Grab sample of dark sedimentary rock, banded, with approximately 1-2% of disseminated pyrite. Fine grained shale (Sample BA-006) alternating with bands of coarser grained sandstone.
BA-007	(Stop 17) Grab sample of altered andesite flow with iron and manganese stains and minor small disseminated pyrite crystals.
BA-008	(Stop 17) Grab sample of brecciated zone within outcrop of altered andesite (Sample BA-007).
BA-009	(Stop 18) Grab sample of highly altered and silicified andesitic tuff float. Presence of heavy iron stain and traces of sulphides.
BA-010	(Stop 19) Grab sample of aphanitic, silicified andesite flow with traces of pyrite and minor manganese and iron stains.
BA-011	(Stop 21) Grab sample of andesite breccia with clasts up to 5 cm in diameter. Extensive iron and manganese stains occur in matrix.
BA-012	(Stop 22) Grab sample of highly silicified rhyolite with heavy iron stains and traces of pyrite.
BA-013	(Stop 24) Grab sample of quartzite. No visible sulphides, minor iron stains.

BA-014 (Stop 25) Grab sample of silicified andesitic tuff with 1-2% of finely disseminated pyrite. This zone forms a 5 m wide dyke striking N10^{0}.

BA-015 (Stop 26) Grab sample of andesitic tuff float, heavily iron stained, traces of sulphides.

BA-016 (Stop 29) Grab sample of aphanitic, dark grey-green andesite flow with minor sulphides (Mainly pyrite) and heavily iron stained.

BA-017 (Stop 30) Grab sample of highly silicified, aphanitic andesite dyke striking N30^{0} with slight iron stain and approximately 1% of finely disseminated pyrite.

BA-018 (Stop 31) Grab sample of quartz vein material float with presence of pyrite, pyrrhotite, chalcopyrite and galena: approximately 4-5%.

BA-019 (Stop 32) Grab sample of quartz vein material float with iron and chlorite stain. No visible sulphides.

BA-020 (Stop 33) Grab sample of slightly altered andesitic tuff with extensive chlorite and epidote alteration, mainly along fracture planes. Presence of small quartz-carbonate stringers randomly oriented and traces of sulphides.

BA-021 (Stop 33) Grab sample of red-purple rhyolite with manganese staining, no visible sulphides. Rhyolite occurring as a dyke within andesitic tuff (Sample BA-020).

BA-022 (Stop 34) Grab sample of float of silicified andesite with 1-3% of pyrite and chalcopyrite. Slight iron stain and epidote alteration.

BA-023 (Stop 35) Grab sample of slightly silicified andesite flow with chlorite and epidote alteration and iron stains. Presence of small quartz-carbonate veinlets and traces of sulphides (pyrite?).

BA-024 (Stop 36) Grab sample of andesite flow with chlorite and epidote alteration. Approximately 2% of pyrite and sphalerite along fractures. Presence of small quartz-carbonate veinlets and stringers randomly oriented. Traces of disseminated sulphides within rock.

BA-025	(Stop 39) Grab sample of dyke of felsic volcanic. Highly silicified and oxidized on surface. Presence of approximately 2% of disseminated sulphides, mainly pyrite with traces of chalcopyrite (?).
BA-026	(Stop 39) Grab sample of quartz vein material taken out of several small veins randomly oriented within felsic volcanic.
BA-027	(Stop 39) Grab sample of slightly altered and silicified andesite flow with minor epidote and chlorite alteration and 0.5% of finely disseminated pyrite.
BA-028	(Stop 41) Grab sample of buff weathered granodiorite with approximately 0.5% of finely disseminated pyrite.
BA-029	(Stop 41) Grab sample of silicified felsic volcanics with 3-5% of pyrite occurring mainly along fracture planes. Fractures are highly oxidized. Presence of randomly oriented quartz stringers.
BA-030	(Stop 43) Grab sample of highly fractured, silicified, altered and oxidized andesite (?) with traces of malachite and azurite. Sample contains 5-10% pyrite and minor chalcopyrite. Sample taken out of trench.
BA-031	(Stop 43) Same description as BA-030
BA-032	(Stop 45) Grab sample of slightly silicified andesite with traces of pyrite along fracture planes.
BA-033	(Stop 45) Grab sample of highly silicified aphanitic andesite flow with iron stains on surface. 1-2% pyrite mainly occurring in fractures.
BA-034	(Stop 47) Same description as sample BA-033
BA-035	(Stop 49) Grab sample of slightly oxidized granodiorite with minor disseminated pyrite crystals.
BA-036	(Stop 51) Grab sample of silicified andesite with iron stains and traces of sulphides.
BA-037	(Stop 51) Grab sample of slate with iron stains and traces of finely disseminated pyrite.

BA-038 (Stop 53) Grab sample of highly chloritized and epidotized andesite flow with minor pyrite crystals usually disseminated.

BA-039 (Stop 55) Grab sample of float. Oxidized shale with minor pyrite occurring mainly along fracture planes. Manganese staining also present along fracture planes.

BA-040 (Stop 57) Grab sample of oxidized andesitic tuff with minor pyrite and manganese stains along fractures and on weathered surface.

BA-041 (Stop 57) Grab sample of highly oxidized rhyolite with traces of disseminated pyrite.

BA-042 (Stop 57) Grab sample of highly oxidized rhyolite with in places 1-3% pyrite.

BA-043 (Stop 59) Grab sample of granodiorite highly oxidized on surface. Presence of 1-2% of fine disseminated pyrite.

BA-044 (Stop 61) Grab sample of highly oxidized and silicified granodiorite. Presence of small quartz veinlets randomly distributed. Traces of pyrite and manganese stains.

BA-045 (Stop 61) Grab sample of oxidized quartz monzonite with manganese stains. No visible sulphides.

BA-046 (Stop 63) Grab sample of highly oxidized shale with manganese stains and traces of sulphides (pyrite?).

BA-047 (Stop 63) Grab sample of silicified andesite flow with iron and manganese staining. Traces of pyrite.

BA-048 (Stop 65) Grab sample of reddish-orange rhyolite, highly oxidized with 1-2% fine disseminated pyrite. In contact to the north with andesite (BA-049).

BA-049 (Stop 65) Grab sample of highly silicified andesite with approximately 0.5% pyrite.

BA-050 (Stop 65) Grab sample of andesitic tuff, chloritized with traces of fine pyrite occurring mainly along fracture planes.

BA-051 (Stop 67) Grab sample of andesitic tuff, fine grained, slightly silicified with 1-2% finely disseminated pyrite.

R-001	(Stop 1) Grab sample of andesitic tuff; fine grained, greyish-maroon on fresh surface, commonly oxidized and slightly sericitic. Approximately 0.5% of finely disseminated pyrite.
R-002	(Stop 1) Grab sample: same description as sample R-001 with pyrite more concentrated along fracture planes.
R-003	(Stop 3) Grab sample of granodiorite with intense epidotization. No visible mineralization.
R-004	(Stop 3) Grab sample of quartz vein material hosted in granodiorite. Contains traces of disseminated pyrite.
R-005	(Stop 5) Grab sample of quartz monzonite, with minor hornblende. No visible sulphides.
R-006	(Stop 7) Grab sample of altered mafic volcanics, with intense carbonate and epidote alteration.
R-007	(Stop 9) Grab sample of andesitic tuff with approximately 5% of finely disseminated pyrite and localized epidote alteration. Weathered surface is strongly oxidized.
R-008	(Stop 27) Grab sample of intensely silicified, andesitic rock which appears to have undergone contact metamorphism (?) contains 5-10% of finely disseminated pyrite and intense pyritization along fracture planes.
R-009	(Stop 27) Grab sample of siliceous, bluish-grey, altered andesite with intensely oxidized weathered surface contains approximately 3-5% of finely disseminated pyrite.
R-010	(Stop 43) Grab sample of light coloured, siliceous, slightly brecciated material which is intensely oxidized with limonite stains. No visible sulphides.
R-011	(Stop 44) Grab sample of greyish white, silicified and slightly calcareous material which contains 5-7% disseminated pyrite and has a strongly oxidized weathered surface.
R-012	(Stop 44) Grab sample of intensely oxidized and limonitized material, which occurs in a siliceous, greyish white, andesite tuff host rock.

R-013 (Stop 46) Grab sample of diorite with strongly oxidized weathering surface, with 2-3% of disseminated pyrite.

R-014 (Stop 48) Grab sample of dark grey to black argillite with an oxidized weathered surface.

R-015 (Stop 50) Grab sample of dark grey to maroon grey, very fine grained locally chloritized andesite with up to 5% disseminated pyrite and an intensely weathering surface.

R-016 (Stop 52) Grab sample of whitish rhyolitic volcanic material with up to 5% of disseminated pyrite.

R-017 (Stop 54) Grab sample of black argillite angular float with oxidized weathered surface.

R-018 (Stop 56) Grab sample of hornblende granodiorite with minor biotite. No visible sulphides.

R-019 (Stop 56) Grab sample of small pendant of andesitic material in granodiorite host rock. The andesite contains 3-5% disseminated pyrite.

R-020 (Stop 58) Grab sample of dark greenish grey, slightly silicified andesitic material in small fault within granodiorite.

R-021 (Stop 60) Grab sample of quartz vein float with 5% pyrite occurring in blebs and disseminations.

R-022 (Stop 60) Grab sample of intensely carbonate altered tuffaceous andesitic material with euhedral calcite and 7-10% pyrite occurring in blebs and disseminations.

R-023 (Stop 62) Grab sample of pyroxene porphyritic mafic volcanic material with 5% disseminated pyrite.

R-024 (Stop 64) Grab sample of greyish, very fine grained, andesite with an oxidized weathered surface and a trace of disseminated pyrite.

R-025 (Stop 66) Grab sample of 1 centimeter wide quartz vein material with approximately 5% disseminated pyrite.

R-026 (Stop 68) Grab sample of bluish-grey augite porphyry of andesitic composition. Phenocrysts average 5 mm in diameter, but occasionally exceed 2 cm.

R-027 (Stop 68) Grab sample of pinkish felsic dyke with 5% greenish K-feldspar.

R-028 (Stop 68) Grab sample of fine grained, dark grey, intermediate to mafic volcanics with a dark brown oxidized weathered surface and 2-3% of finely disseminated pyrite.

RP-001 (Stop 3) Grab sample of granodiorite, siliceous with green epidote alteration on surface.

RP-002 (Stop 7) Grab sample of quartz vein material, ranging from 5-30 mm wide, with no visible sulphides.

RP-003 (Stop 9) Grab sample of basalt flow float with small randomly oriented quartz veinlets. No visible mineralization.

RP-004 (Stop 11) Grab sample of quartz vein material, 4-5 cm wide, hosted in andesite. No visible sulphides.

RP-005 (Stop 12) Grab sample of float of mineralized quartz-carbonate vein hosted in pyroclastic volcanic tuff. Mineralization consists of finely disseminated pyrite and galena. Host rock shows manganese and iron stains.

RP-006 (Stop 13) Grab sample of quartz vein material hosted in volcanic tuff. Quartz vein approximately 1 cm wide and strongly mineralized with pyrite (5-10%).

RP-007 (Stop 14) Grab sample of andesitic tuff with randomly oriented carbonate veinlets. No visible sulphide mineralization.

RP-008 (Stop 16) Grab sample of granodiorite with heavy iron and manganese stains and epidote alteration. Traces of sulphides.

RP-009 (Stop 17) Grab sample of volcanic breccia float. Polymictic with clasts up to 6 cm in diameter, highly altered with randomly oriented carbonate veinlets and minor finely disseminated pyrite.

RP-010 (Stop 18) Grab sample of highly altered polymictic agglomerate with iron and manganese stains and no visible mineralization.

RP-011	(Stop 20) Grab sample of silicified andesite with approximately 1-2% finely disseminated pyrite. Highly oxidized weathered surface with iron and manganese stains. Presence of randomly oriented quartz-carbonate veinlets, 1-3 mm wide.
RP-012	(Stop 21) Grab sample of slightly silicified andesite with minor disseminated pyrite and iron-manganese stains.
RP-013	(Stop 21) Grab sample of volcanic breccia (with clasts up to 25 cm in diameter) with silicified andesitic matrix, slightly pyrite mineralized, with iron and manganese stains on surface.
RP-014	(Stop 22) Grab sample of silicified andesitic tuff with heavy iron and manganese stains on surface and minor disseminated pyrite mineralization (0.5-1%).
RP-015	(Stop 23) Grab sample of highly altered and oxidized (iron and manganese stains) andesite flow with approximately 1% finely disseminated pyrite.
RP-016	(Stop 24) Grab sample of very oxidized black shale with minor disseminated pyrite.
RP-017	(Stop 25) Grab sample of highly altered and heavily stained basalt with approximately 2% disseminated pyrite.
RP-018	(Stop 25) Grab sample of highly altered and heavily oxidized andesite flow with minor pyrite mineralization.
RP-019	(Stop 26) Grab sample of highly altered and oxidized andesitic tuff with minor disseminated sulphides (pyrite).
RP-020	(Stop 27) Grab sample of highly stained and altered andesite with 5-6% sulphide mineralization consisting of pyrite and chalcopyrite.
RP-022	(Stop 29) Grab sample of highly altered and iron stained andesite with 3-5% finely disseminated pyrite and sphalerite. Presence of unmineralized small (2 mm wide) quartz veinlets.
RP-023	(Stop 30) Grab sample of mildly altered and oxidized andesite flow with approximately 1-2% disseminated pyrite.

RP-024 (Stop 31) Grab sample of altered andesite float, oxidized on surface and containing 5-8% sulphide mineralization (pyrite, pyrrhotite and sphalerite).

RP-025 (Stop 32) Grab sample of slightly altered andesite with iron and manganese staining. Minor pyrite mineralization and presence of carbonate veinlets (1-2 mm wide and randomly oriented).

RP-026 (Stop 33) Grab sample of andesitic tuff, highly altered with presence of quartz-carbonate veinlets and iron stains. Traces of disseminated pyrite.

RP-027 (Stop 34) Grab sample of andesitic tuff, slightly altered and oxidized on surface with 5% disseminated pyrite and 2% of sphalerite. Presence of carbonate stringers.

RP-028 (Stop 35) Grab sample of altered and oxidized andesite with carbonate stringers up to 3mm wide. Presence of 5% disseminated pyrite.

RP-029 (Stop 36) Grab sample of slightly altered andesite flow with iron and manganese stains. Presence of randomly distributed quartz veinlets (up to 1cm wide) with mineralized vugs (pyrite and sphalerite).

RP-030 (Stop 37) Grab sample of altered andesite float cross-cut by carbonate veinlets (1-2 mm wide). Presence of 5% finely disseminated pyrite and traces of sphalerite.

RP-031 (Stop 38) Grab sample of felsic volcanic dyke, highly oxidized and altered with approximately 3% disseminated pyrite.

RP-032 (Stop 38) Grab sample of slightly altered granodiorite with 5% disseminated pyrite.

RP-033 (Stop 39) Grab sample of andesitic tuff float, slightly altered with approximately 2% finely disseminated pyrite.

RP-034 (Stop 40) Grab sample of andesitic tuff, highly altered and silicified with iron and manganese stains and minor pyrite.

RP-035 (Stop 41) Grab sample of iron and manganese stains shale with disseminated pyrite (2%) and quartz-carbonate veinlets randomly oriented.

RP-036 (Stop 41) Grab sample. Same description as sample RP-035.

RP-037 (Stop 42) Grab sample of silicified andesite, highly altered and containing numerous carbonate veinlets with approximately 10% disseminated pyrite and galena, traces of pyrrhotite.

RP-038 (Stop 43) Grab sample of highly altered and oxidized andesite with 10-30% pyrite mineralization.

RP-039 (Stop 43) Grab sample of highly altered andesite with heavy iron and manganese stains on surface contains randomly oriented carbonate stringers with 40% pyrite occurring as disseminations and blebs.

RP-040 (Stop 43) Grab sample: same description as above (RP-039).

RP-041 (Stop 45) Grab sample of slightly altered and oxidized andesite with approximately 1% disseminated pyrite.

RP-042 (Stop 47) Grab sample of aphanitic, altered and oxidized andesite with randomly oriented quartz veinlets containing 1-3% pyrite.

RP-043 (Stop 49) Grab sample of granodiorite, slightly oxidized with traces of disseminated pyrite.

RP-044 (Stop 51) Grab sample of aphanitic basaltic material with carbonate stringers randomly oriented. 1-2% disseminated pyrite occurs mainly along veinlets.

RP-045 (Stop 51) Grab sample same description as above (RP-044) 5-10% disseminated pyrite.

RP-046 (Stop 53) Grab sample of altered, oxidized and slightly siliceous andesite with traces of pyrite.

RP-047 (Stop 55) Grab sample of slightly altered, oxidized andesite with 10-15% disseminated pyrite.

RP-048 (Stop 57) Grab sample of slightly altered andesite with randomly oriented carbonate stringers and iron stains. 1-2% pyrite occurs generally along veinlets.

RP-049 (Stop 57) Grab sample of slightly altered andesite/dacite (?) with 1-2% disseminated pyrite with iron and manganese stains on surface.

RP-050 (Stop 59) Grab sample of altered granodiorite with 3-5% disseminated pyrite and iron stains on surface.

RP-051 (Stop 61) Grab sample of silicified felsic volcanics dyke, highly altered and oxidized with 10-15% pyrite occurring as disseminations and as blebs along fracture planes.

RP-052 (Stop 61) Grab sample of aphanitic andesite float; altered and silicified with quartz veinlets randomly oriented. Contains 3-5% disseminated pyrite.

RP-053 (Stop 61) Grab sample of altered and oxidized granodiorite with approximately 1% disseminated pyrite.

RP-054 (Stop 61) Grab sample of quartz-carbonate float with approximately 1% disseminated pyrite.

RP-055 (Stop 63) Grab sample of aphanitic, altered and oxidized andesite containing 1-2% disseminated pyrite.

RP-056 (Stop 63) Grab sample of highly altered and oxidized aphanitic andesite with 1-2% disseminated pyrite. Presence of barren quartz stringers.

RP-057 (Stop 63) Grab sample of slightly altered, oxidized and silicified andesitic tuff with small randomly oriented quartz-carbonate veinlets. Presence of 5-10% finely disseminated pyrite.

RP-058 (Stop 65) Grab sample of altered and oxidized andesite/dacite (?) with 5-10% pyrite as disseminations and as blebs along fracture planes.

RP-059 (Stop 65) Grab sample of altered andesitic tuff with 10-15% disseminated pyrite and presence of randomly oriented quartz-carbonate veinlets.

RP-060 (Stop 67) Grab sample of slightly altered gabbroic dyke with randomly oriented quartz-carbonate veinlets and 5-10% disseminated pyrite which is slightly oxidized.

RP-061 (Stop 69) Grab sample of aphanitic rhyolite, silicified and containing approximately 1-2% disseminated pyrite.

RP-062	(Stop 69) Grab sample of aphanitic andesitic dyke, slightly altered and oxidized with 3-5% pyrite occurring mainly along fracture planes.
RP-063	(Stop 69) Grab sample of andesitic breccia, highly altered and iron stained, with clasts up to 7 cm in diameter containing 3-5% disseminated pyrite.
RP-064	(Stop 70) Grab sample of aphanitic, slightly altered and oxidized andesite with pyrite (5-10%) occurring as clusters around carbonate veinlets.
RP-065	(Stop 70) Grab sample of basaltic dyke, slightly altered and oxidized with approximately 1% sulphides.
KA-501	(Stop 2) Grab sample of slightly altered andesite. No visible mineralization.
KA-502	(Stop 1) Grab sample of dark grey andesite/basalt (?) with no visible sulphides.
KA-503	(Stop 4) Grab sample of granodiorite with approximately 1-2% disseminated pyrite. Rock is chloritized and relatively weathered on surface.
KA-504	(Stop 4) Grab sample of intensely altered volcanic pyroclastic with manganese and iron staining and traces of sulphides.
KA-505	(Stop 4) Grab sample of andesitic tuff with 3-5% pyrrhotite is green-grey on fresh surface.
KA-506	(Stop 6) Grab sample of quartz-rich, fine grained andesite with traces of pyrite. Slight epidote alteration and manganese and iron staining occurs on the surface.
KA-507	(Stop 6) Grab sample: same description as sample KA-506, with traces of galena.
KA-508	(Stop 8) Grab sample of andesite with minor chloritization and traces of pyrite.
KA-509	(Stop 27) Grab sample of green-grey andesite with 2-3% disseminated pyrite and minor pyrrhotite. Intense iron stains on weathered surface.
KA-510	(Stop 42) Grab sample of andesite with 5-8% finely disseminated pyrite.
KA-511	(Stop 44) Grab sample of andesite showing intense oxidation on surface with 0.5% pyrite occurring as blebs along fracture planes.

KA-512 (Stop 44) Grab sample: same description as sample KA-511 with approximately 2% disseminated pyrite.

KA-513 (Stop 46) Grab sample of diorite with traces of pyrite; light grey on fresh surface.

KA-514 (Stop 48) Grab sample of rhyolite with 1% disseminated and blebby pyrite and traces of chalcopyrite.

KA-515 (Stop 50) Grab sample of aphanitic, chloritized mafic dyke. No visible mineralization.

KA-516 (Stop 52) Grab sample of rhyolite with traces of pyrite.

KA-517 (Stop 54) Grab sample of dark grey argillite with intense iron stains with 5-8% disseminated pyrite, 2% pyrrhotite and traces of magnetite (?).

KA-518 (Stop 56) Grab sample of chloritized and iron stained andesite with traces of sulphides (pyrite).

KA-519 (Stop 58) Grab sample: same description as sample KA-518.

KA-520 (Stop 60) Grab sample of mafic volcanic, moderately iron stained and chloritized. No visible sulphides were found in sample.

KA-521 (Stop 60) Grab sample of intensely oxidized andesite float with 5-8% pyrite and approximately 2% pyrrhotite.

KA-522 (Stop 62) Grab sample of slightly altered andesite with traces of pyrite.

KA-523 (Stop 64) Grab sample of moderately iron stained andesite with minor finely disseminated pyrite.

KA-524 (Stop 66) Grab sample of intensely chloritized mafic dyke with moderate iron staining, magnetic, traces of sulphides.

KA-525 (Stop 68) Grab sample of intensely iron stained andesite with 5-8% disseminated pyrite.

KA-526 (Stop 69) Grab sample of intensely iron stained andesite with 8-12% disseminated pyrite.

KA-527	(Stop 69) Grab sample of weathered and oxidized andesite with approximately 5% disseminated pyrite.
KA-528	(Stop 69) Grab sample: same description as sample KA-526.
KA-529	(Stop 70) Grab sample of altered andesite with intense iron and manganese stains on surface with approximately 5% finely disseminated pyrite.
KA-530	(Stop 70) Grab sample: same description as sample KA-529.

APPENDIX V

STATISTICAL RESULTS FOR ROCK

AND HEAVY MINERAL SAMPLES

file: DAIWAN.AB6 version:0+

COMMAND: CORR

*** CORRELATION MATRIX ***

VARIABLES:

1 AU	1.00000						
2 AG	0.36748	1.00000					
3 BA	-0.01378	-0.02375	1.00000				
4 CU	0.47533	0.44774	0.00464	1.00000			
5 PB	0.49595	0.48456	-0.02298	0.36097	1.00000		
6 SB	0.30008	0.26249	-0.05685	0.24610	0.53631	1.00000	
7 ZN	0.51554	0.50636	-0.01464	0.37675	0.98135	0.55195	1.00000
	1 AU	2 AG	3 BA	4 CU	5 PB	6 SB	7 ZN

DATA SET HAS 163 VALID CASES

file: DAIWAN.AB6 version:0+

COMMAND: DESC

*** DESCRIPTIVE STATISTICS ***

THERE ARE 7 VARIABLES AND 163 CASES IN THE DATA SET

163 CASES (100.0%) ARE VALID

VARIABLE	MEAN	STD.DEV.	VARIANCE	STD ERROR OF MEAN	COEFF OF VARIATION
1 AU	7.48466	19.9924	399.696	1.56593	267.111
2 AG	1.12638	0.645385	0.416522	0.0505505	57.2973
3 BA	154.245	276.850	76646.0	21.6846	179.487
4 CU	65.4233	89.7785	8060.18	7.03200	137.227
5 PB	73.1840	383.269	146895	30.0199	523.706
6 SB	2.23313	4.23765	17.9577	0.331918	189.763
7 ZN	102.540	282.160	79614.3	22.1005	275.171

file: DAIWAN.AB6 version:0+

COMMAND: HIST

VARIABLE: 1 AU AUTO/22

```
AT LEAST        1.00000            10        20        30        40        50        60        70        80        90
BUT NOT OVER:  FREQ    %   +---------+---------+---------+---------+---------+---------+---------+---------+---------+
      9.45455   134  82.2  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      17.9091    14   8.6  IXXXXXXXXX
      26.3636     6   3.7  IXXXX
      34.8182     3   1.8  IXX
      43.2727     1   0.6  IX
      51.7273     0  00.0  I
      60.1818     2   1.2  IX
      68.6364     1   0.6  IX
      77.0909     0  00.0  I
      85.5455     0  00.0  I
      94.0000     0  00.0  I
      102.455     0  00.0  I
      110.909     0  00.0  I
      119.364     0  00.0  I
      127.818     0  00.0  I
      136.273     1   0.6  IX
      144.727     0  00.0  I
      153.182     0  00.0  I
      161.636     0  00.0  I
      170.091     0  00.0  I
      178.545     0  00.0  I
      187.000     1   0.6  IX
                           +---------+---------+---------+---------+---------+---------+---------+---------+---------+
        TOTAL   163 100.0            10        20        30        40        50        60        70        80        90
```

file: DAIWAN.AB6 version:0+

COMMAND: HIST

VARIABLE: 2 AG AUTO/22

```
AT LEAST       0.200000                         5                        10                       15                       20
BUT NOT OVER:  FREQ     %   +------------------------+------------------------+------------------------+------------------------+
    0.413636    18   11.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    0.627273    20   12.3   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    0.840909    26   16.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     1.05455    19   11.7   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     1.26818    14    8.6   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     1.48182    23   14.1   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     1.69545    12    7.4   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     1.90909    18   11.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     2.12273     4    2.5   IXXXXXXXXXXXX
     2.33636     5    3.1   IXXXXXXXXXXXXXXX
     2.55000     1    0.6   IXXX
     2.76364     1    0.6   IXXX
     2.97727     1    0.6   IXXX
     3.19091     0   00.0   I
     3.40455     0   00.0   I
     3.61818     0   00.0   I
     3.83182     0   00.0   I
     4.04545     0   00.0   I
     4.25909     0   00.0   I
     4.47273     0   00.0   I
     4.68636     0   00.0   I
     4.90000     1    0.6   IXXX
                            +------------------------+------------------------+------------------------+------------------------+
       TOTAL   163  100.0                           5                        10                       15                       20
```

COMMAND: HIST

VARIABLE: 3 BA   AUTO/22

```
AT LEAST        6.00000              10            20            30            40            50            60            70
BUT NOT OVER:  FREQ     %   +-------------+-------------+-------------+-------------+-------------+-------------+-------------+
     123.818   104   63.8  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     241.636    38   23.3  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     359.455    11    6.7  IXXXXXXXXXX
     477.273     0   00.0  I
     595.091     5    3.1  IXXXX
     712.909     2    1.2  IXX
     830.727     0   00.0  I
     948.545     0   00.0  I
     1066.36     0   00.0  I
     1184.18     0   00.0  I
     1302.00     0   00.0  I
     1419.82     0   00.0  I
     1537.64     2    1.2  IXX
     1655.45     0   00.0  I
     1773.27     0   00.0  I
     1891.09     0   00.0  I
     2008.91     0   00.0  I
     2126.73     0   00.0  I
     2244.55     0   00.0  I
     2362.36     0   00.0  I
     2480.18     0   00.0  I
     2598.00     1    0.6  IX
                            +-------------+-------------+-------------+-------------+-------------+-------------+-------------+
       TOTAL   163  100.0                10            20            30            40            50            60            70
```

```
file: DAIWAN.AB6 version:0+


COMMAND: HIST

VARIABLE:   4 CU          AUTO/22

AT LEAST       1.00000                       10                  20                  30                  40                  50
BUT NOT OVER:  FREQ     %    +-------------------+-------------------+-------------------+-------------------+-------------------+
      30.5455   72   44.2   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      60.0909   36   22.1   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      89.6364   15    9.2   IXXXXXXXXXXXXXXXXXX
      119.182   20   12.3   IXXXXXXXXXXXXXXXXXXXXXXXXX
      148.727    2    1.2   IXX
      178.273    7    4.3   IXXXXXXXXX
      207.818    3    1.8   IXXXX
      237.364    2    1.2   IXX
      266.909    1    0.6   IX
      296.455    0   00.0   I
      326.000    0   00.0   I
      355.545    0   00.0   I
      385.091    2    1.2   IXX
      414.636    0   00.0   I
      444.182    0   00.0   I
      473.727    1    0.6   IX
      503.273    1    0.6   IX
      532.818    0   00.0   I
      562.364    0   00.0   I
      591.909    0   00.0   I
      621.455    0   00.0   I
      651.000    1    0.6   IX
                             +-------------------+-------------------+-------------------+-------------------+-------------------+
        TOTAL  163  100.0                    10                  20                  30                  40                  50
```

```
COMMAND: HIST

VARIABLE:   5 PB        AUTO/22

AT LEAST        2.00000           10        20        30        40        50        60        70        80        90       100
BUT NOT OVER:  FREQ    %   +---------+---------+---------+---------+---------+---------+---------+---------+---------+---------+
      222.273   161   98.8 IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      442.545     0   00.0 I
      662.818     0   00.0 I
      883.091     0   00.0 I
      1103.36     1    0.6 IX
      1323.64     0   00.0 I
      1543.91     0   00.0 I
      1764.18     0   00.0 I
      1984.45     0   00.0 I
      2204.73     0   00.0 I
      2425.00     0   00.0 I
      2645.27     0   00.0 I
      2865.55     0   00.0 I
      3085.82     0   00.0 I
      3306.09     0   00.0 I
      3526.36     0   00.0 I
      3746.64     0   00.0 I
      3966.91     0   00.0 I
      4187.18     0   00.0 I
      4407.45     0   00.0 I
      4627.73     0   00.0 I
      4848.00     1    0.6 IX
                           +---------+---------+---------+---------+---------+---------+---------+---------+---------+---------+
        TOTAL   163  100.0           10        20        30        40        50        60        70        80        90       100
```

file: DAIWAN.AB6 version:0+

```
COMMAND: HIST

VARIABLE:   6 SB         AUTO/22

AT LEAST       1.00000             10        20        30        40        50        60        70        80        90
BUT NOT OVER:  FREQ     %   +---------+---------+---------+---------+---------+---------+---------+---------+---------+
       2.36364  139  85.3  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
       3.72727    7   4.3  IXXXXX
       5.09091    3   1.8  IXX
       6.45455    4   2.5  IXXX
       7.81818    1   0.6  IX
       9.18182    2   1.2  IX
       10.5455    1   0.6  IX
       11.9091    0  00.0  I
       13.2727    1   0.6  IX
       14.6364    0  00.0  I
       16.0000    0  00.0  I
       17.3636    2   1.2  IX
       18.7273    0  00.0  I
       20.0909    0  00.0  I
       21.4545    0  00.0  I
       22.8182    0  00.0  I
       24.1818    1   0.6  IX
       25.5455    0  00.0  I
       26.9091    0  00.0  I
       28.2727    1   0.6  IX
       29.6364    0  00.0  I
       31.0000    1   0.6  IX
                            +---------+---------+---------+---------+---------+---------+---------+---------+---------+
         TOTAL  163 100.0            10        20        30        40        50        60        70        80        90
```

```
COMMAND: HIST

VARIABLE:   7 ZN        AUTO/22

AT LEAST       5.00000          10        20        30        40        50        60        70        80        90       100
BUT NOT OVER:  FREQ     %   +---------+---------+---------+---------+---------+---------+---------+---------+---------+---------+
      170.227   154   94.5  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      335.455     8    4.9  IXXXXX
      500.682     0   00.0  I
      665.909     0   00.0  I
      831.136     0   00.0  I
      996.364     0   00.0  I
      1161.59     0   00.0  I
      1326.82     0   00.0  I
      1492.05     0   00.0  I
      1657.27     0   00.0  I
      1822.50     0   00.0  I
      1987.73     0   00.0  I
      2152.95     0   00.0  I
      2318.18     0   00.0  I
      2483.41     0   00.0  I
      2648.64     0   00.0  I
      2813.86     0   00.0  I
      2979.09     0   00.0  I
      3144.32     0   00.0  I
      3309.55     0   00.0  I
      3474.77     0   00.0  I
      3640.00     1    0.6  IX
                            +---------+---------+---------+---------+---------+---------+---------+---------+---------+---------+
        TOTAL   163  100.0          10        20        30        40        50        60        70        80        90       100
```

file: DAIWAN.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 1 AU

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
1.00000	71	71	43.6	43.6	-0.324357
2.00000	27	98	16.6	60.1	-0.274337
3.00000	14	112	8.6	68.7	-0.224318
4.00000	9	121	5.5	74.2	-0.174299
5.00000	5	126	3.1	77.3	-0.124280
6.00000	1	127	0.6	77.9	-0.0742614
7.00000	1	128	0.6	78.5	-0.0242424
8.00000	4	132	2.5	81.0	0.0257767
9.00000	2	134	1.2	82.2	0.0757957
10.0000	4	138	2.5	84.7	0.125815
11.0000	1	139	0.6	85.3	0.175834
12.0000	3	142	1.8	87.1	0.225853
14.0000	1	143	0.6	87.7	0.325891
15.0000	4	147	2.5	90.2	0.375910
17.0000	1	148	0.6	90.8	0.475948
18.0000	1	149	0.6	91.4	0.525967
19.0000	1	150	0.6	92.0	0.575986
20.0000	3	153	1.8	93.9	0.626005
21.0000	1	154	0.6	94.5	0.676024
31.0000	1	155	0.6	95.1	1.17621
32.0000	1	156	0.6	95.7	1.22623
33.0000	1	157	0.6	96.3	1.27625
40.0000	1	158	0.6	96.9	1.62639
52.0000	1	159	0.6	97.5	2.22661
60.0000	1	160	0.6	98.2	2.62677
63.0000	1	161	0.6	98.8	2.77682
135.000	1	162	0.6	99.4	6.37819
187.000	1	163	0.6	100.0	8.97918
TOTAL	163	163	100.0	100.0	

file: DAIWAN.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 2 AG

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
0.200000	8	8	4.9	4.9	-1.43539
0.300000	3	11	1.8	6.7	-1.28045
0.400000	7	18	4.3	11.0	-1.12550
0.500000	15	33	9.2	20.2	-0.970553
0.600000	5	38	3.1	23.3	-0.815607
0.700000	18	56	11.0	34.4	-0.660660
0.800000	8	64	4.9	39.3	-0.505714
0.900000	8	72	4.9	44.2	-0.350768
1.00000	11	83	6.7	50.9	-0.195822
1.10000	9	92	5.5	56.4	-0.0408754
1.20000	5	97	3.1	59.5	0.114071
1.30000	10	107	6.1	65.6	0.269017
1.40000	13	120	8.0	73.6	0.423963
1.50000	3	123	1.8	75.5	0.578910
1.60000	9	132	5.5	81.0	0.733856
1.70000	6	138	3.7	84.7	0.888802
1.80000	6	144	3.7	88.3	1.04375
1.90000	6	150	3.7	92.0	1.19869
2.00000	3	153	1.8	93.9	1.35364
2.10000	1	154	0.6	94.5	1.50859
2.20000	2	156	1.2	95.7	1.66353
2.30000	3	159	1.8	97.5	1.81848
2.40000	1	160	0.6	98.2	1.97343
2.60000	1	161	0.6	98.8	2.28332
2.90000	1	162	0.6	99.4	2.74816
4.90000	1	163	0.6	100.0	5.84708
TOTAL	163	163	100.0	100.0	

file: DAIWAN.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 3 BA

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
6.00000	2	2	1.2	1.2	-0.535472
10.0000	1	3	0.6	1.8	-0.521023
11.0000	1	4	0.6	2.5	-0.517411
12.0000	2	6	1.2	3.7	-0.513799
14.0000	1	7	0.6	4.3	-0.506575
15.0000	2	9	1.2	5.5	-0.502963
17.0000	3	12	1.8	7.4	-0.495739
18.0000	1	13	0.6	8.0	-0.492127
20.0000	3	16	1.8	9.8	-0.484903
21.0000	3	19	1.8	11.7	-0.481291
22.0000	4	23	2.5	14.1	-0.477679
23.0000	2	25	1.2	15.3	-0.474066
24.0000	1	26	0.6	16.0	-0.470454
26.0000	2	28	1.2	17.2	-0.463230
27.0000	2	30	1.2	18.4	-0.459618
28.0000	1	31	0.6	19.0	-0.456006
29.0000	1	32	0.6	19.6	-0.452394
30.0000	1	33	0.6	20.2	-0.448782
31.0000	2	35	1.2	21.5	-0.445170
32.0000	1	36	0.6	22.1	-0.441558
33.0000	1	37	0.6	22.7	-0.437946
34.0000	2	39	1.2	23.9	-0.434334
35.0000	2	41	1.2	25.2	-0.430722
36.0000	2	43	1.2	26.4	-0.427110
37.0000	1	44	0.6	27.0	-0.423498
38.0000	2	46	1.2	28.2	-0.419886
39.0000	1	47	0.6	28.8	-0.416273
43.0000	1	48	0.6	29.4	-0.401825
46.0000	1	49	0.6	30.1	-0.390989
48.0000	1	50	0.6	30.7	-0.383765
50.0000	2	52	1.2	31.9	-0.376541
51.0000	1	53	0.6	32.5	-0.372929
52.0000	2	55	1.2	33.7	-0.369317
53.0000	2	57	1.2	35.0	-0.365705
55.0000	3	60	1.8	36.8	-0.358480
56.0000	1	61	0.6	37.4	-0.354868
58.0000	2	63	1.2	38.7	-0.347644
60.0000	4	67	2.5	41.1	-0.340420
65.0000	1	68	0.6	41.7	-0.322360
66.0000	1	69	0.6	42.3	-0.318748
68.0000	2	71	1.2	43.6	-0.311524
70.0000	1	72	0.6	44.2	-0.304300
72.0000	1	73	0.6	44.8	-0.297075
73.0000	1	74	0.6	45.4	-0.293463
74.0000	2	76	1.2	46.6	-0.289851
75.0000	1	77	0.6	47.2	-0.286239
78.0000	1	78	0.6	47.9	-0.275403
80.0000	1	79	0.6	48.5	-0.268179
85.0000	3	82	1.8	50.3	-0.250119

file: DAIWAN.AB6 version:0+

VARIABLE: 3 BA

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
86.0000	1	83	0.6	50.9	-0.246507
90.0000	2	85	1.2	52.1	-0.232058
92.0000	3	88	1.8	54.0	-0.224834
94.0000	1	89	0.6	54.6	-0.217610
95.0000	1	90	0.6	55.2	-0.213998
96.0000	1	91	0.6	55.8	-0.210386
98.0000	1	92	0.6	56.4	-0.203162
99.0000	1	93	0.6	57.1	-0.199550
102.000	2	95	1.2	58.3	-0.188714
105.000	2	97	1.2	59.5	-0.177877
108.000	1	98	0.6	60.1	-0.167041
114.000	1	99	0.6	60.7	-0.145369
116.000	1	100	0.6	61.3	-0.138145
119.000	2	102	1.2	62.6	-0.127309
120.000	1	103	0.6	63.2	-0.123696
123.000	1	104	0.6	63.8	-0.112860
125.000	1	105	0.6	64.4	-0.105636
128.000	1	106	0.6	65.0	-0.0948000
134.000	1	107	0.6	65.6	-0.0731276
141.000	1	108	0.6	66.3	-0.0478432
142.000	2	110	1.2	67.5	-0.0442311
143.000	2	112	1.2	68.7	-0.0406191
146.000	1	113	0.6	69.3	-0.0297829
149.000	1	114	0.6	69.9	-0.0189467
150.000	2	116	1.2	71.2	-0.0153346
151.000	1	117	0.6	71.8	-0.0117226
153.000	1	118	0.6	72.4	-0.00449846
158.000	1	119	0.6	73.0	0.0135619
159.000	1	120	0.6	73.6	0.0171739
162.000	1	121	0.6	74.2	0.0280101
167.000	1	122	0.6	74.8	0.0460704
170.000	1	123	0.6	75.5	0.0569066
171.000	1	124	0.6	76.1	0.0605187
181.000	1	125	0.6	76.7	0.0966393
183.000	2	127	1.2	77.9	0.103863
184.000	1	128	0.6	78.5	0.107475
186.000	1	129	0.6	79.1	0.114700
187.000	1	130	0.6	79.8	0.118312
199.000	1	131	0.6	80.4	0.161656
200.000	1	132	0.6	81.0	0.165268
204.000	1	133	0.6	81.6	0.179717
205.000	2	135	1.2	82.8	0.183329
215.000	2	137	1.2	84.0	0.219449
216.000	1	138	0.6	84.7	0.223061
220.000	1	139	0.6	85.3	0.237510
232.000	2	141	1.2	86.5	0.280854
238.000	1	142	0.6	87.1	0.302527
245.000	1	143	0.6	87.7	0.327811
252.000	1	144	0.6	88.3	0.353096
262.000	1	145	0.6	89.0	0.389216
271.000	1	146	0.6	89.6	0.421725
278.000	1	147	0.6	90.2	0.447009
282.000	1	148	0.6	90.8	0.461457
289.000	1	149	0.6	91.4	0.486742
316.000	1	150	0.6	92.0	0.584268

file: DAIWAN.AB6 version:0←

VARIABLE: 3 BA

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
321.000	1	151	0.6	92.6	0.602328
341.000	1	152	0.6	93.3	0.674569
345.000	1	153	0.6	93.9	0.689017
488.000	1	154	0.6	94.5	1.20554
525.000	1	155	0.6	95.1	1.33919
529.000	1	156	0.6	95.7	1.35364
587.000	1	157	0.6	96.3	1.56314
591.000	1	158	0.6	96.9	1.57758
665.000	1	159	0.6	97.5	1.84488
670.000	1	160	0.6	98.2	1.86294
1499.00	1	161	0.6	98.8	4.85734
1536.00	1	162	0.6	99.4	4.99098
2598.00	1	163	0.6	100.0	8.82699
TOTAL	163	163	100.0	100.0	

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 4 CU

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
1.00000	1	1	0.6	0.6	-0.717580
3.00000	2	3	1.2	1.8	-0.695303
4.00000	6	9	3.7	5.5	-0.684165
5.00000	3	12	1.8	7.4	-0.673026
6.00000	5	17	3.1	10.4	-0.661888
7.00000	6	23	3.7	14.1	-0.650749
8.00000	8	31	4.9	19.0	-0.639611
9.00000	3	34	1.8	20.9	-0.628472
11.0000	4	38	2.5	23.3	-0.606195
12.0000	2	40	1.2	24.5	-0.595057
13.0000	3	43	1.8	26.4	-0.583918
15.0000	2	45	1.2	27.6	-0.561641
16.0000	3	48	1.8	29.4	-0.550503
19.0000	4	52	2.5	31.9	-0.517087
20.0000	3	55	1.8	33.7	-0.505949
21.0000	1	56	0.6	34.4	-0.494810
22.0000	3	59	1.8	36.2	-0.483671
23.0000	1	60	0.6	36.8	-0.472533
24.0000	1	61	0.6	37.4	-0.461394
25.0000	3	64	1.8	39.3	-0.450256
26.0000	1	65	0.6	39.9	-0.439117
27.0000	3	68	1.8	41.7	-0.427979
28.0000	2	70	1.2	42.9	-0.416840
29.0000	2	72	1.2	44.2	-0.405702
31.0000	3	75	1.8	46.0	-0.383425
32.0000	1	76	0.6	46.6	-0.372286
34.0000	1	77	0.6	47.2	-0.350009
35.0000	2	79	1.2	48.5	-0.338871
36.0000	1	80	0.6	49.1	-0.327732
37.0000	1	81	0.6	49.7	-0.316594
39.0000	2	83	1.2	50.9	-0.294317
40.0000	2	85	1.2	52.1	-0.283178
42.0000	1	86	0.6	52.8	-0.260901
43.0000	2	88	1.2	54.0	-0.249763
44.0000	3	91	1.8	55.8	-0.238624
45.0000	1	92	0.6	56.4	-0.227485
46.0000	3	95	1.8	58.3	-0.216347
48.0000	4	99	2.5	60.7	-0.194070
49.0000	1	100	0.6	61.3	-0.182931
50.0000	1	101	0.6	62.0	-0.171793
51.0000	2	103	1.2	63.2	-0.160654
52.0000	2	105	1.2	64.4	-0.149516
54.0000	1	106	0.6	65.0	-0.127239
59.0000	1	107	0.6	65.6	-0.0715462
60.0000	1	108	0.6	66.3	-0.0604077
61.0000	1	109	0.6	66.9	-0.0492692
62.0000	1	110	0.6	67.5	-0.0381306
68.0000	1	111	0.6	68.1	0.0287005
70.0000	1	112	0.6	68.7	0.0509775

file: DAIWAN.AB6 version:0+

VARIABLE: 4 CU

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
72.0000	2	114	1.2	69.9	0.0732546
73.0000	1	115	0.6	70.6	0.0843931
74.0000	1	116	0.6	71.2	0.0955316
76.0000	1	117	0.6	71.8	0.117809
77.0000	1	118	0.6	72.4	0.128947
83.0000	1	119	0.6	73.0	0.195778
84.0000	1	120	0.6	73.6	0.206917
86.0000	2	122	1.2	74.8	0.229194
88.0000	1	123	0.6	75.5	0.251471
90.0000	1	124	0.6	76.1	0.273748
91.0000	1	125	0.6	76.7	0.284886
92.0000	3	128	1.8	78.5	0.296025
93.0000	1	129	0.6	79.1	0.307164
94.0000	1	130	0.6	79.8	0.318302
96.0000	2	132	1.2	81.0	0.340579
97.0000	1	133	0.6	81.6	0.351718
101.000	1	134	0.6	82.2	0.396272
103.000	2	136	1.2	83.4	0.418549
104.000	1	137	0.6	84.0	0.429687
105.000	1	138	0.6	84.7	0.440826
107.000	1	139	0.6	85.3	0.463103
108.000	1	140	0.6	85.9	0.474241
109.000	1	141	0.6	86.5	0.485380
111.000	1	142	0.6	87.1	0.507657
116.000	1	143	0.6	87.7	0.563349
122.000	1	144	0.6	88.3	0.630181
125.000	1	145	0.6	89.0	0.663596
153.000	1	146	0.6	89.6	0.975475
155.000	1	147	0.6	90.2	0.997752
163.000	1	148	0.6	90.8	1.08686
170.000	1	149	0.6	91.4	1.16483
171.000	1	150	0.6	92.0	1.17597
172.000	1	151	0.6	92.6	1.18711
177.000	1	152	0.6	93.3	1.24280
179.000	1	153	0.6	93.9	1.26508
191.000	1	154	0.6	94.5	1.39874
195.000	1	155	0.6	95.1	1.44329
232.000	1	156	0.6	95.7	1.85542
235.000	1	157	0.6	96.3	1.88883
240.000	1	158	0.6	96.9	1.94453
357.000	1	159	0.6	97.5	3.24773
373.000	1	160	0.6	98.2	3.42595
454.000	1	161	0.6	98.8	4.32817
484.000	1	162	0.6	99.4	4.66233
651.000	1	163	0.6	100.0	6.52246
TOTAL	163	163	100.0	100.0	

file: DAIWAN.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 5 P8

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
2.00000	2	2	1.2	1.2	-0.185729
3.00000	1	3	0.6	1.8	-0.183120
4.00000	2	5	1.2	3.1	-0.180510
5.00000	1	6	0.6	3.7	-0.177901
6.00000	4	10	2.5	6.1	-0.175292
8.00000	1	11	0.6	6.7	-0.170074
9.00000	3	14	1.8	8.6	-0.167465
10.0000	2	16	1.2	9.8	-0.164856
12.0000	3	19	1.8	11.7	-0.159637
13.0000	3	22	1.8	13.5	-0.157028
14.0000	2	24	1.2	14.7	-0.154419
15.0000	2	26	1.2	16.0	-0.151810
16.0000	4	30	2.5	18.4	-0.149201
17.0000	1	31	0.6	19.0	-0.146592
18.0000	1	32	0.6	19.6	-0.143983
20.0000	3	35	1.8	21.5	-0.138764
21.0000	4	39	2.5	23.9	-0.136155
22.0000	1	40	0.6	24.5	-0.133546
23.0000	3	43	1.8	26.4	-0.130937
24.0000	3	46	1.8	28.2	-0.128328
25.0000	5	51	3.1	31.3	-0.125719
26.0000	4	55	2.5	33.7	-0.123109
27.0000	1	56	0.6	34.4	-0.120500
28.0000	3	59	1.8	36.2	-0.117891
29.0000	8	67	4.9	41.1	-0.115282
30.0000	3	70	1.8	42.9	-0.112673
31.0000	5	75	3.1	46.0	-0.110064
32.0000	1	76	0.6	46.6	-0.107455
33.0000	1	77	0.6	47.2	-0.104846
34.0000	2	79	1.2	48.5	-0.102236
35.0000	4	83	2.5	50.9	-0.0996273
36.0000	3	86	1.8	52.8	-0.0970182
37.0000	4	90	2.5	55.2	-0.0944090
38.0000	1	91	0.6	55.8	-0.0917999
39.0000	1	92	0.6	56.4	-0.0891908
40.0000	7	99	4.3	60.7	-0.0865816
41.0000	2	101	1.2	62.0	-0.0839725
42.0000	2	103	1.2	63.2	-0.0813634
43.0000	2	105	1.2	64.4	-0.0787542
45.0000	6	111	3.7	68.1	-0.0735360
46.0000	2	113	1.2	69.3	-0.0709268
47.0000	1	114	0.6	69.9	-0.0683177
48.0000	4	118	2.5	72.4	-0.0657086
49.0000	3	121	1.8	74.2	-0.0630994
50.0000	5	126	3.1	77.3	-0.0604903
51.0000	1	127	0.6	77.9	-0.0578812
53.0000	1	128	0.6	78.5	-0.0526629
54.0000	2	130	1.2	79.8	-0.0500537
55.0000	3	133	1.8	81.6	-0.0474446

file: DAIWAN.AB6 version:0+

VARIABLE: 5 PB

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
56.0000	3	136	1.8	83.4	-0.0448355
57.0000	3	139	1.8	85.3	-0.0422263
58.0000	2	141	1.2	86.5	-0.0396172
60.0000	2	143	1.2	87.7	-0.0343989
61.0000	1	144	0.6	88.3	-0.0317898
63.0000	2	146	1.2	89.6	-0.0265715
64.0000	1	147	0.6	90.2	-0.0239624
67.0000	1	148	0.6	90.8	-0.0161350
68.0000	1	149	0.6	91.4	-0.0135259
70.0000	1	150	0.6	92.0	-0.00830761
74.0000	1	151	0.6	92.6	0.00212893
77.0000	1	152	0.6	93.3	0.00995633
79.0000	1	153	0.6	93.9	0.0151746
81.0000	2	155	1.2	95.1	0.0203929
83.0000	1	156	0.6	95.7	0.0256111
111.000	1	157	0.6	96.3	0.0986669
129.000	1	158	0.6	96.9	0.145631
145.000	2	160	1.2	98.2	0.187377
171.000	1	161	0.6	98.8	0.255215
906.000	1	162	0.6	99.4	2.17293
4848.00	1	163	0.6	100.0	12.4581
TOTAL	163	163	100.0	100.0	

file: DAIWAN.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 6 SB

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
1.00000	134	134	82.2	82.2	-0.290994
2.00000	5	139	3.1	85.3	-0.0550137
3.00000	7	146	4.3	89.6	0.180966
4.00000	2	148	1.2	90.8	0.416946
5.00000	1	149	0.6	91.4	0.652926
6.00000	4	153	2.5	93.9	0.888906
7.00000	1	154	0.6	94.5	1.12489
8.00000	1	155	0.6	95.1	1.36087
9.00000	1	156	0.6	95.7	1.59685
10.0000	1	157	0.6	96.3	1.83283
12.0000	1	158	0.6	96.9	2.30479
16.0000	1	159	0.6	97.5	3.24871
17.0000	1	160	0.6	98.2	3.48469
24.0000	1	161	0.6	98.8	5.13655
28.0000	1	162	0.6	99.4	6.08047
31.0000	1	163	0.6	100.0	6.78840
TOTAL	163	163	100.0	100.0	

file: DAIWAN.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 7 ZN

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
5.00000	1	1	0.6	0.6	-0.345690
9.00000	1	2	0.6	1.2	-0.331514
11.0000	1	3	0.6	1.8	-0.324425
12.0000	1	4	0.6	2.5	-0.320881
13.0000	1	5	0.6	3.1	-0.317337
16.0000	1	6	0.6	3.7	-0.306705
21.0000	1	7	0.6	4.3	-0.288984
23.0000	1	8	0.6	4.9	-0.281896
24.0000	1	9	0.6	5.5	-0.278352
27.0000	1	10	0.6	6.1	-0.267720
29.0000	2	12	1.2	7.4	-0.260632
31.0000	1	13	0.6	8.0	-0.253544
32.0000	1	14	0.6	8.6	-0.250000
33.0000	1	15	0.6	9.2	-0.246455
35.0000	4	19	2.5	11.7	-0.239367
36.0000	3	22	1.8	13.5	-0.235823
38.0000	3	25	1.8	15.3	-0.228735
39.0000	1	26	0.6	16.0	-0.225191
40.0000	1	27	0.6	16.6	-0.221647
42.0000	3	30	1.8	18.4	-0.214559
43.0000	2	32	1.2	19.6	-0.211015
45.0000	1	33	0.6	20.2	-0.203926
46.0000	1	34	0.6	20.9	-0.200382
47.0000	3	37	1.8	22.7	-0.196838
48.0000	4	41	2.5	25.2	-0.193294
49.0000	1	42	0.6	25.8	-0.189750
50.0000	1	43	0.6	26.4	-0.186206
51.0000	1	44	0.6	27.0	-0.182662
52.0000	3	47	1.8	28.8	-0.179118
54.0000	1	48	0.6	29.4	-0.172030
56.0000	1	49	0.6	30.1	-0.164941
57.0000	1	50	0.6	30.7	-0.161397
58.0000	4	54	2.5	33.1	-0.157853
59.0000	1	55	0.6	33.7	-0.154309
60.0000	1	56	0.6	34.4	-0.150765
61.0000	3	59	1.8	36.2	-0.147221
62.0000	3	62	1.8	38.0	-0.143677
64.0000	3	65	1.8	39.9	-0.136589
65.0000	3	68	1.8	41.7	-0.133045
66.0000	3	71	1.8	43.6	-0.129501
70.0000	1	72	0.6	44.2	-0.115324
72.0000	1	73	0.6	44.8	-0.108236
73.0000	1	74	0.6	45.4	-0.104692
76.0000	3	77	1.8	47.2	-0.0940597
77.0000	4	81	2.5	49.7	-0.0905156
78.0000	2	83	1.2	50.9	-0.0869715
79.0000	1	84	0.6	51.5	-0.0834274
80.0000	3	87	1.8	53.4	-0.0798833
81.0000	3	90	1.8	55.2	-0.0763392

VARIABLE: 7 ZN

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
82.0000	2	92	1.2	56.4	-0.0727951
83.0000	2	94	1.2	57.7	-0.0692510
85.0000	2	96	1.2	58.9	-0.0621629
86.0000	3	99	1.8	60.7	-0.0586188
87.0000	3	102	1.8	62.6	-0.0550747
88.0000	1	103	0.6	63.2	-0.0515306
89.0000	2	105	1.2	64.4	-0.0479865
90.0000	3	108	1.8	66.3	-0.0444424
91.0000	2	110	1.2	67.5	-0.0408983
92.0000	2	112	1.2	68.7	-0.0373543
93.0000	2	114	1.2	69.9	-0.0338102
95.0000	1	115	0.6	70.6	-0.0267220
97.0000	4	119	2.5	73.0	-0.0196338
100.000	1	120	0.6	73.6	-0.00900155
101.000	2	122	1.2	74.8	-0.00545746
103.000	2	124	1.2	76.1	0.00163072
104.000	1	125	0.6	76.7	0.00517480
107.000	3	128	1.8	78.5	0.0158071
108.000	1	129	0.6	79.1	0.0193512
109.000	1	130	0.6	79.8	0.0228952
110.000	1	131	0.6	80.4	0.0264393
111.000	1	132	0.6	81.0	0.0299834
113.000	1	133	0.6	81.6	0.0370716
115.000	1	134	0.6	82.2	0.0441598
116.000	1	135	0.6	82.8	0.0477039
118.000	1	136	0.6	83.4	0.0547920
119.000	1	137	0.6	84.0	0.0583361
120.000	1	138	0.6	84.7	0.0618802
121.000	2	140	1.2	85.9	0.0654243
122.000	1	141	0.6	86.5	0.0689684
123.000	1	142	0.6	87.1	0.0725125
124.000	1	143	0.6	87.7	0.0760566
126.000	1	144	0.6	88.3	0.0831447
127.000	3	147	1.8	90.2	0.0866888
128.000	1	148	0.6	90.8	0.0902329
131.000	1	149	0.6	91.4	0.100865
143.000	1	150	0.6	92.0	0.143394
156.000	1	151	0.6	92.6	0.189467
157.000	1	152	0.6	93.3	0.193011
159.000	1	153	0.6	93.9	0.200100
162.000	1	154	0.6	94.5	0.210732
172.000	1	155	0.6	95.1	0.246173
178.000	1	156	0.6	95.7	0.267437
180.000	1	157	0.6	96.3	0.274525
182.000	1	158	0.6	96.9	0.281614
184.000	1	159	0.6	97.5	0.288702
219.000	1	160	0.6	98.2	0.412745
228.000	1	161	0.6	98.8	0.444642
276.000	1	162	0.6	99.4	0.614758
3640.00	1	163	0.6	100.0	12.5371
TOTAL	163	163	100.0	100.0	

file: DAIWANHM.AB6 version:0+

COMMAND: CORR

*** CORRELATION MATRIX ***

VARIABLES:

1 AU	1.00000						
2 AG	-0.06437	1.00000					
3 BA	-0.06947	0.50143	1.00000				
4 CU	-0.00507	0.26522	0.27020	1.00000			
5 PB	-0.07276	0.93442	0.56876	0.39480	1.00000		
6 SB	-0.10924	0.80536	0.51547	0.27956	0.86595	1.00000	
7 ZN	-0.04552	0.43520	0.60676	0.79707	0.64029	0.53849	1.00000
	1 AU	2 AG	3 BA	4 CU	5 PB	6 SB	7 ZN

DATA SET HAS 30 VALID CASES

file: DAIWANHM.AB6 version:0+

COMMAND: DESC

*** DESCRIPTIVE STATISTICS ***

THERE ARE 7 VARIABLES AND 30 CASES IN THE DATA SET

30 CASES (100.0%) ARE VALID

VARIABLE	MEAN	STD.DEV.	VARIANCE	STD ERROR OF MEAN	COEFF OF VARIATION
1 AU	299.467	1171.21	1371739	213.833	391.099
2 AG	3.23333	5.56562	30.9761	1.01614	172.132
3 BA	180.033	184.299	33966.2	33.6493	102.369
4 CU	228.333	169.653	28782.2	30.9743	74.3006
5 PB	157.900	283.801	80543.2	51.8148	179.735
6 SB	7.90000	11.1180	123.610	2.02986	140.734
7 ZN	241.733	215.563	46467.2	39.3562	89.1737

```
COMMAND: HIST

VARIABLE:   1 AU          AUTO/15

AT LEAST        3.00000              10         20         30         40         50         60         70         80         90
BUT NOT OVER:  FREQ      %   +----------+----------+----------+----------+----------+----------+----------+----------+----------+
      429.467    27   90.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      855.933     1    3.3   IXXXX
      1282.40     1    3.3   IXXXX
      1708.87     0   00.0   I
      2135.33     0   00.0   I
      2561.80     0   00.0   I
      2988.27     0   00.0   I
      3414.73     0   00.0   I
      3841.20     0   00.0   I
      4267.67     0   00.0   I
      4694.13     0   00.0   I
      5120.60     0   00.0   I
      5547.07     0   00.0   I
      5973.53     0   00.0   I
      6400.00     1    3.3   IXXXX
                             +----------+----------+----------+----------+----------+----------+----------+----------+----------+
        TOTAL    30  100.0              10         20         30         40         50         60         70         80         90
```

file: DAIWANHM.AB6 version:0+

COMMAND: HIST

VARIABLE: 2 AG   AUTO/15

```
AT LEAST       1.10000              10         20         30         40         50         60         70         80         90
BUT NOT OVER:  FREQ     %   +----------+----------+----------+----------+----------+----------+----------+----------+----------+
      3.16000   27   90.0  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      5.22000    1    3.3  IXXXX
      7.28000    0   00.0  I
      9.34000    1    3.3  IXXXX
      11.4000    0   00.0  I
      13.4600    0   00.0  I
      15.5200    0   00.0  I
      17.5800    0   00.0  I
      19.6400    0   00.0  I
      21.7000    0   00.0  I
      23.7600    0   00.0  I
      25.8200    0   00.0  I
      27.8800    0   00.0  I
      29.9400    0   00.0  I
      32.0000    1    3.3  IXXXX
                            +----------+----------+----------+----------+----------+----------+----------+----------+----------+
        TOTAL     30  100.0             10         20         30         40         50         60         70         80         90
```

```
file: DAIWANHM.AB6 version:0+



COMMAND: HIST

VARIABLE:   3 BA         AUTO/15

AT LEAST       8.00000                  5                10                15                20                25                30
BUT NOT OVER:  FREQ     %   +----------------+----------------+-----------------+----------------+----------------+-----------------+
     52.4000     8   26.7   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     96.8000     4   13.3   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     141.200     3   10.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     185.600     6   20.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     230.000     2    6.7   IXXXXXXXXXXXXXXXXXXXXXX
     274.400     0   00.0   I
     318.800     2    6.7   IXXXXXXXXXXXXXXXXXXXXXX
     363.200     0   00.0   I
     407.600     1    3.3   IXXXXXXXXXXX
     452.000     1    3.3   IXXXXXXXXXXX
     496.400     0   00.0   I
     540.800     1    3.3   IXXXXXXXXXXX
     585.200     0   00.0   I
     629.600     0   00.0   I
     674.000     2    6.7   IXXXXXXXXXXXXXXXXXXXXXX
                            +----------------+----------------+-----------------+----------------+----------------+-----------------+
      TOTAL     30  100.0                    5                10                15                20                25                30
```

file: DAIWANHM.AB6 version:0+

COMMAND: HIST

VARIABLE: 4 CU AUTO/15

```
AT LEAST       34.0000                           5                        10                       15                       20
BUT NOT OVER:  FREQ    %    +------------------------+------------------------+------------------------+------------------------+
      81.2667    4   13.3   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      128.533    5   16.7   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      175.800    5   16.7   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      223.067    6   20.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      270.333    2    6.7   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      317.600    1    3.3   IXXXXXXXXXXXXXXXXX
      364.867    1    3.3   IXXXXXXXXXXXXXXXXX
      412.133    3   10.0   IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      459.400    1    3.3   IXXXXXXXXXXXXXXXXX
      506.667    0   00.0   I
      553.933    0   00.0   I
      601.200    0   00.0   I
      648.467    0   00.0   I
      695.733    1    3.3   IXXXXXXXXXXXXXXXXX
      743.000    1    3.3   IXXXXXXXXXXXXXXXXX
                            +------------------------+------------------------+------------------------+------------------------+
        TOTAL   30  100.0                            5                        10                       15                       20
```

file: DAIWANHM.AB6 version:0+

COMMAND: HIST

VARIABLE: 5 PB   AUTO/15

```
AT LEAST       28.0000              10             20             30             40             50             60             70
BUT NOT OVER:  FREQ     %    +-------------+--------------+--------------+--------------+--------------+--------------+-------------
      129.133   20   66.7  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      230.267    7   23.3  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
      331.400    1    3.3  IXXXXX
      432.533    0   00.0  I
      533.667    0   00.0  I
      634.800    1    3.3  IXXXXX
      735.933    0   00.0  I
      837.067    0   00.0  I
      938.200    0   00.0  I
      1039.33    0   00.0  I
      1140.47    0   00.0  I
      1241.60    0   00.0  I
      1342.73    0   00.0  I
      1443.87    0   00.0  I
      1545.00    1    3.3  IXXXXX
                             +-------------+--------------+--------------+--------------+--------------+--------------+-------------
        TOTAL      30  100.0            10             20             30             40             50             60             70
```

file: DAIWANHM.AB6 version:0+

COMMAND: HIST

VARIABLE: 6 SB AUTO/15

```
AT LEAST        1.00000                10          20           30           40          50           60
BUT NOT OVER:  FREQ    %   +----------------+-----------+------------+------------+-----------+------------+
     4.53333    18   60.0  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     8.06667     1    3.3  IXXXXXX
     11.6000     2    6.7  IXXXXXXXXXXX
     15.1333     5   16.7  IXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     18.6667     1    3.3  IXXXXXX
     22.2000     1    3.3  IXXXXXX
     25.7333     1    3.3  IXXXXXX
     29.2667     0   00.0  I
     32.8000     0   00.0  I
     36.3333     0   00.0  I
     39.8667     0   00.0  I
     43.4000     0   00.0  I
     46.9333     0   00.0  I
     50.4667     0   00.0  I
     54.0000     1    3.3  IXXXXXX
                           +----------------+-----------+------------+------------+-----------+------------+
       TOTAL    30  100.0                  10          20           30           40          50           60
```

file: DAIWANHM.AB6 version:0+

COMMAND: HIST

VARIABLE: 7 ZN AUTO/15

```
AT LEAST       64.0000              5           10           15           20           25           30           35           40
BUT NOT OVER:  FREQ     %   +------------+-----------+------------+-----------+------------+-----------+------------+-----------+
    115.733     11   36.7  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    167.467      5   16.7  IXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    219.200      2    6.7  IXXXXXXXXXXXXXXXXX
    270.933      3   10.0  IXXXXXXXXXXXXXXXXXXXXXXXXX
    322.667      2    6.7  IXXXXXXXXXXXXXXXXX
    374.400      0   00.0  I
    426.133      2    6.7  IXXXXXXXXXXXXXXXXX
    477.867      1    3.3  IXXXXXXXX
    529.600      1    3.3  IXXXXXXXX
    581.333      0   00.0  I
    633.067      0   00.0  I
    684.800      1    3.3  IXXXXXXXX
    736.533      0   00.0  I
    788.267      0   00.0  I
    840.000      2    6.7  IXXXXXXXXXXXXXXXXX
                            +------------+-----------+------------+-----------+------------+-----------+------------+-----------+
      TOTAL     30  100.0               5           10           15           20           25           30           35           40
```

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 1 AU

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
3.00000	3	3	10.0	10.0	-0.253128
5.00000	1	4	3.3	13.3	-0.251420
7.00000	1	5	3.3	16.7	-0.249713
8.00000	1	6	3.3	20.0	-0.248859
11.0000	1	7	3.3	23.3	-0.246297
12.0000	1	8	3.3	26.7	-0.245444
13.0000	1	9	3.3	30.0	-0.244590
15.0000	1	10	3.3	33.3	-0.242882
16.0000	1	11	3.3	36.7	-0.242028
17.0000	1	12	3.3	40.0	-0.241175
24.0000	2	14	6.7	46.7	-0.235198
28.0000	1	15	3.3	50.0	-0.231783
30.0000	1	16	3.3	53.3	-0.230075
35.0000	1	17	3.3	56.7	-0.225806
37.0000	1	18	3.3	60.0	-0.224098
38.0000	1	19	3.3	63.3	-0.223244
39.0000	1	20	3.3	66.7	-0.222391
42.0000	1	21	3.3	70.0	-0.219829
63.0000	1	22	3.3	73.3	-0.201899
70.0000	1	23	3.3	76.7	-0.195922
72.0000	1	24	3.3	80.0	-0.194215
92.0000	1	25	3.3	83.3	-0.177138
93.0000	1	26	3.3	86.7	-0.176285
94.0000	1	27	3.3	90.0	-0.175431
720.000	1	28	3.3	93.3	0.359058
970.000	1	29	3.3	96.7	0.572512
6400.00	1	30	3.3	100.0	5.20873
TOTAL	30	30	100.0	100.0	

file: DAIWANHM.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 2 AG

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
1.10000	1	1	3.3	3.3	-0.383306
1.20000	1	2	3.3	6.7	-0.365338
1.40000	3	5	10.0	16.7	-0.329403
1.50000	1	6	3.3	20.0	-0.311436
1.60000	4	10	13.3	33.3	-0.293469
1.70000	1	11	3.3	36.7	-0.275501
1.80000	1	12	3.3	40.0	-0.257534
1.90000	1	13	3.3	43.3	-0.239566
2.00000	2	15	6.7	50.0	-0.221599
2.10000	3	18	10.0	60.0	-0.203631
2.30000	1	19	3.3	63.3	-0.167696
2.50000	3	22	10.0	73.3	-0.131761
2.60000	1	23	3.3	76.7	-0.113794
2.80000	2	25	6.7	83.3	-0.0778590
2.90000	2	27	6.7	90.0	-0.0598915
3.20000	1	28	3.3	93.3	-0.00598915
7.90000	1	29	3.3	96.7	0.838481
32.0000	1	30	3.3	100.0	5.16864
TOTAL	30	30	100.0	100.0	

file: DAIWANHM.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 3 BA

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
8.00000	1	1	3.3	3.3	-0.933446
14.0000	1	2	3.3	6.7	-0.900890
19.0000	1	3	3.3	10.0	-0.873761
20.0000	1	4	3.3	13.3	-0.868335
22.0000	1	5	3.3	16.7	-0.857483
28.0000	1	6	3.3	20.0	-0.824927
35.0000	1	7	3.3	23.3	-0.786945
51.0000	1	8	3.3	26.7	-0.700130
55.0000	1	9	3.3	30.0	-0.678426
57.0000	1	10	3.3	33.3	-0.667574
61.0000	1	11	3.3	36.7	-0.645870
79.0000	1	12	3.3	40.0	-0.548203
103.000	1	13	3.3	43.3	-0.417980
105.000	1	14	3.3	46.7	-0.407128
111.000	1	15	3.3	50.0	-0.374572
144.000	1	16	3.3	53.3	-0.195515
154.000	1	17	3.3	56.7	-0.141256
159.000	1	18	3.3	60.0	-0.114126
165.000	2	20	6.7	66.7	-0.0815703
177.000	1	21	3.3	70.0	-0.0164587
207.000	1	22	3.3	73.3	0.146320
209.000	1	23	3.3	76.7	0.157172
299.000	1	24	3.3	80.0	0.645509
303.000	1	25	3.3	83.3	0.667212
382.000	1	26	3.3	86.7	1.09586
414.000	1	27	3.3	90.0	1.26949
524.000	1	28	3.3	93.3	1.86635
657.000	1	29	3.3	96.7	2.58800
674.000	1	30	3.3	100.0	2.68024
TOTAL	30	30	100.0	100.0	

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 4 CU

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
34.0000	1	1	3.3	3.3	-1.14547
48.0000	1	2	3.3	6.7	-1.06295
57.0000	1	3	3.3	10.0	-1.00990
80.0000	1	4	3.3	13.3	-0.874333
86.0000	1	5	3.3	16.7	-0.838967
95.0000	1	6	3.3	20.0	-0.785918
103.000	1	7	3.3	23.3	-0.738763
113.000	1	8	3.3	26.7	-0.679819
127.000	1	9	3.3	30.0	-0.597297
151.000	1	10	3.3	33.3	-0.455832
154.000	1	11	3.3	36.7	-0.438149
164.000	1	12	3.3	40.0	-0.379205
168.000	1	13	3.3	43.3	-0.355628
169.000	1	14	3.3	46.7	-0.349733
177.000	1	15	3.3	50.0	-0.302578
185.000	1	16	3.3	53.3	-0.255423
190.000	1	17	3.3	56.7	-0.225951
193.000	1	18	3.3	60.0	-0.208268
198.000	1	19	3.3	63.3	-0.178796
205.000	1	20	3.3	66.7	-0.137536
228.000	1	21	3.3	70.0	-0.00196479
255.000	1	22	3.3	73.3	0.157184
286.000	1	23	3.3	76.7	0.339909
358.000	1	24	3.3	80.0	0.764305
389.000	1	25	3.3	83.3	0.947031
397.000	1	26	3.3	86.7	0.994186
407.000	1	27	3.3	90.0	1.05313
419.000	1	28	3.3	93.3	1.12386
671.000	1	29	3.3	96.7	2.60925
743.000	1	30	3.3	100.0	3.03364
TOTAL	30	30	100.0	100.0	

file: DAIWANHM.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 5 PB

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
28.0000	1	1	3.3	3.3	-0.457715
29.0000	1	2	3.3	6.7	-0.454191
36.0000	1	3	3.3	10.0	-0.429526
37.0000	3	6	10.0	20.0	-0.426002
45.0000	2	8	6.7	26.7	-0.397813
46.0000	1	9	3.3	30.0	-0.394290
49.0000	1	10	3.3	33.3	-0.383719
50.0000	1	11	3.3	36.7	-0.380196
52.0000	2	13	6.7	43.3	-0.373148
54.0000	2	15	6.7	50.0	-0.366101
56.0000	1	16	3.3	53.3	-0.359054
59.0000	1	17	3.3	56.7	-0.348483
73.0000	1	18	3.3	60.0	-0.299153
110.000	1	19	3.3	63.3	-0.168780
117.000	1	20	3.3	66.7	-0.144115
135.000	1	21	3.3	70.0	-0.0806902
140.000	1	22	3.3	73.3	-0.0630723
165.000	1	23	3.3	76.7	0.0250175
193.000	1	24	3.3	80.0	0.123678
206.000	1	25	3.3	83.3	0.169485
227.000	1	26	3.3	86.7	0.243480
229.000	1	27	3.3	90.0	0.250527
282.000	1	28	3.3	93.3	0.437278
549.000	1	29	3.3	96.7	1.37808
1545.00	1	30	3.3	100.0	4.88757
TOTAL	30	30	100.0	100.0	

file: DAIWANHM.AB6 version:0+

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 6 SB

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
1.00000	13	13	43.3	43.3	-0.620614
2.00000	3	16	10.0	53.3	-0.530670
3.00000	1	17	3.3	56.7	-0.440726
4.00000	1	18	3.3	60.0	-0.350782
6.00000	1	19	3.3	63.3	-0.170894
11.0000	2	21	6.7	70.0	0.278827
12.0000	1	22	3.3	73.3	0.368771
13.0000	3	25	10.0	83.3	0.458715
15.0000	1	26	3.3	86.7	0.638603
18.0000	1	27	3.3	90.0	0.908435
22.0000	1	28	3.3	93.3	1.26821
23.0000	1	29	3.3	96.7	1.35816
54.0000	1	30	3.3	100.0	4.14642
TOTAL	30	30	100.0	100.0	

COMMAND: FREQ

*** FREQUENCIES AND Z-SCORES ***

VARIABLE: 7 ZN

VALUE	FREQ	CUM FREQ	%	CUM %	Z SCORE
64.0000	1	1	3.3	3.3	-0.824509
65.0000	1	2	3.3	6.7	-0.819870
69.0000	1	3	3.3	10.0	-0.801314
74.0000	1	4	3.3	13.3	-0.778119
75.0000	3	7	10.0	23.3	-0.773480
77.0000	1	8	3.3	26.7	-0.764202
89.0000	1	9	3.3	30.0	-0.708534
90.0000	1	10	3.3	33.3	-0.703895
93.0000	1	11	3.3	36.7	-0.689977
119.000	1	12	3.3	40.0	-0.569363
150.000	1	13	3.3	43.3	-0.425553
158.000	1	14	3.3	46.7	-0.388441
162.000	1	15	3.3	50.0	-0.369885
166.000	1	16	3.3	53.3	-0.351329
177.000	1	17	3.3	56.7	-0.300299
182.000	1	18	3.3	60.0	-0.277104
224.000	1	19	3.3	63.3	-0.0822654
227.000	1	20	3.3	66.7	-0.0683483
240.000	1	21	3.3	70.0	-0.00804097
278.000	1	22	3.3	73.3	0.168242
302.000	1	23	3.3	76.7	0.279578
385.000	1	24	3.3	80.0	0.664617
401.000	1	25	3.3	83.3	0.738842
443.000	1	26	3.3	86.7	0.933681
490.000	1	27	3.3	90.0	1.15171
671.000	1	28	3.3	93.3	1.99138
791.000	1	29	3.3	96.7	2.54806
840.000	1	30	3.3	100.0	2.77537
TOTAL	30	30	100.0	100.0	

APPENDIX VI

STATEMENTS OF COSTS

GROUP 1 - 8

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 1
VALKYRIE 1-4 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>	
R. Arnold, Project Geologist, 1.33 day @$400/day	$ 532.00
K. Akhurst, Geologist, 1.33 day @$350/day	465.50
G. King, Assistant Geologist, 1.33 day @$250/day	332.50
P. Daigle, Assistant Geologist, 1.33 day @$250/day	332.50
<u>Project Expenses</u>	
Project Preparation	180.97
Mobilization/Demobilization	749.24
Domicile	
Camp Rental, 5.32 man days @$55/man day	292.60
Food, 5.32 man days @$45/man day	239.40
Geochemistry	
16 Rocks Geochem	
16 - 6 Element Trace ICP @$5.00/sample	80.00
16 - Au Fire @$7.25/sample	116.00
16 - Assay Cut Sample Prep. @$3.75/sample	60.00
6 Heavy Mineral	
6 - 6 Element Trace ICP @$5.00/sample	30.00
6 - Au Fire @$7.25/sample	43.50
6 - Heavy Min. Prep @$25.00/sample	150.00
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (3.3 hours)	2,554.78
Truck Rental and Fuel	67.05
Radio Rental	11.88
Walkie Talkie Rental	11.14
Field Supplies 5.32 man days @$25.00/man day	133.00
Computer Rental	47.13
Expediting	20.90

Accounting, Communications, Freight	99.40
Report Compilation and Drafting	966.77
Project Management Fee	628.40
TOTAL COST	$ **8,145.16**

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 2
LOKI 4-7 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

Salaries

R. Arnold, Project Geologist, 1.18 day @$400/day	$ 472.00
K. Akhurst, Geologist, 1.18 day @$350/day	413.00
G. King, Assistant Geologist, 1.18 day @$250/day	295.00
P. Daigle, Assistant Geologist, 1.18 day @$250/day	295.00

Project Expenses

Project Preparation	160.60
Mobilization/Demobilization	664.95
Domicile	
Camp Rental, 4.72 man days @$55/man day	259.60
Food, 4.72 man days @$45/man day	212.40
Geochemistry	
28 Rocks Geochem	
28 - 6 Element Trace ICP @$5.00/sample	140.00
28 - Au Fire @$7.25/sample	203.00
28 - Assay Cut Sample Prep. @$3.75/sample	105.00
1 Heavy Mineral	
1 - 6 Element Trace ICP @$5.00/sample	5.00
1 - Au Fire @$7.25/sample	7.75
1 - Heavy Min. Prep @$25.00/sample	25.00
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (2.8 hours)	2,167.69
Truck Rental and Fuel	59.50
Radio Rental	10.54
Walkie Talkie Rental	9.90
Field Supplies 5.32 man days @$25.00/man day	118.00
Computer Rental	41.83
Expediting	18.53

Accounting, Communications, Freight	88.22
Report Compilation and Drafting	858.00
Project Management Fee	557.70
TOTAL COST	$ 7,188.23

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 3
GRENDEL 5-8 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>

R. Arnold, Project Geologist, 1.11 day @$400/day	$ 444.00
K. Akhurst, Geologist, 1.11 day @$350/day	388.50
G. King, Assistant Geologist, 1.11 day @$250/day	277.50
P. Daigle, Assistant Geologist, 1.11 day @$250/day	277.50

<u>Project Expenses</u>

Project Preparation	151.56
Mobilization/Demobilization	627.50
Domicile	
Camp Rental, 4.44 man days @$55/man day	244.20
Food, 4.44 man days @$45/man day	199.80
Geochemistry	
18 Rocks Geochem	
18 - 6 Element Trace ICP @$5.00/sample	90.00
18 - Au Fire @$7.25/sample	130.50
18 - Assay Cut Sample Prep. @$3.75/sample	67.50
2 Heavy Mineral	
2 - 6 Element Trace ICP @$5.00/sample	10.00
2 - Au Fire @$7.25/sample	14.50
2 - Heavy Min. Prep @$25.00/sample	50.00
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (2.8 hours)	2,167.69
Truck Rental and Fuel	56.15
Radio Rental	9.95
Walkie Talkie Rental	9.33
Field Supplies 4.44 man days @$25.00/man day	111.00
Computer Rental	39.47
Expediting	17.51

Accounting, Communications, Freight		83.25
Report Compilation and Drafting		809.67
Project Management Fee		526.28
	TOTAL COST	$ **6,803.86**

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 4
BEOWULF 1-4 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>

R. Arnold, Project Geologist, 1.20 day @$400/day	$ 480.00
K. Akhurst, Geologist, 1.20 day @$350/day	420.00
G. King, Assistant Geologist, 1.20 day @$250/day	300.00
P. Daigle, Assistant Geologist, 1.20 day @$250/day	300.00

<u>Project Expenses</u>

Project Preparation	162.87
Mobilization/Demobilization	674.33
Domicile	
Camp Rental, 4.80 man days @$55/man day	264.00
Food, 4.80 man days @$45/man day	216.00
Geochemistry	
23 Rocks Geochem	
23 - 6 Element Trace ICP @$5.00/sample	115.00
23 - Au Fire @$7.25/sample	166.75
23 - Assay Cut Sample Prep. @$3.75/sample	86.25
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (3.0 hours)	2,322.52
Truck Rental and Fuel	60.34
Radio Rental	10.69
Walkie Talkie Rental	10.03
Field Supplies 4.80 man days @$25.00/man day	120.00
Computer Rental	42.42
Expediting	18.82

Accounting, Communications, Freight	89.46
Report Compilation and Drafting	870.09
Project Management Fee	565.56
TOTAL COST	$ 7,295.63

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 5
GRENDEL 1-4 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>

R. Arnold, Project Geologist, 1.33 day @$400/day	$ 532.00
K. Akhurst, Geologist, 1.33 day @$350/day	465.50
G. King, Assistant Geologist, 1.33 day @$250/day	332.50
P. Daigle, Assistant Geologist, 1.33 day @$250/day	332.50

<u>Project Expenses</u>

Project Preparation	180.97
Mobilization/Demobilization	749.24
Domicile	
Camp Rental, 5.32 man days @$55/man day	292.60
Food, 5.32 man days @$45/man day	239.40
Geochemistry	
3 Rocks Geochem	
3 - 6 Element Trace ICP @$5.00/sample	15.00
3 - Au Fire @$7.25/sample	21.75
3 - Assay Cut Sample Prep. @$3.75/sample	11.25
4 Heavy Mineral	
4 - 6 Element Trace ICP @$5.00/sample	20.00
4 - Au Fire @$7.25/sample	29.00
4 - Heavy Min. Prep @$25.00/sample	100.00
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (3.6 hours)	2,787.03
Truck Rental and Fuel	67.05
Radio Rental	11.88
Walkie Talkie Rental	11.14
Field Supplies 5.32 man days @$25.00/man day	133.00
Computer Rental	47.13
Expediting	20.9[illegible]

Accounting, Communications, Freight	99.40
Report Compilation and Drafting	966.77
Project Management Fee	628.40
TOTAL COST	$ **8,094.92**

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 6
ODIN 9-10 AND LOKI 1-3 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>	
R. Arnold, Project Geologist, 1.58 day @$400/day	$ 632.00
K. Akhurst, Geologist, 1.58 day @$350/day	553.00
G. King, Assistant Geologist, 1.58 day @$250/day	395.00
P. Daigle, Assistant Geologist, 1.58 day @$250/day	395.00
<u>Project Expenses</u>	
Project Preparation	214.90
Mobilization/Demobilization	889.73
Domicile	
Camp Rental, 6.32 man days @$55/man day	347.60
Food, 6.32 man days @$45/man day	284.40
Geochemistry	
31 Rocks Geochem	
31 - 6 Element Trace ICP @$5.00/sample	155.00
31 - Au Fire @$7.25/sample	224.75
31 - Assay Cut Sample Prep. @$3.75/sample	116.25
4 Heavy Mineral	
4 - 6 Element Trace ICP @$5.00/sample	20.00
4 - Au Fire @$7.25/sample	29.00
4 - Heavy Min. Prep @$25.00/sample	100.00
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (3.8 hours)	2,941.86
Truck Rental and Fuel	79.62
Radio Rental	14.11
Walkie Talkie Rental	13.23
Field Supplies 6.32 man days @$25.00/man day	158.00
Computer Rental	55.97
Expediting	24.82

Accounting, Communications, Freight	118.04
Report Compilation and Drafting	1,148.04
Project Management Fee	746.22
TOTAL COST	$ **9,657.05**

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 7
ODIN 3-8 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>

R. Arnold, Project Geologist, 1.65 day @$400/day	$ 660.00
K. Akhurst, Geologist, 1.65 day @$350/day	577.50
G. King, Assistant Geologist, 1.65 day @$250/day	412.50
P. Daigle, Assistant Geologist, 1.65 day @$250/day	412.50

<u>Project Expenses</u>

Project Preparation	223.95
Mobilization/Demobilization	927.19
Domicile	
Camp Rental, 6.60 man days @$55/man day	363.00
Food, 6.60 man days @$45/man day	297.00
Geochemistry	
21 Rocks Geochem	
21 - 6 Element Trace ICP @$5.00/sample	105.00
21 - Au Fire @$7.25/sample	152.25
21 - Assay Cut Sample Prep. @$3.75/sample	78.75
5 Heavy Mineral	
5 - 6 Element Trace ICP @$5.00/sample	25.00
5 - Au Fire @$7.25/sample	36.25
5 - Heavy Min. Prep @$25.00/sample	125.00
Fax Charges on Geochemistry	0.50
Helicopter and Fuel (4.1 hours)	3,174.12
Truck Rental and Fuel	82.97
Radio Rental	14.70
Walkie Talkie Rental	13.79
Field Supplies 6.60 man days @$25.00/man day	165.00
Computer Rental	58.32
Expediting	25.87

Accounting, Communications, Freight	123.01
Report Compilation and Drafting	1,196.37
Project Management Fee	777.65
TOTAL COST	$ **10,028.19**

STATEMENT OF COSTS

PROJECT 89BC037
GROUP 8
THOR 1-4 AND ODIN 1-2 CLAIMS
STEWART PROPERTIES

Period of field Work: Sept. 22 - Oct. 02, 1989

<u>Salaries</u>

R. Arnold, Project Geologist, 1.62 day @$400/day	$ 648.00
K. Akhurst, Geologist, 1.62 day @$350/day	567.00
G. King, Assistant Geologist, 1.62 day @$250/day	405.00
P. Daigle, Assistant Geologist, 1.62 day @$250/day	405.00

<u>Project Expenses</u>

Project Preparation	221.68
Mobilization/Demobilization	917.82
Domicile	
Camp Rental, 6.48 man days @$55/man day	356.40
Food, 6.48 man days @$45/man day	291.60
Geochemistry	
20 Rocks Geochem	
20 - 6 Element Trace ICP @$5.00/sample	100.00
20 - Au Fire @$7.25/sample	145.00
20 - Assay Cut Sample Prep. @$3.75/sample	75.00
8 Heavy Mineral	
8 - 6 Element Trace ICP @$5.00/sample	40.00
8 - Au Fire @$7.25/sample	58.00
8 - Heavy Min. Prep @$25.00/sample	200.00
Helicopter and Fuel (3.9 hours)	3,019.28
Truck Rental and Fuel	82.12
Radio Rental	14.55
Walkie Talkie Rental	13.65
Field Supplies 6.48 man days @$25.00/man day	162.00
Computer Rental	57.73
Expediting	25.61

Accounting, Communications, Freight	121.77
Report Compilation and Drafting	1,184.29
Project Management Fee	769.79
TOTAL COST	$ **9,881.29**

STATEMENT OF COSTS

PROJECT 89BC037
RECONNAISSANCE SAMPLING
KING CLAIMS

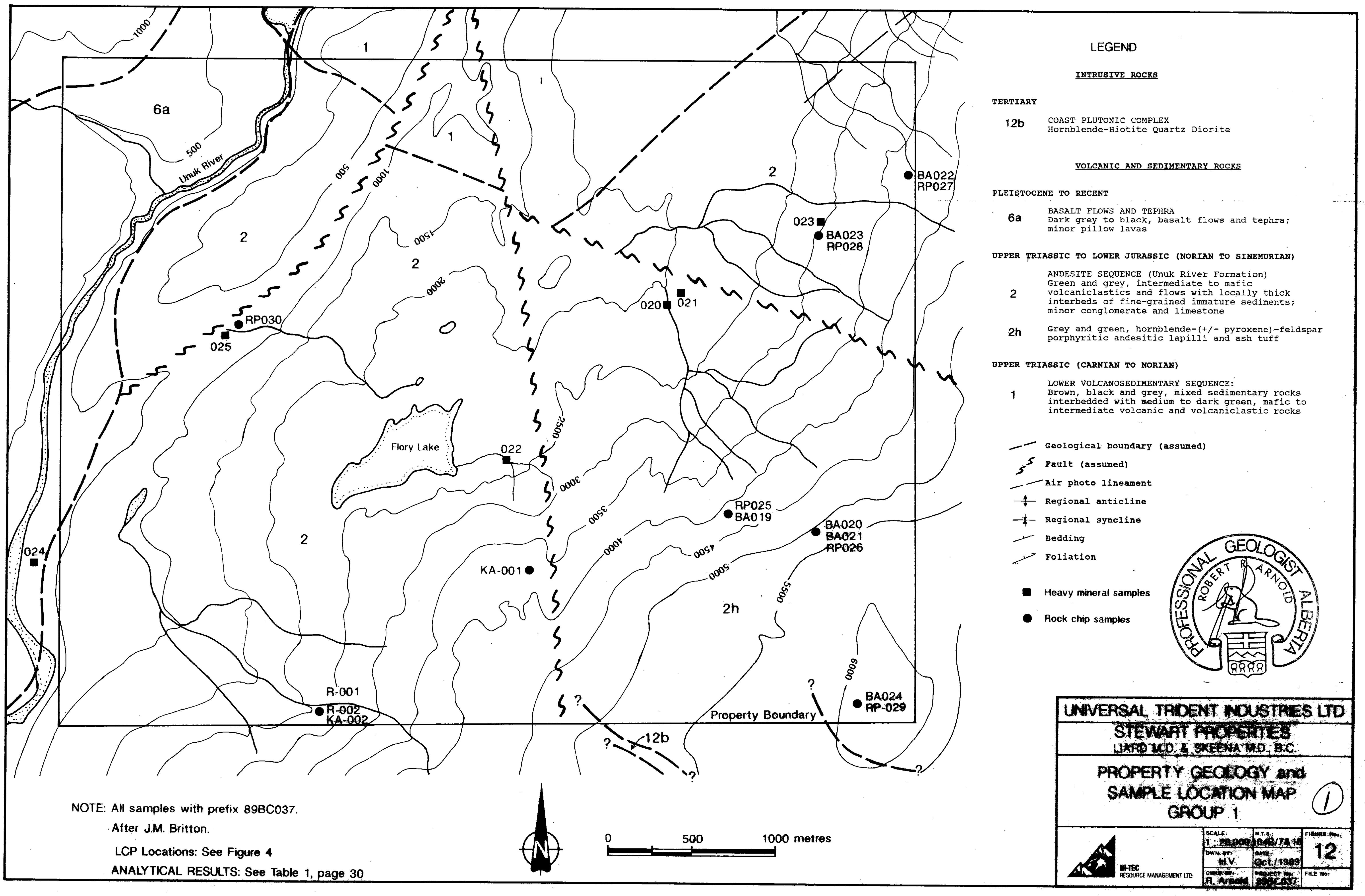
Period of field Work: Sept. 22 - Oct. 02, 1989

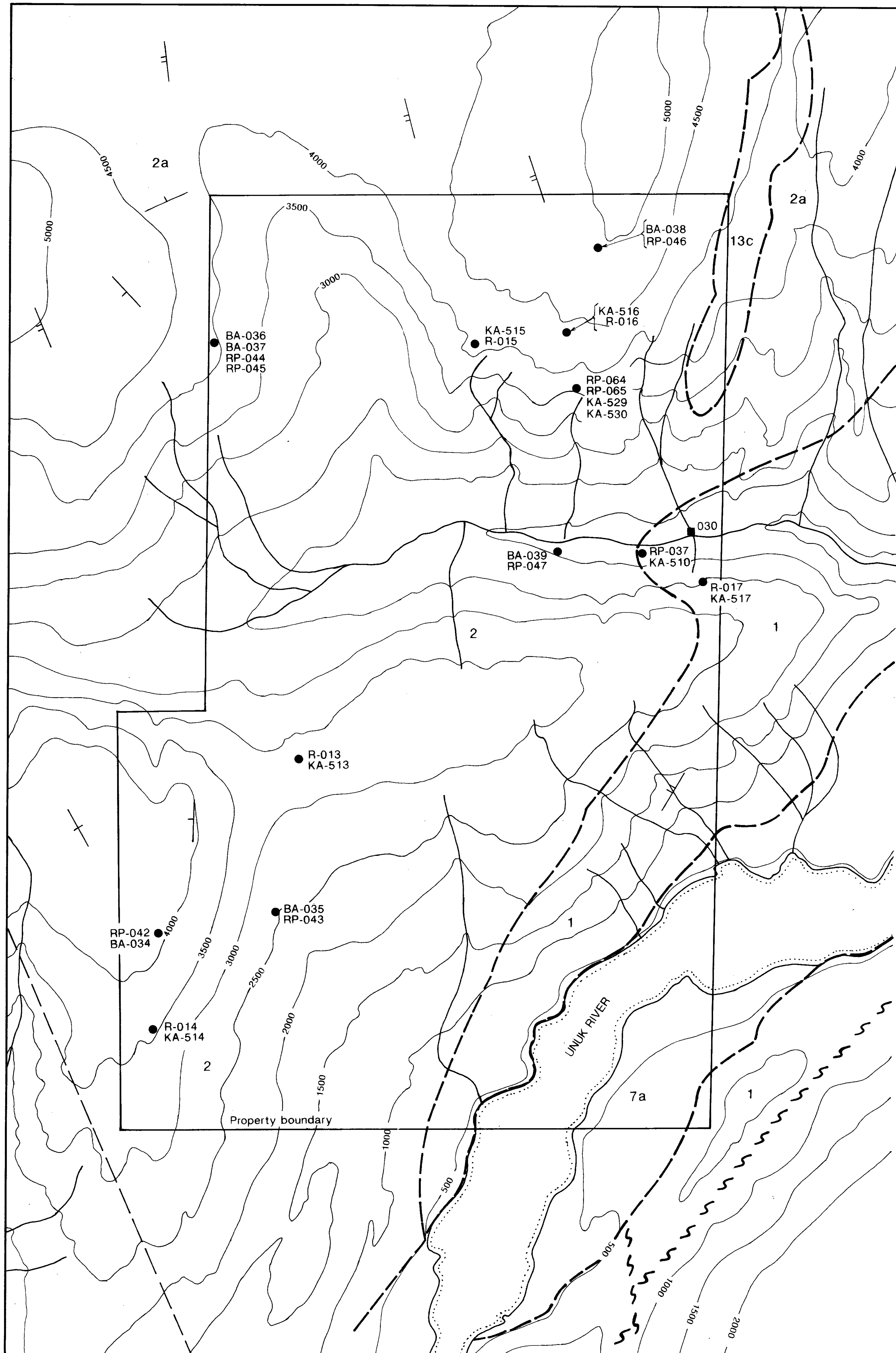
Geochemistry

14 Rocks Geochem	
14 - 6 Element Trace ICP @$5.00/sample	$ 70.00
14 - Au Fire @$7.25/sample	101.50
14 - Assay Cut Sample Prep. @$3.75/sample	52.50
2 - Assays Au @$8.50/assay	17.00
TOTAL COST	**$ 241.00**

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,596





LEGEND

INTRUSIVE ROCKS

TERTIARY

13c POST-TECTONIC DYKES
Hawilson monzonite: fine grained leuco-monzonite

VOLCANIC AND SEDIMENTARY ROCKS

RECENT

7a UNCONSOLIDATED SEDIMENTS
Alluvium, glaciofluvial deposits, landslide debris, moraine

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)

2 ANDESITE SEQUENCE (Unuk River Formation)
Green and grey, intermediate to mafic volcaniclastics and flows with locally thick interbeds of fine-grained immature sediments; minor conglomerate and limestone

2s Grey, brown and green, thinly bedded, tuffaceous siltstone and fine grained wacke

UPPER TRIASSIC (CARNIAN TO NORIAN)

1 LOWER VOLCANOSEDIMENTARY SEQUENCE:
Brown, black and grey, mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcaniclastic rocks

Geological boundary (assumed)
Fault (assumed)
Air photo lineament
Regional anticline
Regional syncline
Bedding
Foliation
Heavy mineral sample
Rock sample

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,596

PROFESSIONAL GEOLOGIST ALBERTA
ROBERT R. ARNOLD

NOTE: All samples with prefix 89BC037.
After J.M. Britton.

LCP Locations: See Figure 5

ANALYTICAL RESULTS: See Table 2, page 31

0 500 1000 metres

UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.

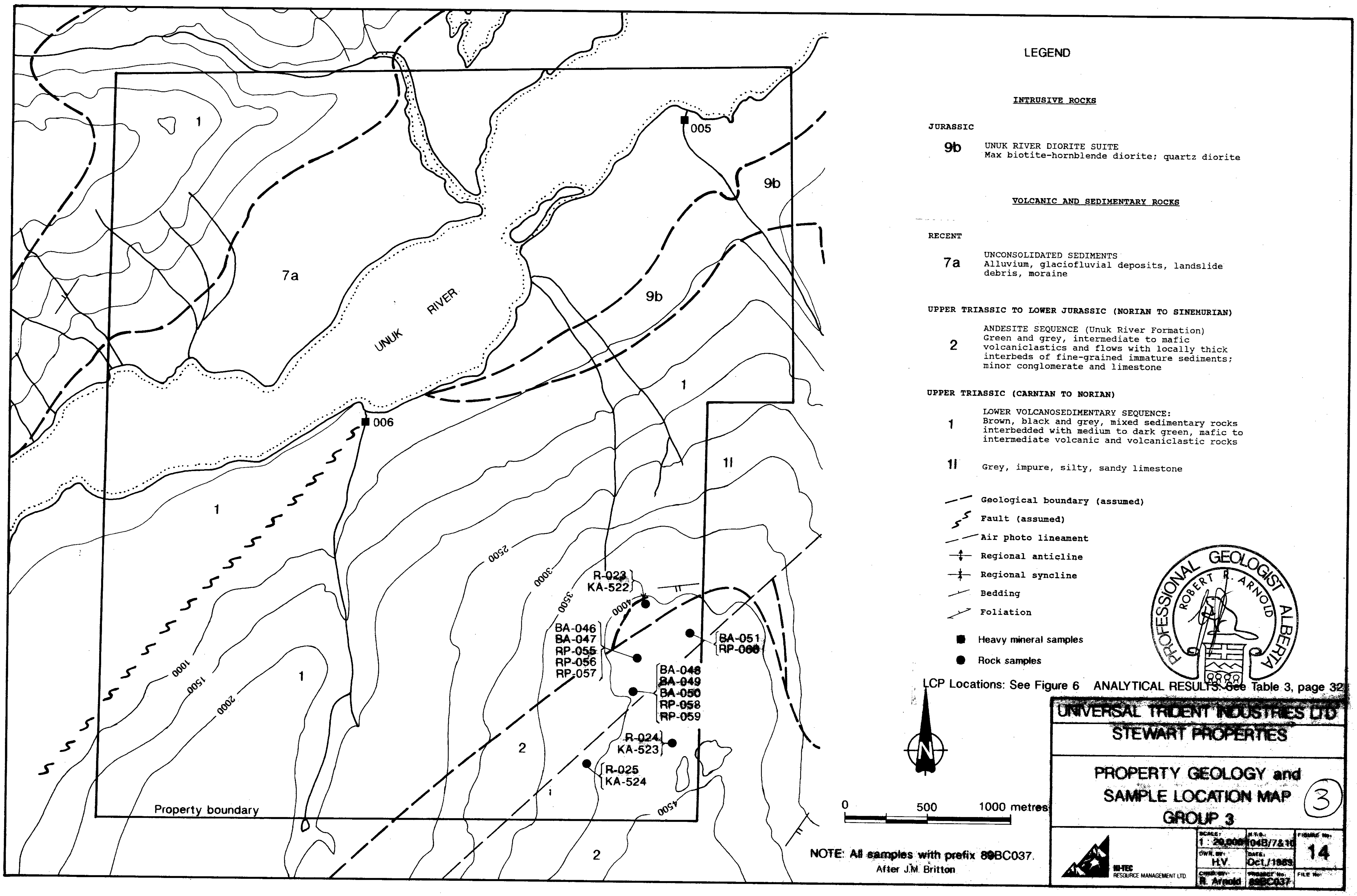
PROPERTY GEOLOGY and
SAMPLE LOCATION MAP (2)
GROUP 2

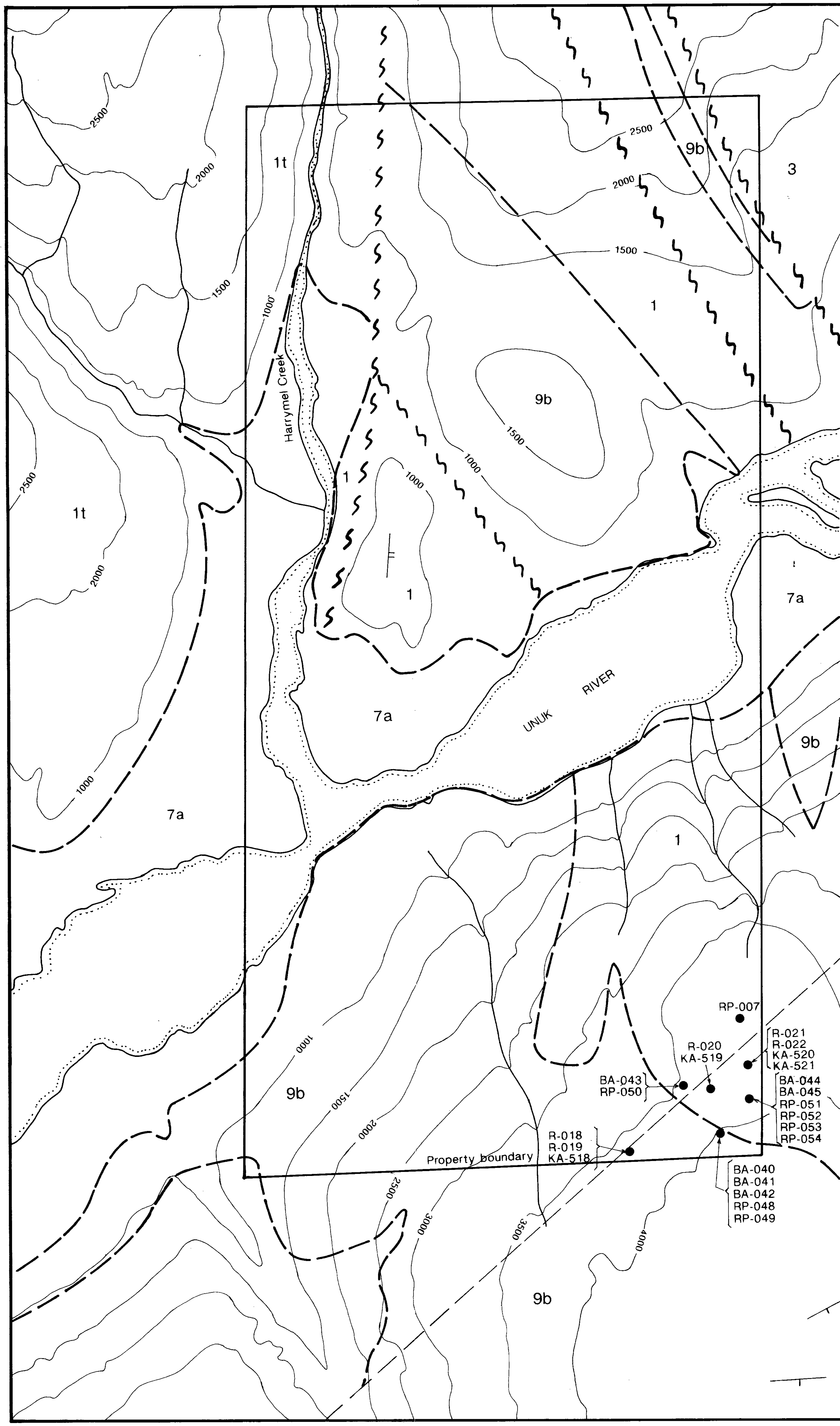
HI-TEC RESOURCE MANAGEMENT LTD

SCALE: 1 : 20,000	N.T.S.: 104B/7&10	FIGURE No: 13
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,596





LEGEND

INTRUSIVE ROCKS

JURASSIC

9b UNUK RIVER DIORITE SUITE
Max biotite-hornblende diorite; quartz diorite

VOLCANIC AND SEDIMENTARY ROCKS

RECENT

7a UNCONSOLIDATED SEDIMENTS
Alluvium, glaciofluvial deposits, landslide debris, moraine

LOWER JURASSIC (PLIENSBACHIAN TO TORCIAN)

3 PYROCLASTIC-EPICLASTIC SEQUENCE
(Betty Creek Formation)
Heterogeneous, grey, green, locally purple or maroon, massive to bedded pyroclastic and sedimentary rocks; pillow lava

UPPER TRIASSIC (CARNIAN TO NORIAN)

1 LOWER VOLCANOSEDIMENTARY SEQUENCE:
Brown, black and grey, mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcaniclastic rocks

1t Grey to black, thinly bedded siltstone, shale, argillite (turbidite)

Geological boundary (assumed)
Fault (assumed)
Air photo lineament
Regional anticline
Regional syncline
Bedding
Foliation
Rock Sample

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,596

NOTE: All samples with prefix 89BC037.
After J.M. Britton.
ANALYTICAL RESULTS: See Table 4, page 33
LCP Locations: See Figure 7

PROFESSIONAL GEOLOGIST ROBERT R. ARNOLD ALBERTA

N

0 500 1000 metres

UNIVERSAL TRIDENT INDUSTRIES LTD

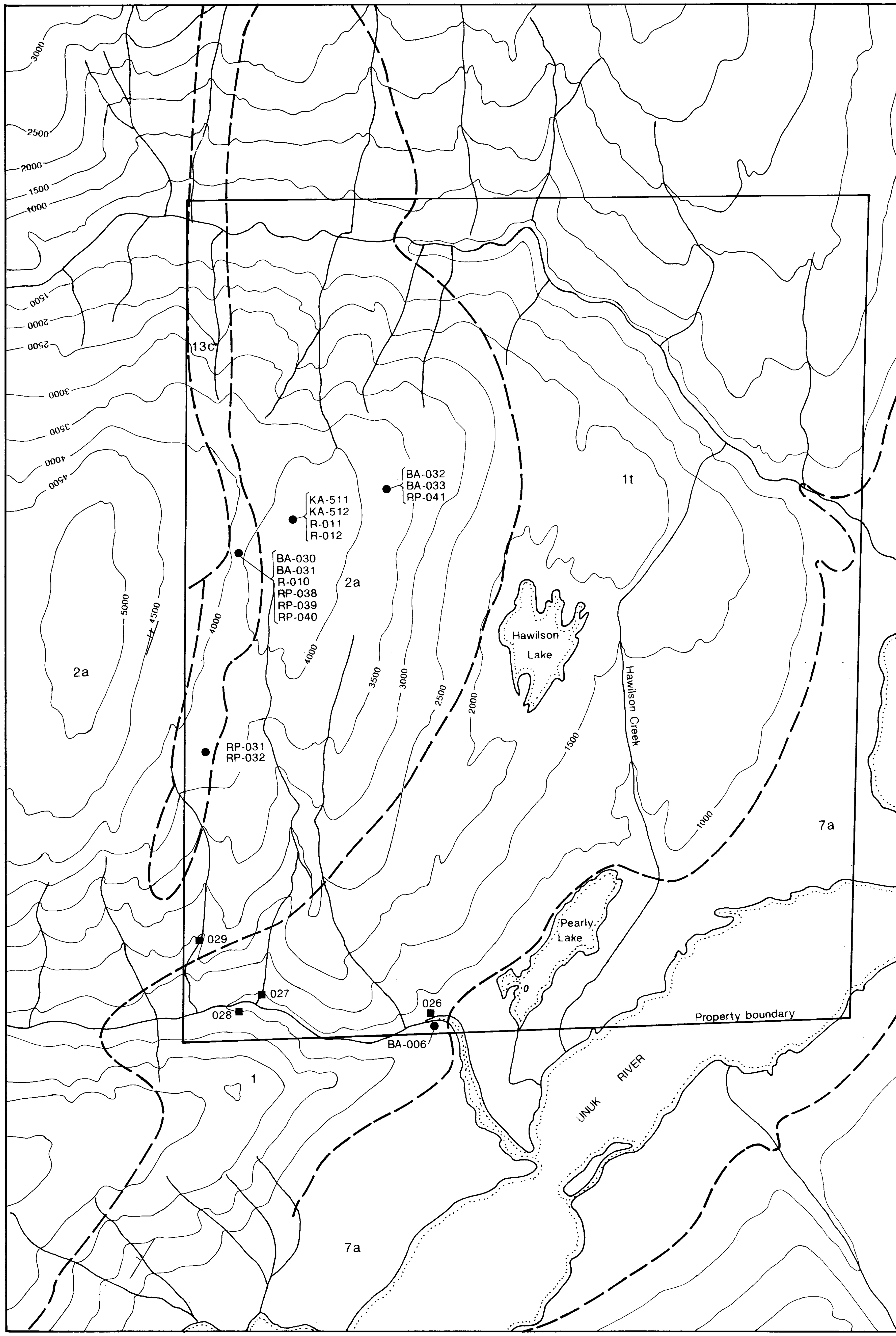
STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.

PROPERTY GEOLOGY and SAMPLE LOCATION MAP
GROUP 4

(4)

HI-TEC RESOURCE MANAGEMENT LTD.

SCALE: 1 : 20,000	N.T.S.: 104B/7&10	FIGURE No: 15
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:



LEGEND

INTRUSIVE ROCKS

TERTIARY

13c	POST-TECTONIC DYKES Hawilson monzonite: fine grained leuco-monzonite

VOLCANIC AND SEDIMENTARY ROCKS

RECENT

7a	UNCONSOLIDATED SEDIMENTS Alluvium, glaciofluvial deposits, landslide debris, moraine

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)

2a	ANDESITE SEQUENCE (Unuk River Formation) Grey and green, plagioclase +/- hornblende porphyritic andesite; massive to poorly bedded

UPPER TRIASSIC (CARNIAN TO NORIAN)

1	LOWER VOLCANOSEDIMENTARY SEQUENCE: Brown, black and grey, mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcaniclastic rocks
1t	Grey to black, thinly bedded siltstone, shale, argillite (turbidite)

Geological boundary (assumed)
Fault (assumed)
Air photo lineament
Regional anticline
Regional syncline
Bedding
Foliation

Heavy mineral samples

Rock samples

ANALYTICAL RESULTS: See Table 5, page 34

LCP Locations: See Figure 8

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,596

NOTE: All samples with prefix 89BC037.
After J.M. Britton.

PROFESSIONAL GEOLOGIST ROBERT R. ARNOLD ALBERTA

0 500 1000 metres

N

UNIVERSAL TRIDENT INDUSTRIES LTD

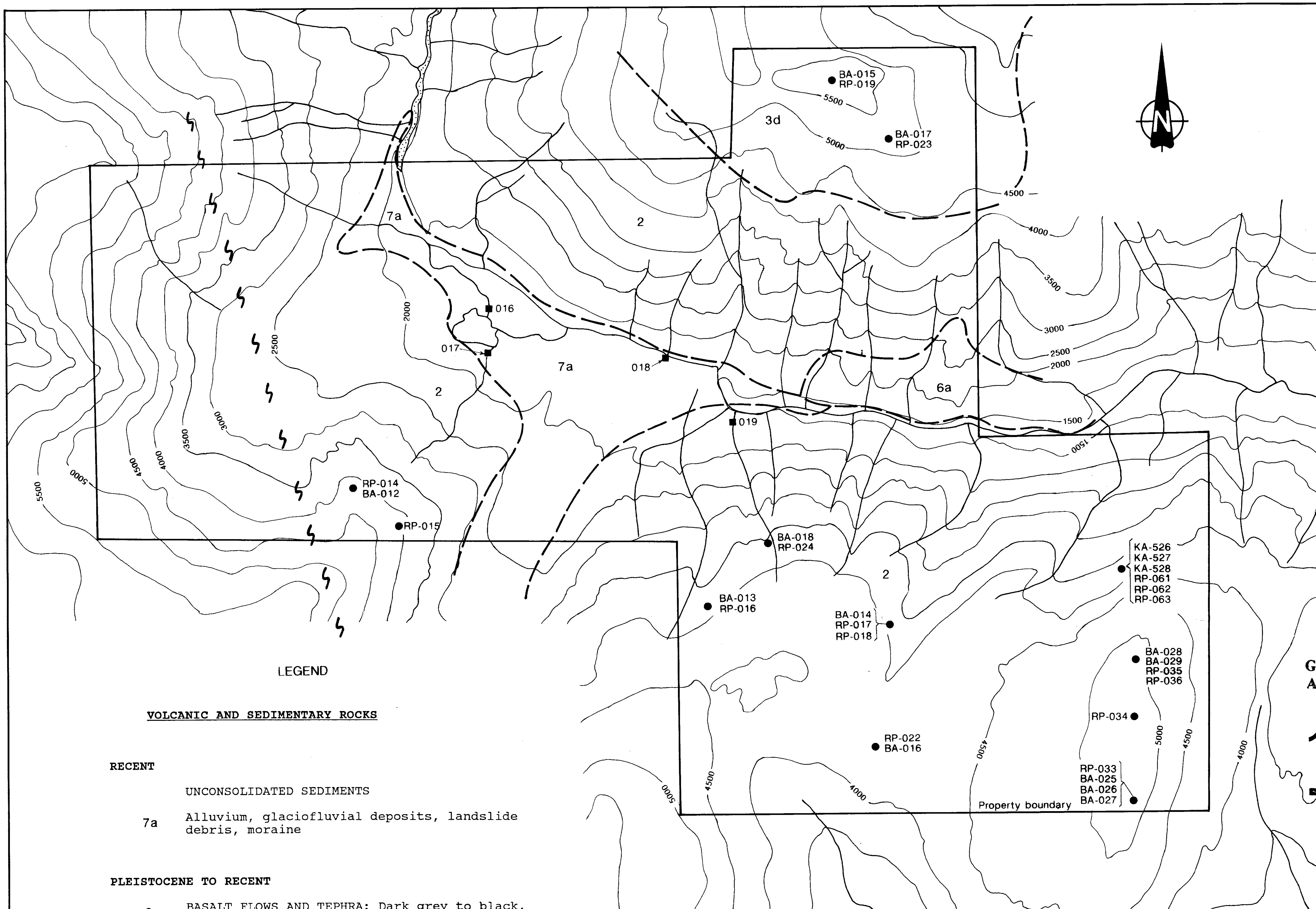
STEWART PROPERTIES
LIARD M.D., & SKEENA M.D., B.C.

PROPERTY GEOLOGY and SAMPLE LOCATION MAP
GROUP 5

(5)

HI-TEC RESOURCE MANAGEMENT LTD

SCALE:	N.T.S.: 104B/7&10	FIGURE No: 16
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,596

NOTE: All samples with prefix 89BC037.
After J.M. Britton.

ANALYTICAL RESULTS: See Table 6, page 35

LCP Locations: See Figure 9

LEGEND

VOLCANIC AND SEDIMENTARY ROCKS

RECENT

UNCONSOLIDATED SEDIMENTS

7a	Alluvium, glaciofluvial deposits, landslide debris, moraine

PLEISTOCENE TO RECENT

6a	BASALT FLOWS AND TEPHRA: Dark grey to black, basalt flows and tephra; minor pillow lavas.

LOWER JURASSIC (PLIENSBACHIAN TO TOARCIAN)

3d	PYROCLASTIC-EPICLASTIC SEQUENCE (Betty Creek Formation): Grey, green and purple dacitic tuff, lapilli tuff, crystal and lithic tuff; massive to well bedded; feldspar phyric.

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)

2	ANDESITE SEQUENCE (Unuk River Formation) Green and grey, intermediate to mafic volcaniclastics and flows with locally thick interbeds of fine-grained immature sediments; minor conglomerate and limestone

Geological boundary (assumed)
Fault (assumed)
Air photo lineament
Regional anticline
Regional syncline
Bedding
Foliation
Heavy mineral sample
Rock sample

PROFESSIONAL GEOLOGIST ROBERT R. ARNOLD ALBERTA

0 500 1000 metres

UNIVERSAL TRIDENT INDUSTRIES LTD

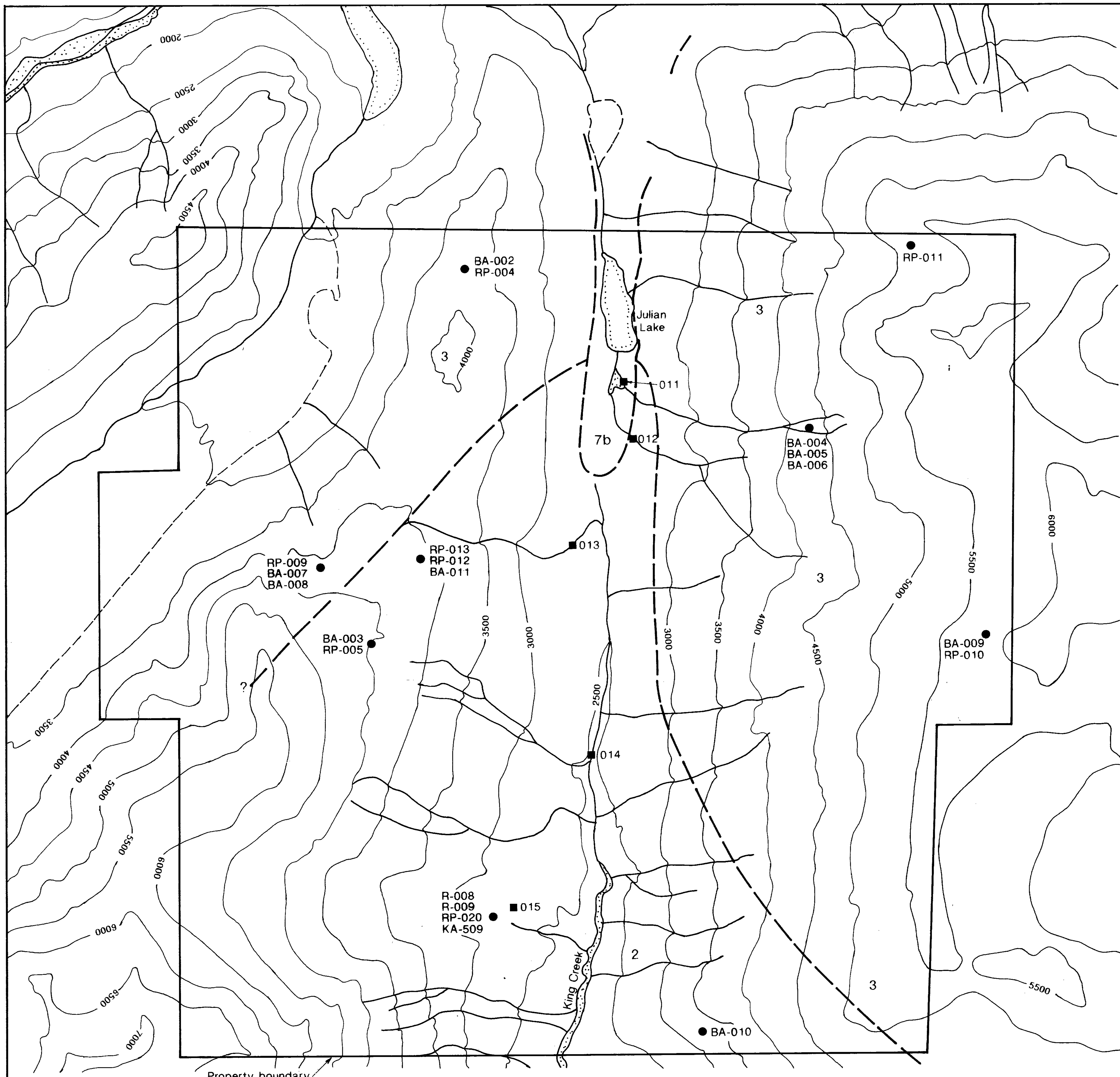
STEWART PROPERTIES

PROPERTY GEOLOGY and SAMPLE LOCATION MAP GROUP 6

(6)

SCALE: 1 : 20,000	N.T.S.: 104B/7&10	FIGURE No: 17
DWN. BY: H.V.	DATE: Oct./1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:

HI-TEC RESOURCE MANAGEMENT LTD



LEGEND

VOLCANIC AND SEDIMENTARY ROCKS

RECENT

UNCONSOLIDATED SEDIMENTS

7b Alluvium underlain by Pleistocene to Recent basalt

LOWER JURASSIC (PLIENSBACHIAN TO TOARCIAN)

3 PYROCLASTIC-EPICLASTIC SEQUENCE (Betty Creek Formation): Heterogeneous, grey, green, locally purple or maroon, massive to bedded pyroclastic and sedimentary rock; pillow lava

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)

2 ANDESITE SEQUENCE (Unuk River Formation) Green and grey, intermediate to mafic volcaniclastics and flows with locally thick interbeds of fine-grained immature sediments; minor conglomerate and limestone

- Geological boundary (assumed)
- Fault (assumed)
- Air photo lineament
- Regional anticline
- Regional syncline
- Bedding
- Foliation
- ■ Heavy mineral sample
- ● Rock sample

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,596

NOTE: All samples with prefix 89BC037.
After J.M. Britton.

ANALYTICAL RESULTS: See Table 7, page 36

LCP Locations: See Figure 10

PROFESSIONAL GEOLOGIST ALBERTA ROBERT R. ARNOLD

0 500 1000 metres

N

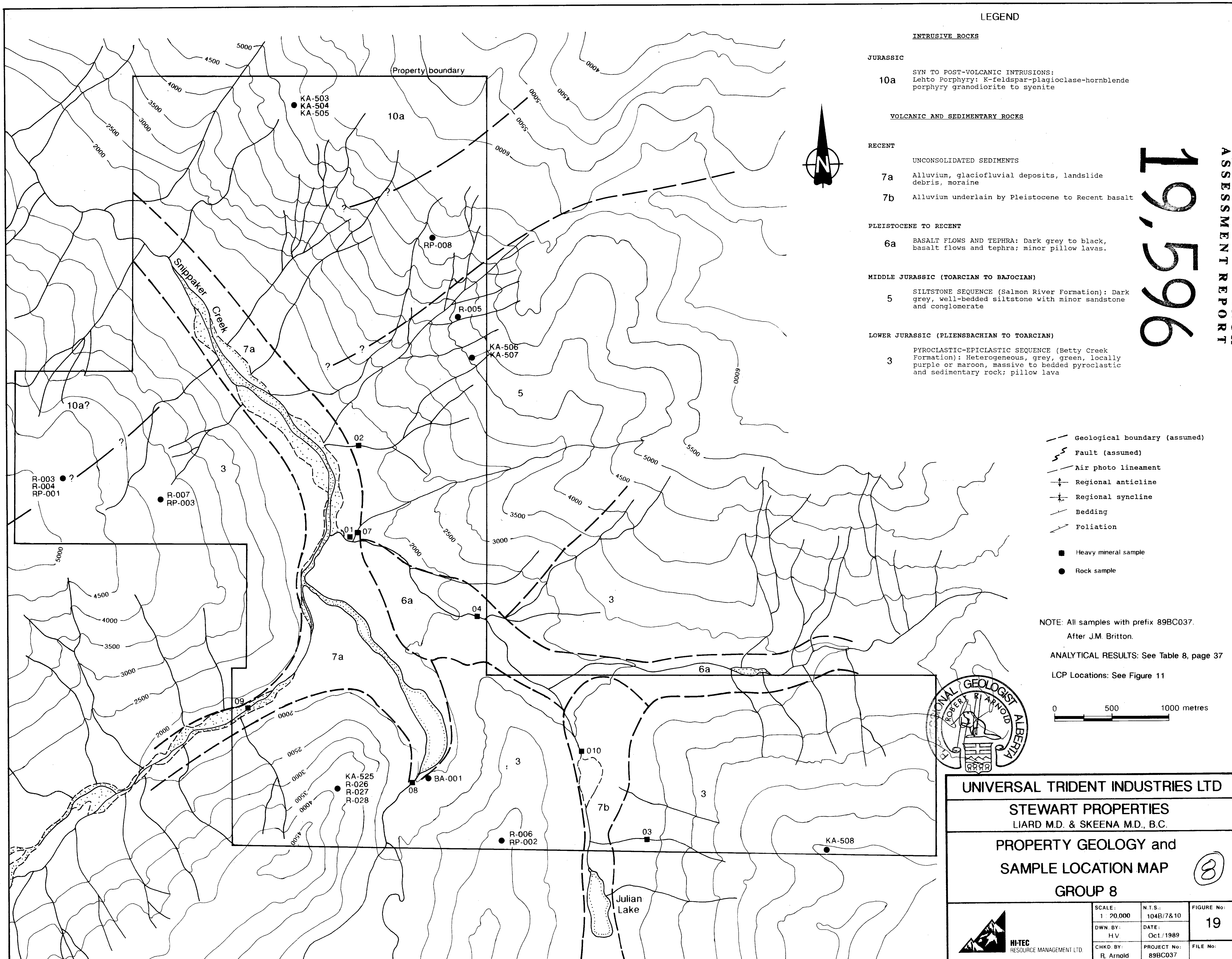
UNIVERSAL TRIDENT INDUSTRIES LTD

STEWART PROPERTIES
LIARD M.D., & SKEENA M.D., B.C.

PROPERTY GEOLOGY and SAMPLE LOCATION MAP GROUP 7

(7)

HI-TEC RESOURCE MANAGEMENT LTD	SCALE: 1 : 20,000	N.T.S.: 104B/7&10	FIGURE No: 18
	DWN. BY: H.V.	DATE: Oct./1989	
	CHKD. BY: R. Arnold	PROJECT No: 89BC037	FILE No:


LEGEND
INTRUSIVE ROCKS
JURASSIC
10a SYN TO POST-VOLCANIC INTRUSIONS: Lehto Porphyry: K-feldspar-plagioclase-hornblende porphyry granodiorite to syenite
VOLCANIC AND SEDIMENTARY ROCKS
RECENT
UNCONSOLIDATED SEDIMENTS
7a Alluvium, glaciofluvial deposits, landslide debris, moraine
7b Alluvium underlain by Pleistocene to Recent basalt
PLEISTOCENE TO RECENT
6a BASALT FLOWS AND TEPHRA: Dark grey to black, basalt flows and tephra; minor pillow lavas.
MIDDLE JURASSIC (TOARCIAN TO BAJOCIAN)
5 SILTSTONE SEQUENCE (Salmon River Formation): Dark grey, well-bedded siltstone with minor sandstone and conglomerate
LOWER JURASSIC (PLIENSBACHIAN TO TOARCIAN)
3 PYROCLASTIC-EPICLASTIC SEQUENCE (Betty Creek Formation): Heterogeneous, grey, green, locally purple or maroon, massive to bedded pyroclastic and sedimentary rock; pillow lava
Geological boundary (assumed)
Fault (assumed)
Air photo lineament
Regional anticline
Regional syncline
Bedding
Foliation
Heavy mineral sample
Rock sample
NOTE: All samples with prefix 89BC037.
After J.M. Britton.
ANALYTICAL RESULTS: See Table 8, page 37
LCP Locations: See Figure 11
0 500 1000 metres
GEOLOGICAL BRANCH
ASSESSMENT REPORT
19,596
Property boundary
Snippaker Creek
Julian Lake
KA-503
KA-504
KA-505
RP-008
R-005
KA-506
KA-507
R-003
R-004
RP-001
R-007
RP-003
KA-525
R-026
R-027
R-028
BA-001
R-006
RP-002
KA-508
02
01
07
04
09
08
010
03
10a
10a?
7a
7b
6a
5
3
UNIVERSAL TRIDENT INDUSTRIES LTD
STEWART PROPERTIES
LIARD M.D. & SKEENA M.D., B.C.
PROPERTY GEOLOGY and
SAMPLE LOCATION MAP
GROUP 8
SCALE: 1 : 20,000
N.T.S.: 104B/7&10
FIGURE No: 19
DWN. BY: HV
DATE: Oct./1989
CHKD. BY: R. Arnold
PROJECT No: 89BC037
FILE No:
HI-TEC RESOURCE MANAGEMENT LTD.
8