

**ASSESSMENT REPORT**

**LINECUTTING AND GEOPHYSICAL SURVEYS**

conducted on the

**KEYSTONE PROPERTY**

**LIARD MINING DIVISION  
BRITISH COLUMBIA**

**NTS 104 J 16E/W  
58°48' N / 130°14 W**

for

**NU-LITE INDUSTRIES LIMITED  
910-510 Burrard Street  
Vancouver, B.C.  
V6C 3A8**

by

**J. M. KOWALCHUK**

**March 12, 1997**

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VANCOUVER, B.C.

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**24,902**

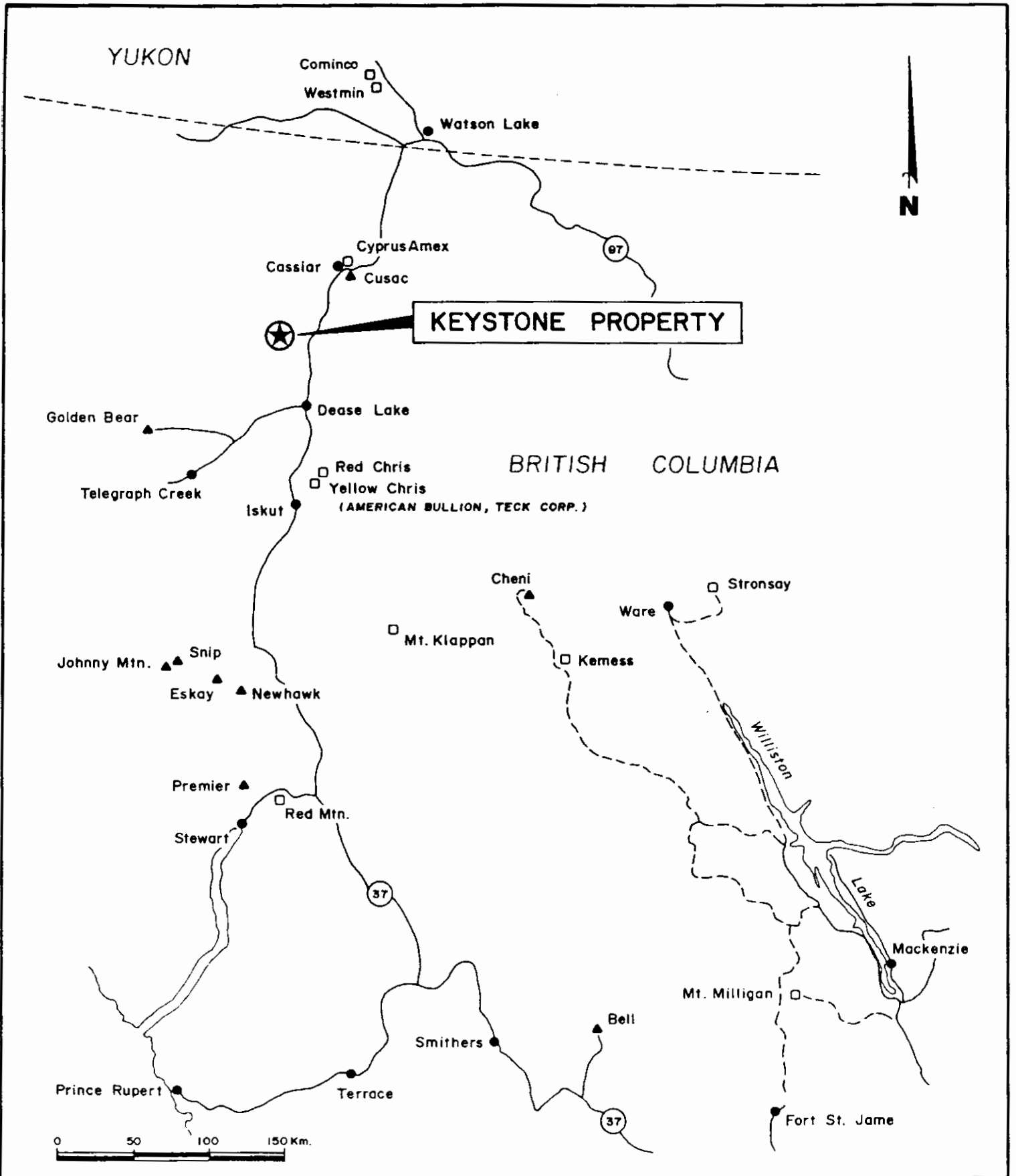
**SUMMARY and RECOMMENDATIONS**

A ground magnetic and VLF EM survey conducted on the Keystone property mapped the location of the ultramafic rocks which crop out on the bluffs north of Thibert Creek. The VLF EM mapped several subsidiary structures which may be the locus of gold bearing quartz veins at Thibert Creek.

It is recommended that the grid be completed throughout the whole eight kilometres of survey strike and the geophysics be completed over the whole grid. It is also recommended that the company complete a limited diamond drilling program to test the model that the VLF EM conductors are mapping mineralized structures which may be the source of the Thibert Creek gold placers.

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**NU-LITE INDUSTRIES LTD.**

910-510 Burrard Street  
 Vancouver, British Columbia  
 Canada, V6C 3A8

FIG. 1

LEGEND

- Mine development project
- ▲ Operating mine
- Highway
- - - Industrial road

## **1.0 INTRODUCTION**

A small surface program was completed on the Keystone Property in order to locate targets for drilling in the new year. The program consisted of surveying 8.0 km of cut line and 14 km of flagged line. Over this grid, ground geophysics consisting of magnetics and VLF EM was performed

### **1.1 Location and Access**

The Keystone Property is located on NTS map sheet 104 J 16, approximately 65 km north of the town of Dease Lake, Northern B. C. The location of the property is shown on Figure 1. The area is part of the Liard Mining District.

Access to the property is north along highway 17, across the Dease River by an installed ford just north of Dease Lake and then 5 km by placer mining roads to the property. Travel on the property is by four wheel drive vehicle on mine roads.

### **1.2 Physiography and Vegetation**

The property lies on a flat plain incised by several deep canyons from creeks flowing into Thibert Creek. The plain is at an elevation of 3200 feet with Thibert Creek forming the deepest canyon of 500 feet.

Vegetation consists primarily of scrub black spruce, poplar, and willow in the swampy areas. In areas of spruce and poplar the country is quite open. Many of the swampy areas are quite thickly vegetated and difficult to walk through. The floor of the Thibert Creek canyon has been extensively disturbed by placer gold mining with the southern bluffs of the canyon being steep grass covered clay slopes.

### **1.3 Claims and Ownership**

The Keystone property consists of one, eighteen unit four post claim and 80, two post claims. A list of the claims is shown as Table 1. The location of the claims is shown on Figure 2. The claims are regulated by the Liard Mining Division. The claims are wholly owned by Nu-Lite Industries.

### **1.4 Exploration History**

Placer gold was first discovered in at the confluence of DeLure Creek and Thibert Creek in 1873. The creeks that were actively mined were Thibert, Delure and Boulder Creeks. By 1949, the production from these creeks was recorded as being more than 70,000 ounces of gold. It was reported that concentrates from the Thibert Creek placer operations contained about two ounces of platinum per ton. In 1931, the Minister of Mines Report recorded that open cutting and stripping of the valley of Thibert Creek below the confluence of Berry Creek exposed a zone of quartz stringers in quartz porphyry in which the owner reported gold values up to \$5.50 per ton across a width of 40 feet. At the going price this value would have represented a grade of 0.25 ounces of gold per ton.

In 1983, Noranda Exploration carried out reconnaissance exploration over the Thibert Creek area. In 1987, Equity Silver Mines optioned the property from Ed Asp the owner of the claims and did a compilation of the data in the area. As a result of this compilation, they did a limited amount of backhoe and hand trenching in the Boulder Creek-Berry Creek area in order to find the old Keystone showing reported in 1931. They were unsuccessful in finding the showing. They company drilled one, 500 foot diamond drill hole near the junction of Boulder Creek and Thibert Creek.

SCALE  
0  
500  
1000  
1500

SCALE

N

KEN 22 671836	KEN 20 671834	KEN 18 671832
KEN 21 671835	KEN 19 671833	KEN 17 671831

AUSY • 76 312798	AUSY • 72 312796	AUSY • 70 312794
AUSY • 74 312797	AUSY • 71 312795	AUSY • 69 312793

THI • 32 342015	THI • 30 342013	THI • 28 342011
THI • 31 342014	THI • 29 342012	THI • 27 342010

BERT 24 344178	BERT 22 344176	BERT 20 344174	BERT 18 344172	BERT 16 344170	BERT 14 344168
BERT 23 344171	BERT 21 344169	BERT 19 344167	BERT 17 344165	BERT 15 344163	BERT 13 344161

Thibert E.A. 1 TO 18 222480					
THI • 26 342009	THI • 22 342007	THI • 20 342005	THI • 18 342003	THI • 16 342001	THI • 14 341999
THI • 25 342008	THI • 21 342006	THI • 19 342004	THI • 17 342002	THI • 15 342000	THI • 13 341998
KEN 1 661015	KEN 3 661017	KEN 5 661019	KEN 7 661021	KEN 23 661023	
KEN 2 661016	KEN 4 661018	KEN 6 661020	KEN 8 661022	KEN 24 661024	

BERT 1 344155	BERT 3 344157	BERT 5 344159	BERT 7 344161	BERT 9 344163	BERT 11 344165
BERT 2 344153	BERT 4 344155	BERT 6 344157	BERT 8 344159	BERT 10 344161	BERT 12 344163

RUSTY 1 333305	RUSTY 3 333307	RUSTY 5 333309	RUSTY 7 333311	RUSTY 9 333313	RUSTY 11 333315
RUSTY 2 333306	RUSTY 4 333308	RUSTY 6 333310	RUSTY 8 333312	RUSTY 10 333314	RUSTY 12 333316

THI • 12 342797	THI • 10 342795	THI • 8 342793	THI • 6 342791	THI • 4 342789	THI • 2 342787
THI • 11 342796	THI • 9 342794	THI • 7 342792	THI • 5 342790	THI • 3 342788	THI • 1 342786
KEN 9 671823	KEN 11 671825	KEN 13 671827	KEN 15 671829	KEN 17 671831	KEN 19 671833
KEN 10 671824	KEN 12 671826	KEN 14 671828	KEN 16 671830	KEN 18 671832	KEN 20 671834

Five Mile Guich

Boulder

Por Land

NU-LITE INDUSTRIES LTD

KEYSTONE PROJECT

CLAIM LOCATION

104 J 16

FIG. 2

LIARD

**TABLE 1**  
**KEYSTONE**  
**PROPERTY STATUS**

Claim		Record		
Name	Units	Record Date	Number	Expiry Date
Thi #1	1	1995/Dec/12	342786	1997/Dec/12
Thi #10	1	1995/Dec/12	342795	1997/Dec/12
Thi #11	1	1995/Dec/12	342796	1997/Dec/12
Thi #12	1	1995/Dec/12	342797	1997/Dec/12
Thi #2	1	1995/Dec/12	342787	1997/Dec/12
Thi #3	1	1995/Dec/12	342788	1997/Dec/12
Thi #4	1	1995/Dec/12	342789	1997/Dec/12
Thi #5	1	1995/Dec/12	342790	1997/Dec/12
Thi #6	1	1995/Dec/12	342790	1997/Dec/12
Thi #7	1	1995/Dec/12	342791	1997/Dec/12
Thi #8	1	1995/Dec/12	342793	1997/Dec/12
Thi #9	1	1995/Dec/12	342794	1997/Dec/12
Thi #13	1	1995/Dec/13	342798	1997/Dec/12
Thi #14	1	1995/Dec/13	342799	1997/Dec/12
Thi #15	1	1995/Dec/13	342800	1997/Dec/13
Thi #16	1	1995/Dec/13	342801	1997/Dec/13
Thi #17	1	1995/Dec/13	342802	1997/Dec/13
Thi #18	1	1995/Dec/13	342803	1997/Dec/13
Thi #19	1	1995/Dec/13	342804	1997/Dec/13
Thi #20	1	1995/Dec/13	342805	1997/Dec/13
Thi #21	1	1995/Dec/13	342806	1997/Dec/13
Thi #22	1	1995/Dec/13	342807	1997/Dec/13
Thi # 30	1	1995/Dec/15	342813	1997/Dec/15
Thi #25	1	1995/Dec/15	342808	1997/Dec/15
Thi #26	1	1995/Dec/15	342809	1997/Dec/15
Thi #27	1	1995/Dec/15	342810	1997/Dec/15
Thi #28	1	1995/Dec/15	342811	1997/Dec/15
Thi #29	1	1995/Dec/15	342812	1997/Dec/15
Thi #31	1	1995/Dec/15	342814	1997/Dec/15
Thi #32	1	1995/Dec/15	342815	1997/Dec/15
Rusty #1	1	1994/Dec/20	333305	1997/Dec/20
Rusty #10	1	1994/Dec/20	333314	1997/Dec/20
Rusty #2	1	1994/Dec/20	333306	1997/Dec/20
Rusty #3	1	1994/Dec/20	333307	1997/Dec/20
Rusty #4	1	1994/Dec/20	333308	1997/Dec/20
Rusty #5	1	1994/Dec/20	333309	1997/Dec/20
Rusty #6	1	1994/Dec/20	333310	1997/Dec/20
Rusty #7	1	1994/Dec/20	333311	1997/Dec/20
Rusty #8	1	1994/Dec/20	333312	1997/Dec/20
Rusty #9	1	1994/Dec/20	333313	1997/Dec/20
Auey # 72	1	1992/Aug/17	312796	1998/Aug/17
Auey # 76	1	1992/Aug/17	312800	1998/Aug/17
Auey #69	1	1992/Aug/17	312793	1998/Aug/17
Auey #70	1	1992/Aug/17	312794	1998/Aug/17
Auey #71	1	1992/Aug/17	312795	1998/Aug/17
Auey #73	1	1992/Aug/17	312797	1998/Aug/17
Auey #74	1	1992/Aug/17	312798	1998/Aug/17

Auey #75	1	1992/Aug/17	312799	1998/Aug/17
Ted 1	1	1996/Jan/18	343139	1998/Jan/18
Ted 2	1	1996/Jan/18	343140	1998/Jan/18
Ted 3	1	1996/Jan/18	343141	1998/Jan/18
Ted 4	1	1996/Jan/18	343142	1998/Jan/18
E.A/#1 To #18	18	1986/Jul/18	222480	1998/Jul/18
Bert 1	1	1996/Mar/05	344155	1998/Mar/05
Bert 10	1	1996/Mar/05	344164	1998/Mar/05
Bert 11	1	1996/Mar/05	344165	1998/Mar/05
Bert 12	1	1996/Mar/05	344166	1998/Mar/05
Bert 13	1	1996/Mar/05	344167	1998/Mar/05
Bert 14	1	1996/Mar/05	344168	1998/Mar/05
Bert 15	1	1996/Mar/05	344169	1998/Mar/05
Bert 16	1	1996/Mar/05	344170	1998/Mar/05
Bert 17	1	1996/Mar/05	344171	1998/Mar/05
Bert 18	1	1996/Mar/05	344172	1998/Mar/05
Bert 19	1	1996/Mar/05	344173	1998/Mar/05
Bert 2	1	1996/Mar/05	344156	1998/Mar/05
Bert 20	1	1996/Mar/05	344174	1998/Mar/05
Bert 21	1	1996/Mar/05	344175	1998/Mar/05
Bert 22	1	1996/Mar/05	344176	1998/Mar/05
Bert 23	1	1996/Mar/05	344177	1998/Mar/05
Bert 24	1	1996/Mar/05	344178	1998/Mar/05
Bert 3	1	1996/Mar/05	344157	1998/Mar/05
Bert 4	1	1996/Mar/05	344158	1998/Mar/05
Bert 5	1	1996/Mar/05	344159	1998/Mar/05
Bert 6	1	1996/Mar/05	344160	1998/Mar/05
Bert 7	1	1996/Mar/05	344161	1998/Mar/05
Bert 8	1	1996/Mar/05	344162	1998/Mar/05
Bert 9	1	1996/Mar/05	344163	1998/Mar/05
Ken 1	1	1996/May/10	345886	1998/May/10
Ken 10	1	1996/May/10	345895	1998/May/10
Ken 11	1	1996/May/10	345896	1998/May/10
Ken 12	1	1996/May/10	345897	1998/May/10
Ken 13	1	1996/May/10	345898	1998/May/10
Ken 14	1	1996/May/10	345899	1998/May/10
Ken 15	1	1996/May/10	345900	1998/May/10
Ken 16	1	1996/May/10	345901	1998/May/10
Ken 17	1	1996/May/10	345902	1998/May/10
Ken 18	1	1996/May/10	345903	1998/May/10
Ken 19	1	1996/May/10	345904	1998/May/10
Ken 2	1	1996/May/10	345887	1998/May/10
Ken 20	1	1996/May/10	345905	1998/May/10
Ken 21	1	1996/May/10	345906	1998/May/10
Ken 22	1	1996/May/10	345907	1998/May/10
Ken 23	1	1996/May/10	345908	1998/May/10
Ken 24	1	1996/May/10	345909	1998/May/10
Ken 3	1	1996/May/10	345888	1998/May/10
Ken 4	1	1996/May/10	345889	1998/May/10
Ken 5	1	1996/May/10	345890	1998/May/10
Ken 6	1	1996/May/10	345891	1998/May/10
Ken 7	1	1996/May/10	345892	1998/May/10
Ken 8	1	1996/May/10	345893	1998/May/10
Ken 9	1	1996/May/10	345894	1998/May/10



#### **1.4 Summary of Work Performed**

In October and November, 1996, NuLite performed a limited field program on the Keystone Property. The company contracted Twin Mountain Enterprises of Whitehorse, Yukon to cut, chain and picket an eight kilometer baseline and chain and flag twenty, one kilometre cross lines. The baseline was cut to run at a bearing of 270° and the crosslines had a bearing of 90°. The cross lines were placed at 200 metre intervals at the mouth of Boulder and Delure Creeks. Between these two clumps of lines, the cross lines were placed at 100 metre intervals. Due to extreme weather conditions at the time, the six most easterly lines were not located. The grid location is plotted on Figure 3.

Over this grid, Amerok Geosciences Ltd. was contracted to do ground magnetic and VLF EM surveys. Due to extreme cold and snow conditions, the company only completed surveying six kilometres of the grid. The results are plotted on Figures 4, 5 and 6.

#### **2.0 REGIONAL GEOLOGY AND MINERALIZATION (Figure 7)**

Thibert Creek lies along the northeastern boundary of the Atlin Terrane which is a fault bounded area of Upper Paleozoic Rocks. Many sections of this fault boundary, including the Thibert Creek area, are marked by small ultramafic bodies. Structural evidence suggests that the Atlin Terrane is a sheet of oceanic crust, thrust over the Triassic sediments and volcanics. The Thibert Creek fault is a large regional thrust fault which extends as far north as the Teslin Fault in the southern Yukon. The fault dips to the south with the Atlin Terrane ultramafics and the Paleozoic sediments thrust over the Triassic sediments and volcanics.

##### **2.1 Kedaha Formation (Mississippian to Permian)**

This formation consists of very schistose quartzite and lesser black, platy argillite. The strike of the well developed foliation roughly parallels that of the Thibert Creek Fault. The schistosity generally dips 60 to 70 degrees south. Immediately south of the Thibert fault, a 200m to 400 metre band of these rocks contain numerous coarse-grained white quartz lenses and veins

##### **2.2 Nazcha Formation (Upper Triassic)**

This formation lies to the northwest of this property. It consist of fine grained, well bedded light grey sandstone with vaying but significant amount of black argillaceous rocks.

##### **2.3 Shonektaw Formation (Upper Triassic)**

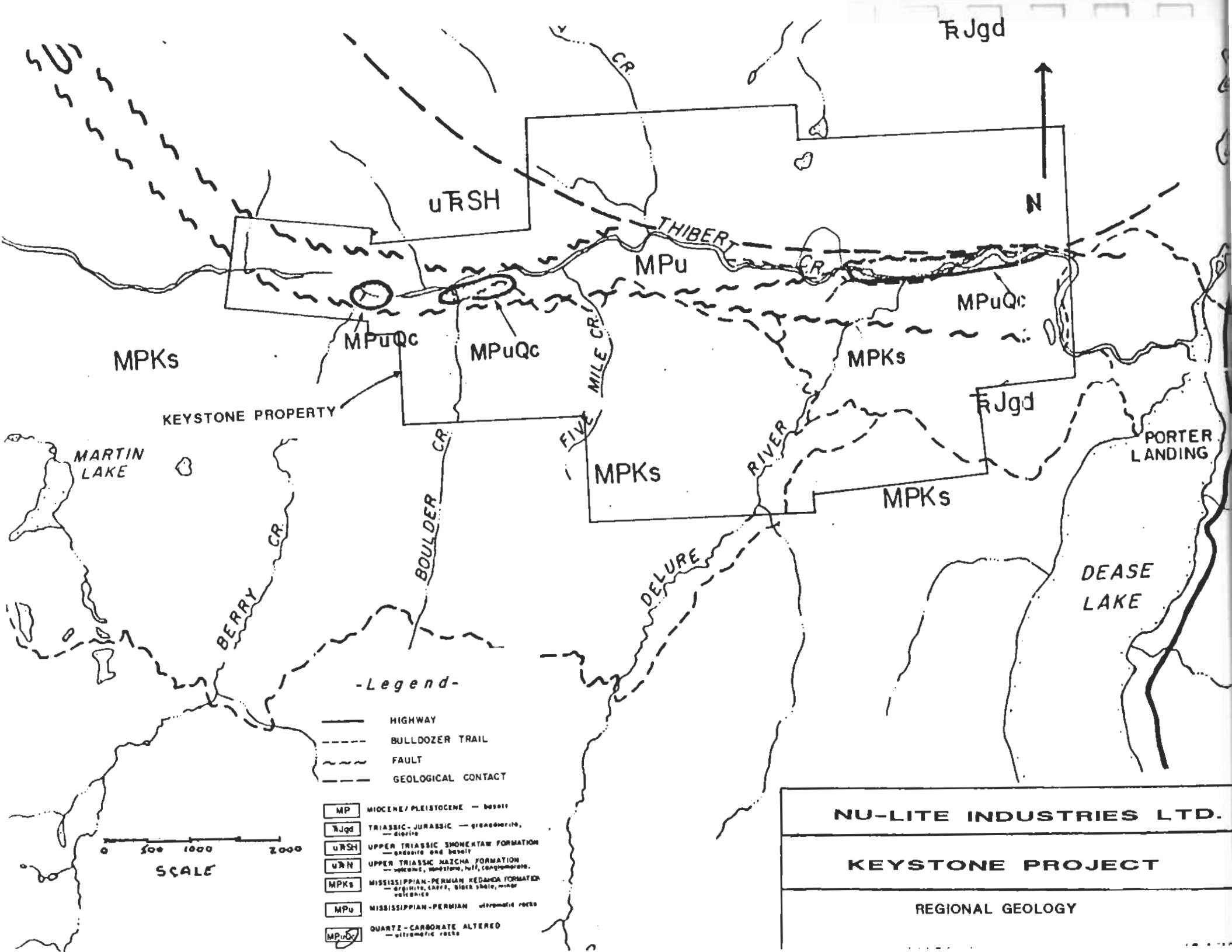
This formation occurs in the northern portion of the property, north of the Thibert Creek fault. It consist of augite andesite and basalt.

##### **2.4 Ultramafic (Mississippian to Permian)**

Ultramafic rocks in the Atlin Terrane have been divided into three types; elongate bodies occurring along the fault contacts, equidimensional bodies within the atlin Terrane and bodies associated with Permo-Triassic volcanism at the northwestern end of the Terrane.

At Thibert Creek, the ultramafics appear to form elongate bodies or thin slices along the Thibert Creek fault. On the property, the rocks have been subdivided into three types:

- a) unaltered, fine grained, black peridotite
- b) serpentinite
- c) quartz-carbonate-mariposite altered rock (Listwaenite)



R Jgd



uTRSH

MPu

MPuQc

MPKs

MPuQc

MPuQc

MPKs

KEYSTONE PROPERTY

R Jgd

MARTIN LAKE

PORTER LANDING

MPKs

MPKs

DEASE LAKE

BERRY CR.

BOULDER CR.

FIVE MILE CR.

DELURE RIVER

-Legend-

- HIGHWAY
- BULLDOZER TRAIL
- FAULT
- GEOLOGICAL CONTACT

- MIOCENE/PLEISTOCENE — basalt
- TRIASSIC-JURASSIC — granodiorite, diorite
- UPPER TRIASSIC SMOKE-TAW FORMATION — andesite and basalt
- UPPER TRIASSIC NAZCHA FORMATION — volcanic, sandstone, silt, conglomerate
- MISSISSIPPIAN-PERMIAN KEDACHA FORMATION — argillite, siltst., black shale, minor volcanics
- MISSISSIPPIAN-PERMIAN ultramafic rocks
- QUARTZ-CARBONATE ALTERED ultramafic rocks



NU-LITE INDUSTRIES LTD.

KEYSTONE PROJECT

REGIONAL GEOLOGY

a) Peridotite

Small pockets of unaltered peridotite are found in the bluffs along Thibert Creek. The unaltered peridotite forms a very small portion of the total amount of ultramafic as most of the rock has been either altered to serpentinite or listwaenite.

b) Serpentinite

Dark green waxy serpentinite comprises a significant portion of the ultramafic rocks in the region.

c) Quartz-carbonate-mariposite altered rocks

These rocks form rusty bluffs along the north shore of Thibert Creek. Silica appears to be the predominant alteration element in the rocks. Emerald green mariposite is present in variable amounts. Small amounts of calcite and whitish carbonate are also present.

Outcrops of this rock form distinctive bluffs, stained bright orange with goethite. The outcrops are also often laced with abundant quartz veinlets generally less than 1cm thick. Only trace amounts of pyrite is seen in these veins.

## 2.5 Granodiorite (Late Triassic to Early Jurassic)

Granitic rocks, including biotite-hornblende quartz diorite, granodiorite, quartz monzonite and diorite intrude country rock in the northern portions of the property.

## 2.6 Mineralization

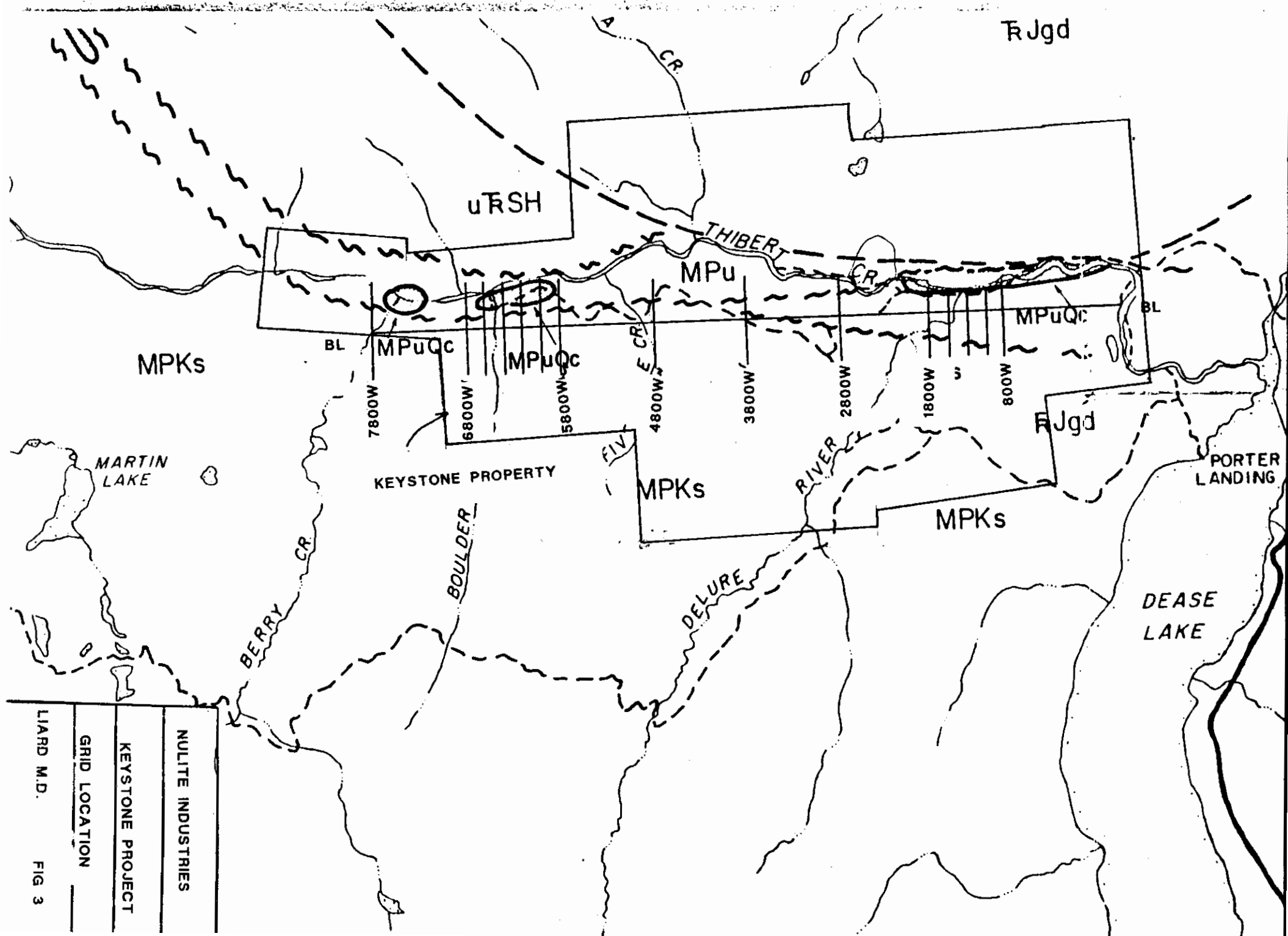
Placer gold has been recorded as mined in the Thibert Creek drainage since the mid 18850s. Quartz veins within the highly altered ultramafic bluffs have been extensively sampled by Noranda Mines in 1983 and others with only nominal success. Sampling demonstrated that the ultramafic rocks were not the source of the placer gold.

The 1931 Minister of Mines Report documented that a forty foot trench in the footwall shales and sediments south of Thibert Creek, reported gold values of \$5.50 per ton. This value in 1931 translates to an average grade of 0.25 ounces gold per ton. Diamond drilling by Equity Silver Mines, of this zone in 1987, reported a veined black shale unit which carried 360 ppb gold over a 19 foot interval. This interval was later run for metallics in Equity Silver's assay lab and assayed at 0.25 ounces gold per ton (personal communication).

The areas of gold mineralization appear to be hosted by quartz veins and stringers in the footwall shales at Thibert Creek. Rather than hosting the gold mineralization, the areas of extensive quartz-carbonate alteration within the ultramafic rocks appear to indicated the locations of gold mineralization within the underlying rocks.

## 3.0 LINECUTTING

Twin Mountain Enterprises, of Whitehorse was contracted to cut, survey and picket eight kilometres of baseline and survey and flag twenty kilometres of cross lines. Due to heavy snow conditions and cold weather, the surveyors were only able to mark out the baseline plus fourteen kilometres of baselines. The baseline was cut to strike 270° and the crosslines were surveyed to strike 180°. The surveyed grid is plotted on Figure 3.



LIARD M.D.      FIG 3

GRID LOCATION

KEYSTONE PROJECT

NULITE INDUSTRIES

#### **4.0 GROUND GEOPHYSICS**

Amerok Geosciences Ltd were contracted to conduct geophysical surveys over the grid. The surveys consisted of total field magnetics and VLF EM. The technical details of this survey is documented in Appendix 1. Due to extreme cold temperatures (-40) the survey crew was only able to complete six kilometres of the survey.

##### **4.1 Magnetics**

The total field magnetics are shown in Figure 4. The magnetic field survey located a strong magnetic high striking roughly 90° and parallel to the trend of the Thibert Creek Fault. The magnetic high is mapping the location of the ultramafic rocks within the thrust fault slice.

##### **4.2 VLF EM**

Several conductors striking roughly 60° were detected by the survey; these are labeled A1 to A4 on the plots (Figures 5 & 6). The location of conductor A3 is ambiguous; the others are well defined. The conductors strike oblique to the regional trend apparent in the magnetic field data. The VLF conductors appear to indicate subsidiary faults to the main Thibert Creek fault. It is expected that these conductors reflect structures which host the gold mineralization at Thibert Creek.

#### **5.0 REFERENCES**

Wallis, J.E., 1989: 1987 Exploration program on the Thibert Property, Assessment Report

Gorc, D. and MacArthur, R.: Geology, Rock and Soil Geochemistry, Thibert Creek Property, Assessment Report.

B.C. Minister of Mines, Annual Report 1931, Pg. A53

**TABLE OF EXPENDITURES**

Linecutting (Twin Mountain Enterprises invoice)	\$18,885.22
Geophysics (Amerok Geosciences Ltd invoice)	\$ 7,816.35
Report	\$ 1,000.00
<b>Total Expenditure</b>	<b>\$27,701.57</b>

**APPENDIX A**

## MEMORANDUM

**AMEROK GEOSCIENCES LTD.**

Site 6, Comp 11

Whitehorse, Yukon

Y1A 5V8

(403) 668-7672 (Phone/Fax)

amerok@yknet.yk.ca

November 27, 1996

File: 96-43

**To:** John Kowalchuk  
Nu-Lite Industries Ltd.

**From:** Mike Power

**Re:** Keystone Project - Mag/VLF Survey

---

This memorandum is a field report describing a total magnetic field and VLF-EM survey conducted at the Keystone Property on Thibert Creek from November 13-20, 1996.

**a. Crew and Equipment.** Amerok Geosciences Ltd. provided a two man crew consisting of Phil Chidgzey (Crew Chief) and Tom Plunkett (Technician). They were equipped with a pair of Omni Plus magnetometer / VLF receivers, an Omni IV base station magnetometer, computer, camp, snowmobile and 4x4 truck.

**b. Survey specifications.** The survey was performed on a flagged survey grid with survey lines turned from a cut base line oriented at  $270^{\circ} / 90^{\circ}$ . Readings were taken at a 12.5 m station spacing along the survey lines. The Cutler, Maine VLF transmitter (Station NAA - 24.0 KHz) was used as the primary transmitter for the VLF survey. The station had an average apparent azimuth of  $100^{\circ}$  on the survey grid. Readings of the VLF in-phase and quadrature components and the total field strength were recorded in the field receivers and dumped to the computer at the end of the survey day. The total magnetic field survey was performed simultaneously with the VLF survey. The base station magnetometer was installed near the camp on the survey grid and cycled at a 30 s interval throughout the survey. Maximum temporal geomagnetic variation was less than 80 nT over the entire period of the survey and all temporal geomagnetic variation has been removed from the field data. Survey production was very poor on this survey due to very cold temperatures (to  $-40^{\circ}$  C) and very treacherous footing created by ice beneath the snow pack.

**c. Results and preliminary interpretation.** The VLF data quality was good over much of the grid with the exception of line 6200W where signals are choppy; there were no problems with the magnetic field data. The digital data is appended to this report in ASCII XYZ format. The data has been registered to UTM coordinates using the GPS

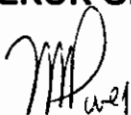


surveyed location of one point on the grid (average of 25 readings) and the known azimuth of the base line. The following plots were prepared at 1:3,000 and are appended to this report:

- Total magnetic field colour contour map
- VLF-EM stacked profile map with conductor axes.
- VLF-EM Fraser filtered in-phase component colour contour map

The Fraser filtered data was trend rotated along an azimuth of 60° to parallel the trend of several apparent multiple line anomalies. The magnetic field data was not trend rotated as the apparent azimuth of the magnetic trend in the profile data is parallel to the base line. The Omni Plus series of VLF receivers produces cross-overs which are positive to negative moving from south to north along the survey lines. The cross-overs may be superimposed on a long wavelength regional base level caused by topographic effect. Several conductors striking roughly 60° were detected by the survey; these are labelled **A1** to **A4** on the plots. The location of conductor **A3** is ambiguous; the others are well defined in both the Fraser filter and stacked profile plots. The conductors strike oblique to the regional trend apparent in the magnetic field data. The magnetic field survey located a strong magnetic high striking roughly 90° and parallel to the trend of an inferred regional fault along Thibert Creek. The VLF conductors have the orientation expected of subsidiary faults within an oblique slip fault zone with both strike and dip slip components of displacement. There is no strong indication of any response from a master fault in the vicinity of the magnetic field high but the VLF responses in the area of the magnetic field are ambiguous.

Respectfully submitted,  
**AMEROK GEOSCIENCES LTD.**



M.A. Power M.Sc. P.Geo.  
Geophysicist



**APPENDIX B**

**TWIN MOUNTAIN ENTERPRISES LTD.**

P.O. Box 4006, Whitehorse, Yukon

Phone: (403) 667-7480 Fax: (403) 633-6954

**KENRICH MINING CORPORATION**

#910 - 510 Burrard Street  
Vancouver, B.C. V6C 3A8

November 6, 1996

**INVOICE**

**RE: LINECUTTING - THIBERT CREEK  
Dease Lake Area, B.C.**

Oct. 8 <sup>th</sup>	4 man crew traveling @ \$160.00 each per day [at cost]	\$640.00
Oct. 9 <sup>th</sup> - 20 <sup>th</sup>	4 man crew @ \$260.00 each per day For Twelve (12) days	\$12,480.00
Oct. 21 <sup>st</sup>	4 man crew traveling @ \$160.00 each per day [at cost]	\$640.00
	Vehicle charge for round trip From Whitehorse, Yukon to Dease Lake, B.C.	\$700.00
	Vehicle Charge for Job Use @ \$60.00 per day For Twelve (12) days	\$720.00
	<b>SUBTOTAL:</b>	<b>\$15,180.00</b>
	<b>GST:</b>	<b><u>1,062.60</u></b>
	Fuel, Groceries, Accommodation At Cost - GST included - Receipts Attached	\$2,642.62
	Truck Repair - Body Work (\$1,341.25) At Cost - GST included - Receipt Attached	N/C
	Truck Repair - Front end & Steering (\$991.11) ½ Cost - GST included - Receipt Attached	N/C

**TOTAL INVOICE:**

**\$18,885.22**

John, the truck repairs totaled \$2,332.36. Thank you for covering the trip and day rate.

Bob.

JE152

PO Jan 20/97  
KRC # 1635



# Amerok Geosciences Ltd.

Site 6, Comp 11  
Whitehorse, Yukon  
Y1A 5V8  
Phone/fax: (403) 668-7672  
amerok@yknet.yk.ca

## INVOICE

GST No.: RT89493 8588  
File: 96-43

Invoice 96105  
November 27, 1996

In account with: **Nu-Lite Industries Ltd.**  
910-510 Burrard Street  
Vancouver B.C. V6C 3A8

Re: **Keystone Mag/VLF survey**  
November 13-20, 1996 inclusive

All charges per Contract of October 10, 1996.

### Survey Services:

Mobe/demobe	2,500.00
Survey: 2.0 days @ \$1,120	2,240.00
Standby: 2.0 days @ \$790	1,580.00
Survival day (weather): 1.0 day @ \$580	580.00

### Professional services:

Field report: 6.0 hrs @ \$55	330.00
Plotting: 2 colour plots @ \$30, 1 line plot @ \$15	<u>75.00</u>

Subtotal **\$7,305.00**

Federal GST 511.35

**\$7,816.35**

less advance 4,000.00

**TOTAL \$3,816.35**

Terms: Net 30 days. Interest charged at 2% per month on overdue accounts



## AMEROK GEOSCIENCES LTD.

### PROJECT LOG KEYSTONE PROJECT - MAG/VLF SURVEY NOVEMBER 13-20, 1996

Wed 13 Nov 96      Check and prepare equipment.

Thurs 14 Nov 96    Crew leaves Whitehorse at 5AM, meet Ed Asp at Dease River, mobe into property by CAT, arrived at cabin on west end of grid after dark.

Fri 15 Nov 96      Cut wood, set up camp; extremely cold (no survey).

Sat 16 Nov 96      Surveyed on west end of grid.

Sun 17 Nov 96      Surveyed on west end of grid.

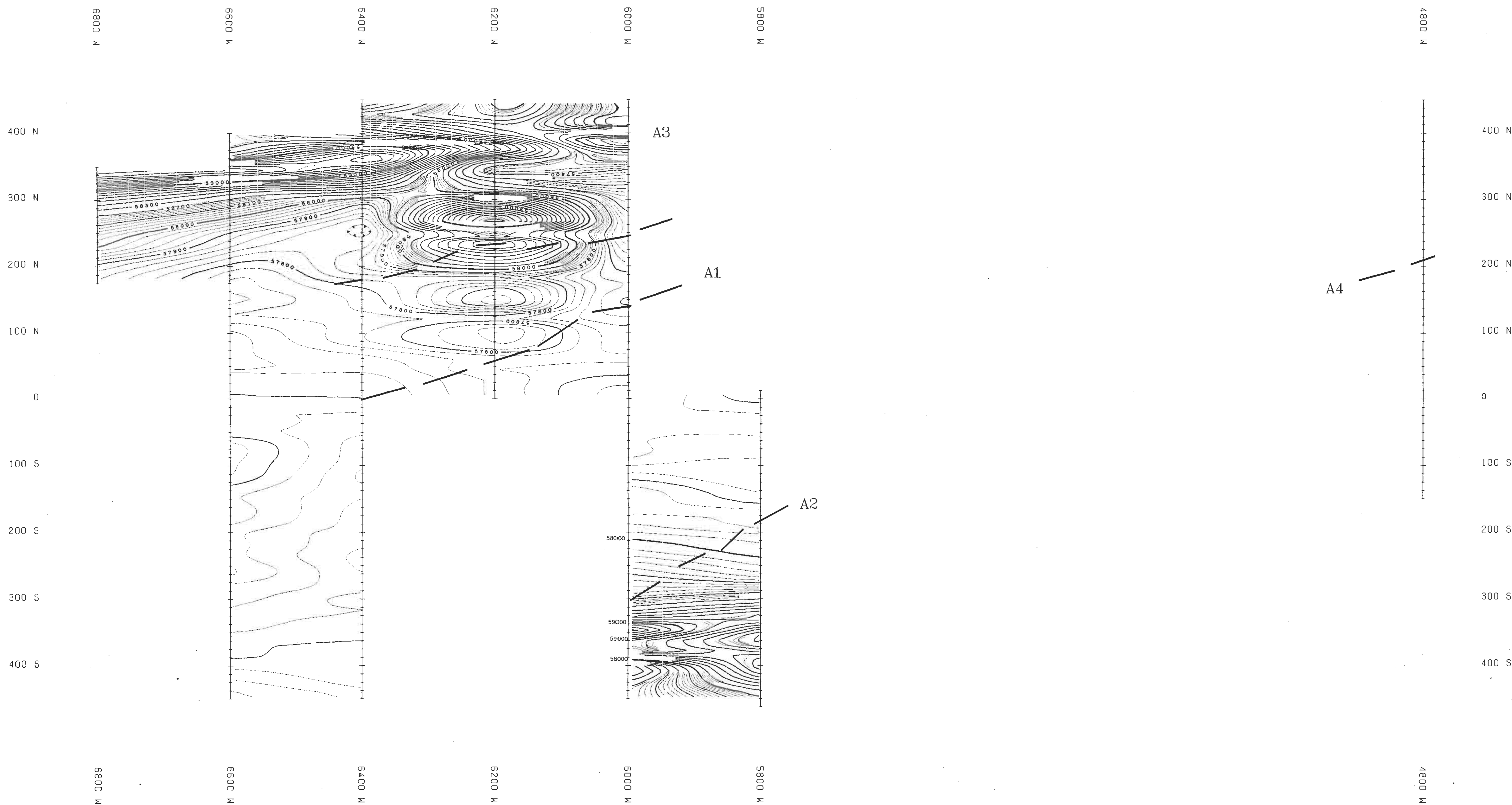
Mon 18 Nov 96      Station down in AM, cut wood, fix snowmobile; survey in PM.

Tues 19 Nov 96     Pack up; wait for CAT, unable to start CAT, demobe to Dease Lake by helicopter.

Wed 20 Nov 96      Demobe to Whitehorse

#### Summary:

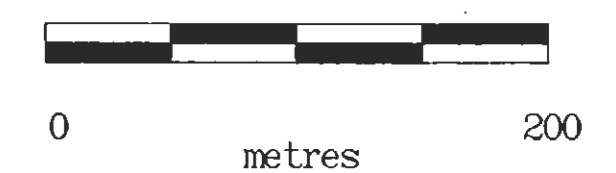
Mobe/demobe:      3.0 days  
Survey:             2.0 days  
Standby:            3.0 days



GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

24,902

CONTOURS: 20, 100, 1000 nT



Scale: 1:3,000

NU-LITE INDUSTRIES LTD.

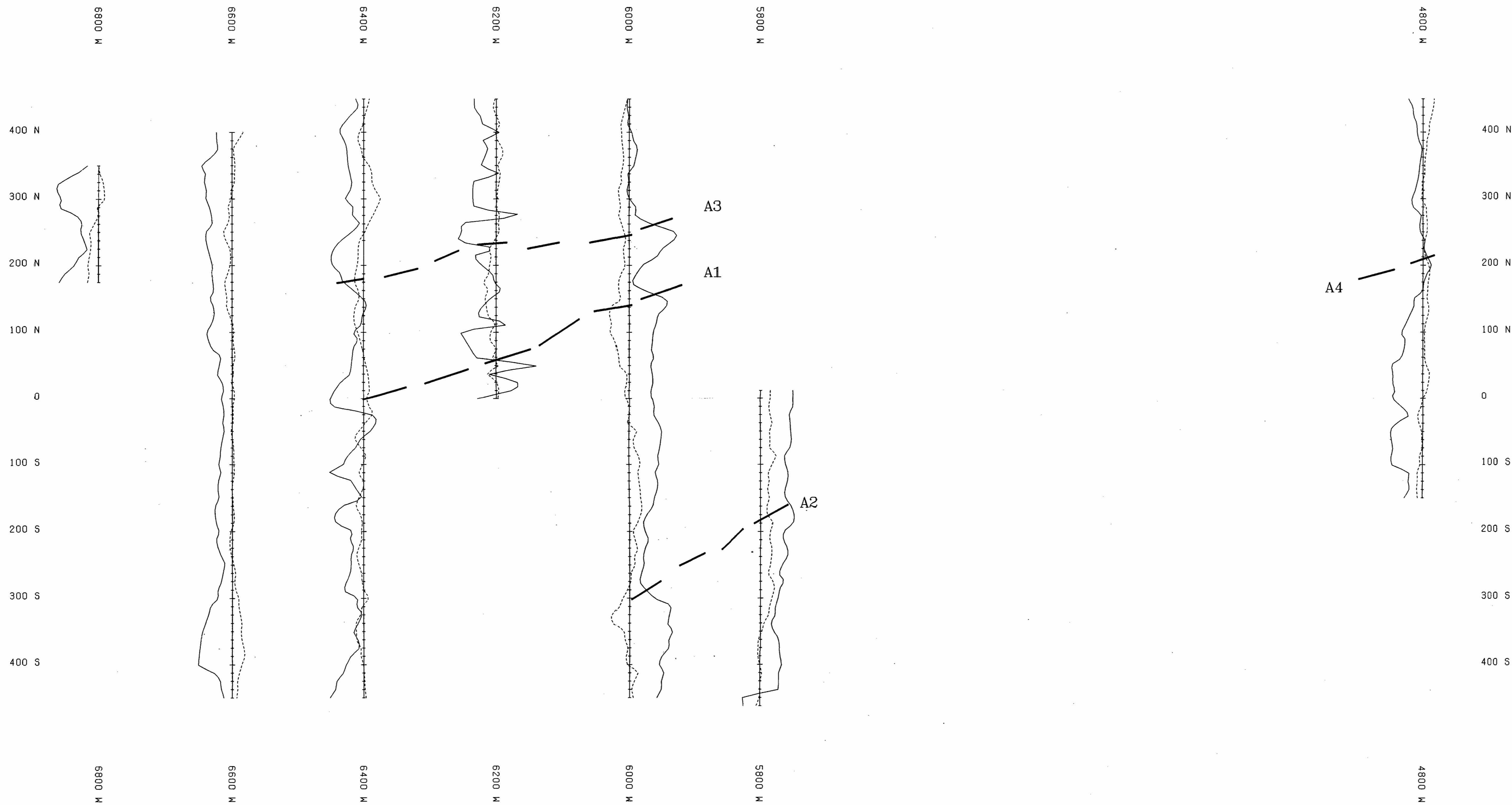
KEYSTONE PROPERTY

TOTAL MAGNETIC FIELD

CONTOUR MAP

FIG 4

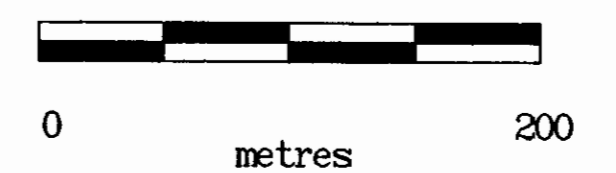
AMEROK GEOSCIENCES LTD.



GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

24,902

Vertical scale: 1cm=20% Hz  
(Right positive)



Scale: 1:3,000

NU-LITE INDUSTRIES LTD.

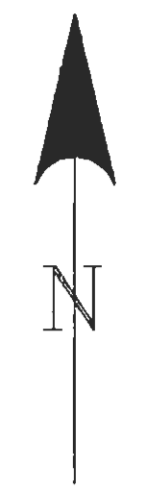
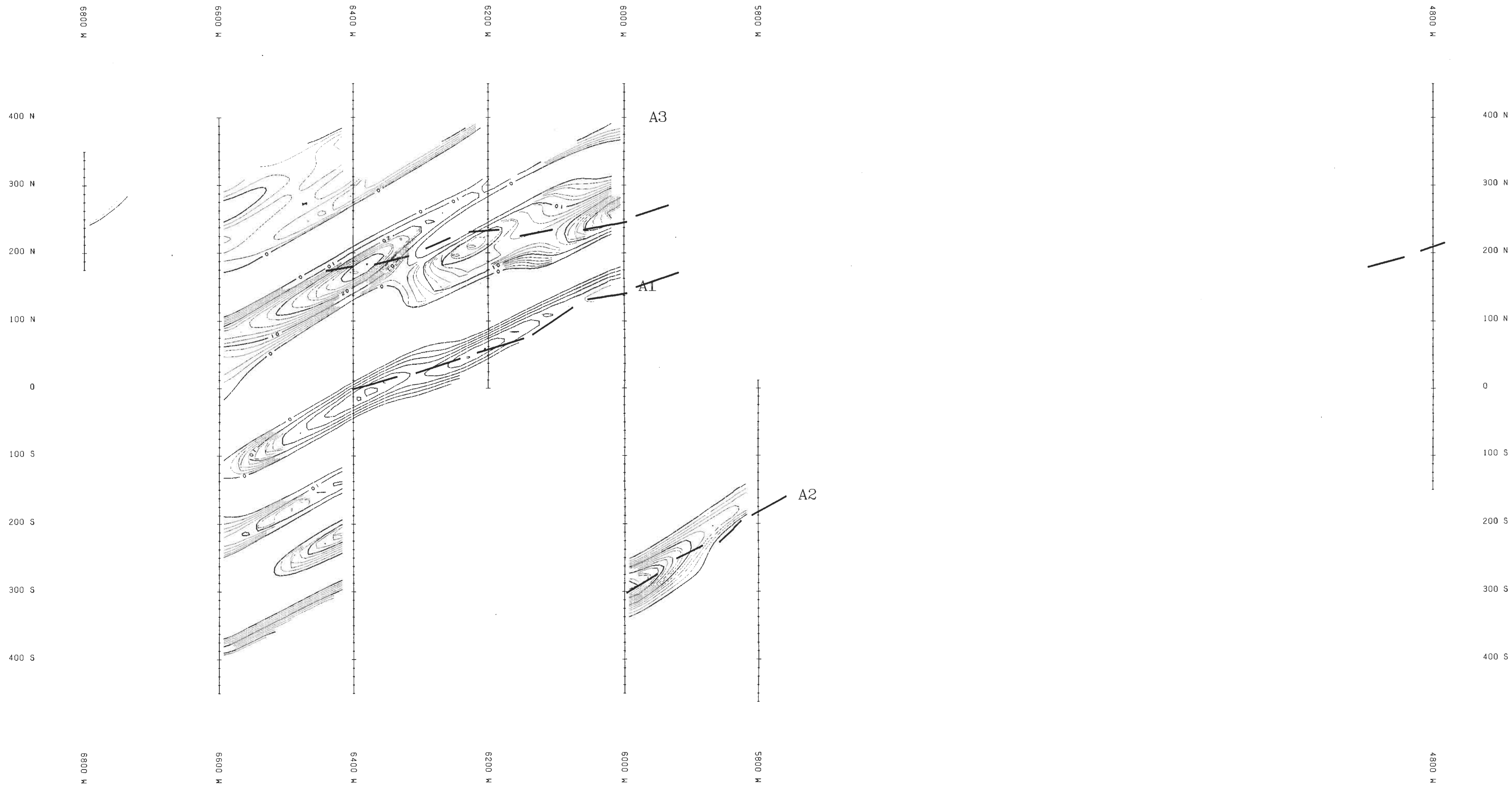
KEYSTONE PROPERTY

VLF-EM SURVEY

STACKED PROFILES

FIG 5

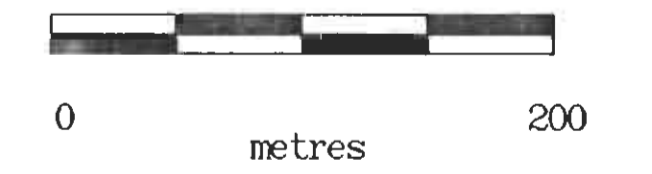
AMEROK GEOSCIENCES LTD.



GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

24,902

Contour interval: 2% Hz



Scale: 1:3,000

NU-LITE INDUSTRIES LTD.  
KEYSTONE PROPERTY  
VLF-EM SURVEY  
FRASER FILTERED IN-PHASE

FIG 6

AMEROK GEOSCIENCES LTD.