

KAMLOOPS

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87-361-16128



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S) GEOPHYSICAL	TOTAL COST \$14,200.00
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AUTHOR(S) Alfred R. Allen SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED June 12, 1987 YEAR OF WORK 1987

PROPERTY NAME(S) STEVENSON CREEK

COMMODITIES PRESENT

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION Similkameen NTS 92H/7E

LATITUDE 49° 24.3' LONGITUDE 120° 34.8'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

P.L. 18977-19000

OWNER(S) (1) Key Diversified Mining Corp. (2)

MAILING ADDRESS

P.O. Box 313 Maple Ridge, B.C. V2X 7G2

FILMED

OPERATOR(S) (that is, Company paying for the work)

(1) Key Diversified Mining Corp. (2)

MAILING ADDRESS

same - as above

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude): The placer lease area is -lain by Upper Triassic Nicola Group argillite and andesite schist with Miocene shale, sandstone and coal seams.

To the northwest at higher elevation massive peridotite, pyroxenite and gabbro

GEOLOGICAL BRANCH ASSESSMENT REPORT

REFERENCES TO PREVIOUS WORK

16.128

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MAPS:

1. Location
2. Placer Leases
3. Placer Leases and New Mineral Discoveries
4. Magnetometer Survey - 3 sheets

\* \* \* \* \*

#### A. INTRODUCTION

Arrangements were made with Mr. E. La Rose and Mr. R. Phillips, president of Key Diversified Metals Corporation, to conduct a magnetometer survey over the 24 placer leases. Scintrex IGS-2 Control Console and MP-4, ULF-4 Sensors were used for the survey over 66 kilometres of surveyed grid.

The writer inspected the project April 7,8,9, 1987 and this report and interpretation of field results are based on print-outs and maps of grids 1, 2 and 3.

#### B. LOCATION AND ACCESSIBILITY

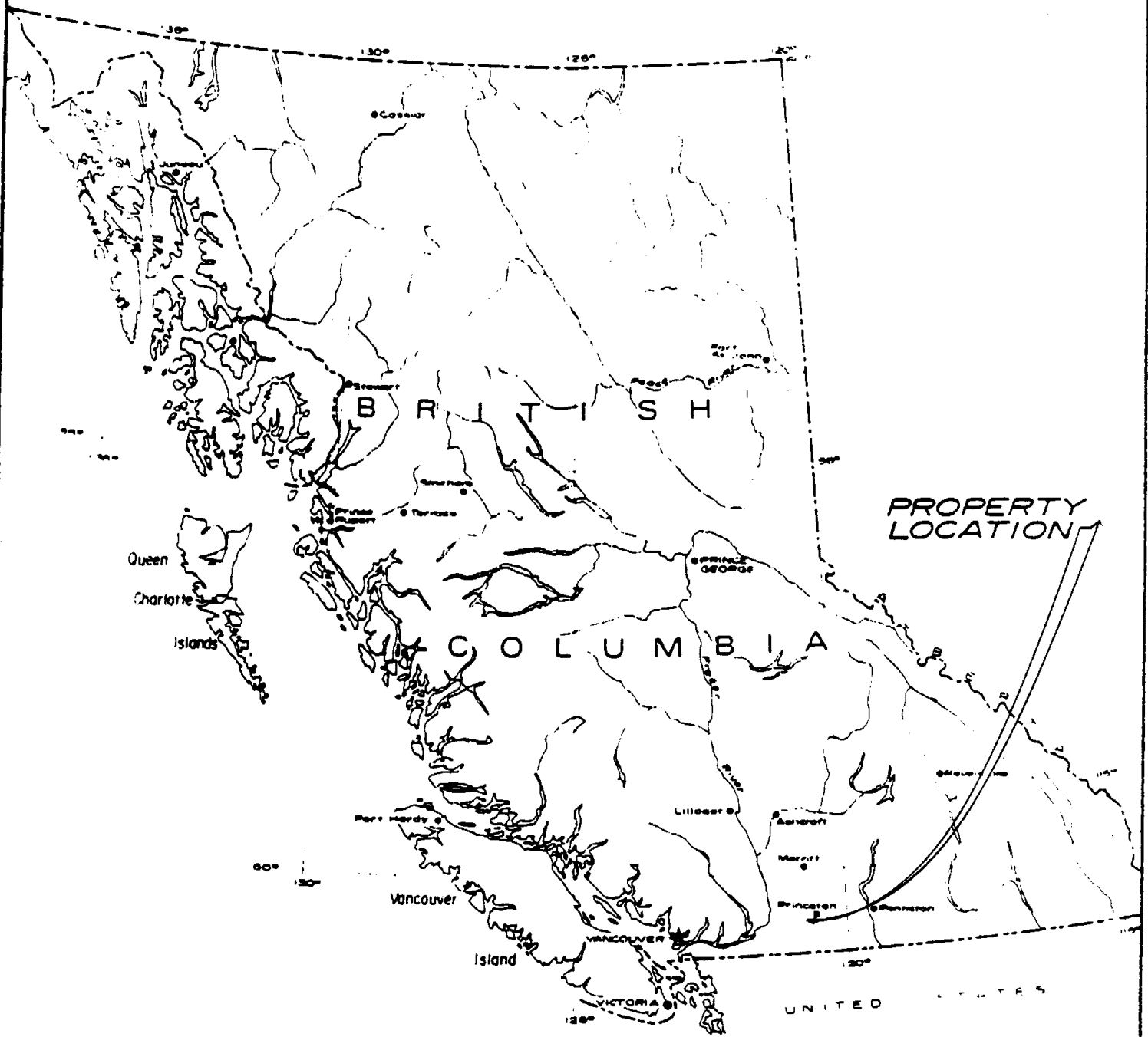
The property is located 5 kilometres, via Highway #3, southerly from Princeton, B.C.

The northwest corner is located  $1\frac{1}{2}$  kilometres south of the Tulameen River and  $2\frac{3}{4}$  kilometres west of the Similkameen River.

#### C. PROPERTY

The following Placer Leases are held by Key Diversified Metals Corporation in the Similkameen Mining Division.

P.L. 18977 to 19000 inclusive in the "Y" category  
The total leased area is 1,200 hectares.



KEY DIVERSIFIED METALS CORP.

LOCATION MAP

SCALE: 1" = 136 MILES

Drawn by	Date
	6/1987
Checked by	Org no.
220	1

ALLEN GEOLOGICAL  
ENGINEERING LTD

#### D. PHYSIOGRAPHY

The placer leases are located in a V-shaped area between the Similkameen and Tulameen Rivers, between 914 and 1036 metres above sea level.

Bromley Creek heads at 1525 metres elevation and flows east across the property into the Similkameen River at 716 metres elevation.

Stevenson Creek heads near the west boundary of the property and flows southeasterly through Stevenson and other small lakes southeasterly into the Similkameen River at an elevation of 750 metres above sea level.

Lamont Creek heads at an elevation of 1300 metres, and joined by Dalby Creek, flows into Whipsaw Creek and the Similkameen River below the south boundary of the property.

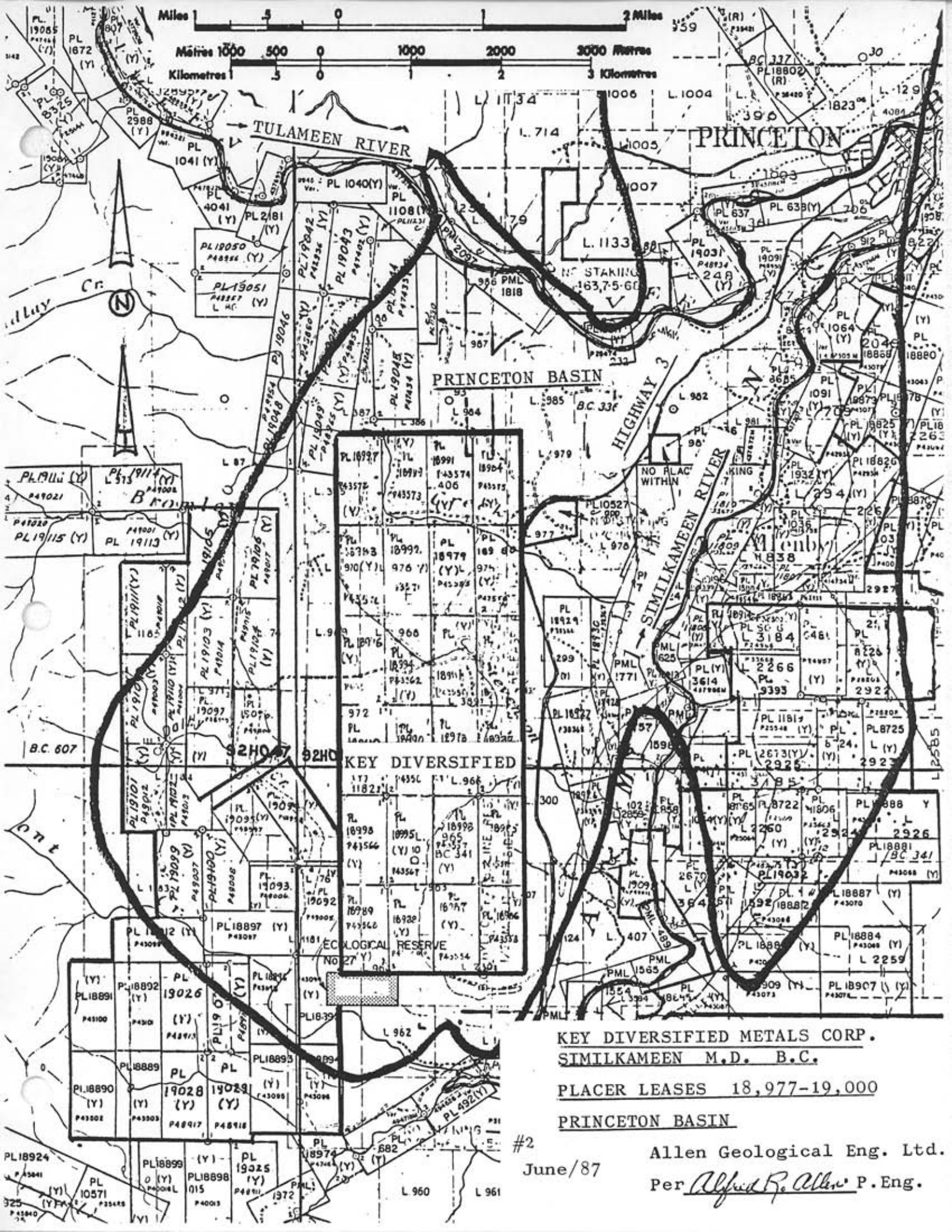
On the southern third of the property, Tracey Lake drains southeast through the property into the Similkameen River.

#### E. HISTORY OF THE AREA

In 1860 the presence of placer gold had been established in the river gravels and benches of the Similkameen River.

The settlement of Blackfoot housed about 100 white and Chinese miners who worked in the area of Kreuger's bar and Allenby.

Rich gold and platinum discoveries were made on the Tulameen River and Granite Creek, and in 1910, Charles Camsell of the Canadian Geological Survey provided a detailed report on the district. Additional studies were provided by Poitevin in 1923 and Raicevic, Cabri and others.



**KEY DIVERSIFIED**

ECOLOGICAL RESERVE  
NO 27

**KEY DIVERSIFIED METALS CORP.**  
**SIMILKAMEEN M.D. B.C.**  
**PLACER LEASES 18,977-19,000**  
**PRINCETON BASIN**

#2  
 June/87  
 Allen Geological Eng. Ltd.  
 Per *Alfred R. Allen* P. Eng.

In recent years gold and platinum have been recovered from gravels on the Rosch ranch 1,750 metres east and across the Similkameen River from the Key Diversified leases.

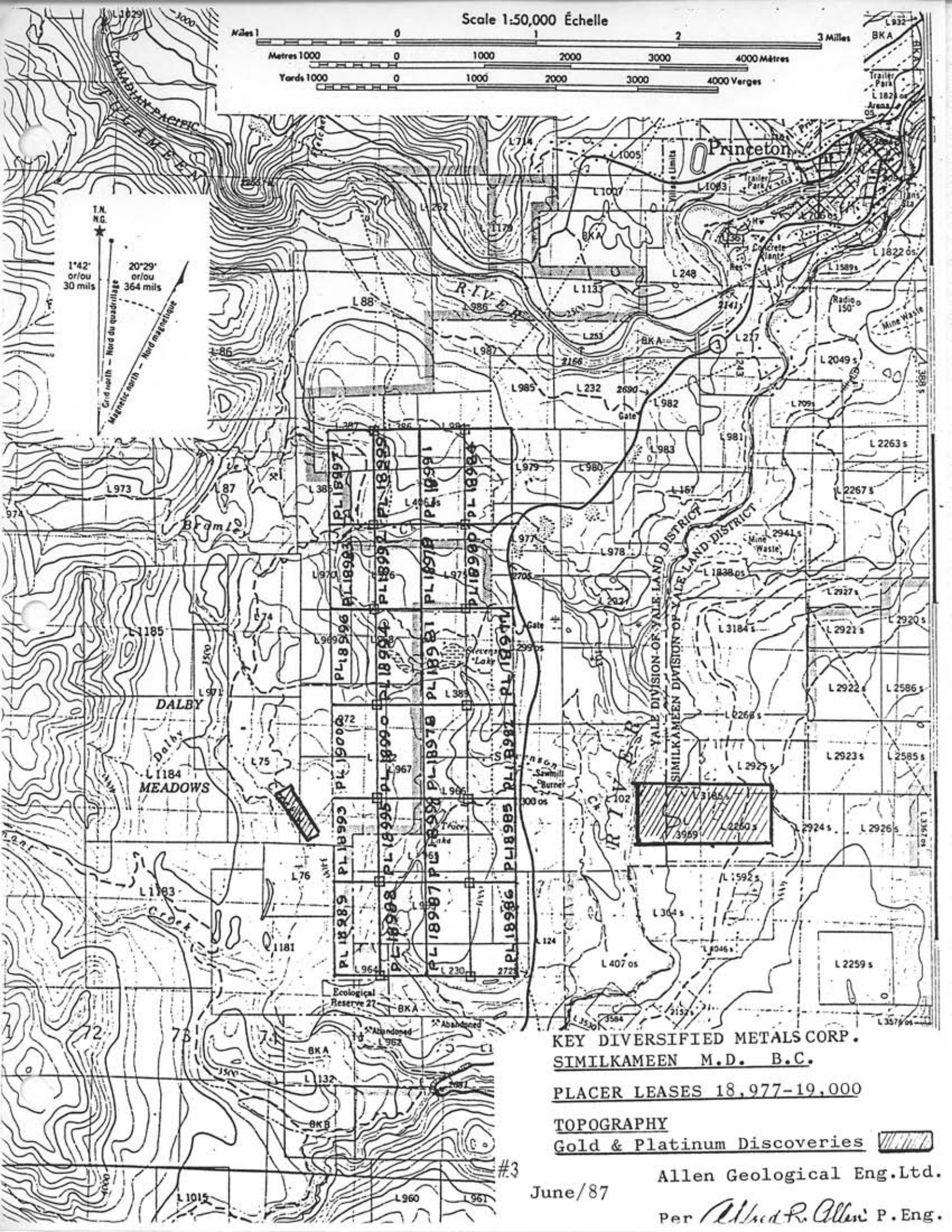
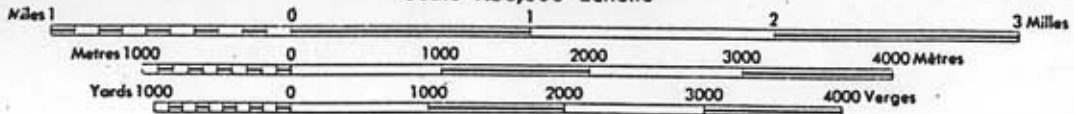
Kettle River Resources Ltd. and G.L.F. Technologies (79) Ltd. have bulk sampled the Rosch ranch property and commissioned a report entitled "Evaluation of Precious Metal Content in Placer Leases in the Similkameen Mining District" provided by Wright Engineers Ltd of Vancouver.

Kettle River Resources Ltd. has also conducted mill tests and additional surface investigations.

Recently a news release advises that a river channel has been outlined about seven feet below the surface which contains coarse grained platinum and gold nuggets.

In addition Blackberry Resources have reported the exposure of an ancient river channel containing fine to nugget size gold and platinum. This is located in the Dalby Creek area just west of the west boundary of the Key Diversified Metals Corporation southern leases.


Scale 1:50,000 Échelle



KEY DIVERSIFIED METALS CORP.  
SIMILKAMEEN M.D. B.C.

PLACER LEASES 18,977-19,000

TOPOGRAPHY

Gold & Platinum Discoveries 

#3

June/87

Allen Geological Eng. Ltd.

Per *Allen R. Allen* P. Eng.



## F. GEOLOGY

The Princeton-Tulameen area is underlain by Upper Triassic andesite, basalt, tuff, argillite and limestone.

An ultrabasic intrusive complex is exposed from the valley of Granite Creek northwesterly over Lodestone Mountain and across the Tulameen River and Grasshopper Mountain.

It is composed of peridotite, pyroxenite, dunite, chromite, serpentine and gabbro, platinum, platinum group elements and magnetite.

A wide band of Coast Range granitic intrusives outcrops on the west side of the ultrabasic complex. Younger granitic intrusives outcrop north of Tulameen and south of Allenby associated with the Copper Mountain intrusives composed of augite, gabbro diorite and pegmatite.

The Princeton Basin extends from the confluence of Whipsaw Creek and the Similkameen River northerly for 25 kilometres. Included are Miocene or earlier light coloured slate, sandstone, conglomerate and coal seams, underlain by andesite and basalt.

The Princeton Basin is over 7 kilometres wide south of the town of Princeton where

A smaller basin is located between Tulameen and Blakeburn, and another 16 kilometres southerly from Whipsaw Creek on the west side of the Similkameen River.

### G. THEORY

Across the Similkameen River, east of the Key Diversified placer leases, gold, platinum and platinum group elements have been discovered on and around the Rosch ranch, well above river level.

The fine-grained minerals have been compared with the Tulameen deposits and a common origin has been suggested, should they have been transported by erosional agencies easterly and settled in the Princeton basin.

The discoveries of gold and the platinum group metals on adjoining properties, both east and west of the Key Diversified Metals leases, supports the theory that the similar precious metals may occur thereon.

### H. OBJECT OF THE FIELD SURVEY

The location of the twenty-four placer leases for Key Diversified Metals Corporation was based on the premise that the discovery of gold and platinum values on the nearby Rosch property and adjoining leases, provided a new dimension to the precious metal potential of the Princeton Basin area.

I. GRID SURVEY OVER THE PROPERTY

A grid was surveyed by hip-chain and compass over the twenty-four placer leases November 9-16, 1986.

The leased area was divided into three sections of eight leases each.

From east-west base lines centrally located across each section north-south lines were established at 200 metre intervals, and stations set at 25 meter intervals along each line.

J. MAGNETOMETER SURVEY

A magnetometer survey was conducted over the twenty-four leases, March 29 - April 13, 1987.

The automated Scintrex IGS-2 Portable System, Control Console and MP-4 sensor was used to provide magnetic determinations and all ancillary data at each station.

Survey results are shown on accompanying contoured sheets Grid 1, 2 and 3.

K. INTERPRETATIONGRID #1

The northeast and north central areas registered the strongest magnetic responses, as follows:

At: L0 - 7N: 1511, a "spot" high

1A 1409 - 1470 range

1B 1408 - 1453 "

1C 1415 1486 "

1D 1301 - 1396

1E 1301 - 1392

1F 1304 - 1442

1G 1335 - 1344

1H 1313 - 1348

1I 1306 - 1363

1J 1308 - 1327

1K 1359 - 1387

1L 1306 - 1351

GRID #2

The grid area registered from 900 to 1100 range

GRID #3

The grid area registered from 783 to 1000 range

L. SUMMARY

Twenty-four placer leases are held by Key Diversified Metals Corporation five kilometres south of Princeton, B.C., on the west side of the Similkameen River.

Placer gold has been mined from the Similkameen and Tulameen rivers and their tributaries since the 1860's.

Gold and platinum were discovered in overburden and buried channels on the east side of the Tulameen River opposite the Key Diversified Metals Corporation leases. Also, fine to nugget-sized gold and platinum has been discovered in a buried channel adjacent to the west boundary of the leases.

The gold and platinum and other minerals in these recent discoveries closely resembles the precious metals of the Tulameen area. It is possible that these metals have been derived from the massive ultrabasic complex of the Tulameen area and transported easterly to be deposited in the Princeton Basin.

It is concluded that the Key Diversified Metals Corporation placer property is located in a prime area for the occurrence of gold and platinum and therefore warrants a detailed exploration program.

The magnetometer survey recently completed indicated anomalous areas on the northern one-third of the leased area warranting thorough investigation.

M. RECOMMENDATIONS

The following field program is recommended on the anomalous areas indicated on the northern leases for the property.

	<u>Estimated Costs</u>
1. Conduct detailed magnetometer surveys on 50m by 15m grids over areas 1A, 1B and 1C,	\$ 8,000.00
2. Conduct seismic tests to determine bedrock depth over selected areas,	8,000.00
3. Conduct a conductivity survey over selected areas to detect granular targets, using Geonics EM-31 instrumentation,	8,000.00
4. Excavate to bedrock to provide detailed information regarding the character and precious metals content of the overburden,	20,000.00
5. Sample and assay for gold and platinum group,	2,000.00
6. Field office, overhead and supervision,	20,000.00
7. Contingencies,	<u>14,000.00</u>
Estimated total costs,	\$80,000.00

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LIMITED

Per Alfred R. Allen P. Eng.  
Alfred R. Allen

June 1987.

COSTS STATEMENT

To: Key Diversified Metals Corporation

For: Magnetometer Survey

By: Contract: Prospecting Geophysical Services

March 29 - April 13, 1987.....\$14,200.00

Allen Theorore LaRose  
11914 - 212st Street  
Maple Ridge, B.C.  
V2X 2X1

## REFERENCES

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- O'Neill, J.J., &                Platinum and Allied Metal Deposits of  
Gunning, H.C.                Canada, G.S.C., Economic Geology Series  
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- Allen, A.R.,                    Report on Placer Leases, Tulameen Area,  
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- Smyth, W.R.,                    Report    The Northern Miner May 12, 1986

\* \* \* \* \*



702 - 2025 Bellevue Avenue  
West Vancouver, B.C.  
V7V 1B9

CERTIFICATE

I, Alfred R. Allen, certify that:

I am a graduate of the University of British Columbia  
and hold the following degrees therefrom:

BASc Geological Engineering 1939

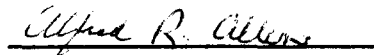
MASc Geological Engineering 1941

I am a Life Member of the Association of Professional  
Engineers of the Province of British Columbia.

I have practised my profession for the past forty years.

I hold no interest in the properties or securities of  
Key Diversified Metals Corporation or affiliates thereof,  
nor do I expect to receive any directly or indirectly.

This report is based upon examination of the Key  
Diversified Metals Corporation placer leases, 18977-  
19000 on April 7, 8, 9, 1987.



Alfred R. Allen

June 1987.

702 - 2025 Bellevue Avenue  
West Vancouver, B.C. V7V 1B9

(604) 926-4785

June 1987.

British Columbia Securities Commission  
Vancouver, B.C.

Dear Sirs:

Re: Key Diversified Metals Corporation

I hereby consent to the use of my report dated June 1987, on the Princeton Placer property of Key Diversified Metals Corporation in the Similkameen Mining Division, British Columbia, in any prospectus or statement of Material Facts or other material to be filed with the British Columbia Securities Commission or the Vancouver Stock Exchange by Key Diversified Metals Corporation.

Yours truly,

Alfred R. Allen P. Eng.  
Alfred R. Allen

# Allen Geological Engineering Limited

2025 BELLEVUE AVENUE  
WEST VANCOUVER, B.C. V7V 1B9

Telephone  
604-926-4785

June 9, 1987.

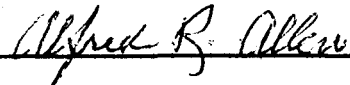
TO WHOM IT MAY CONCERN:

A. T. La Rose is a supervising Geophysical Technician for the British Columbia of Highways.

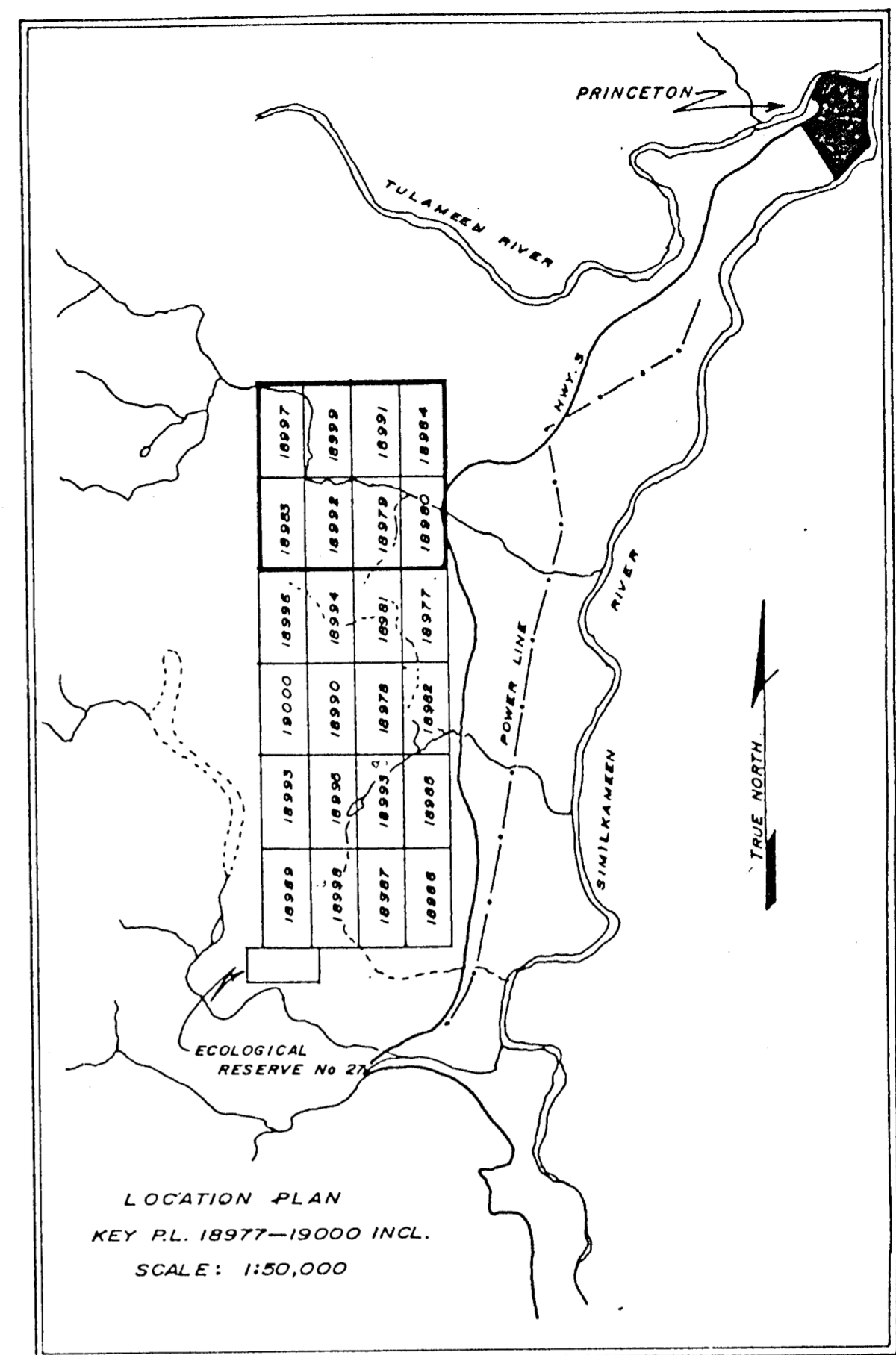
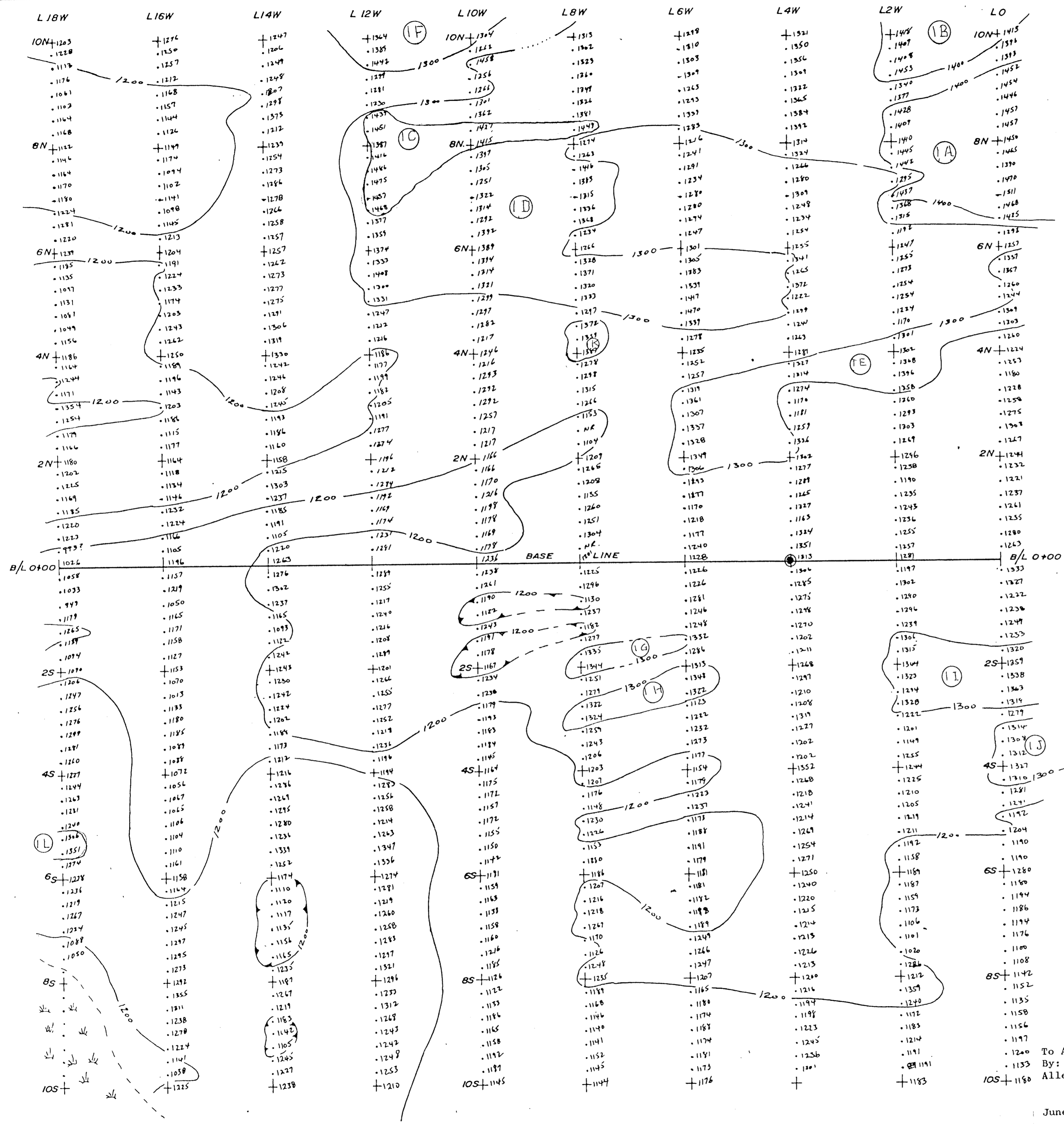
He has proven his ability as a geophysicist on other field geophysical projects for Allen Geological Engineering Limited.

Mr. La Rose was employed as a geophysical operator for Kerr Addison Mines Limited 1968-1972.

His company is Prospecting Geophysical Services  
11914 - 212 Street  
Maple Ridge, B.C.  
V2X 7x1



Alfred R. Allen



NOTE 1 Reconnaissance survey (ia) compass, hipchain and flagged lines only

NOTE 2 Instrument employed SCINTREX IGS-2 MP-4 magnetometer

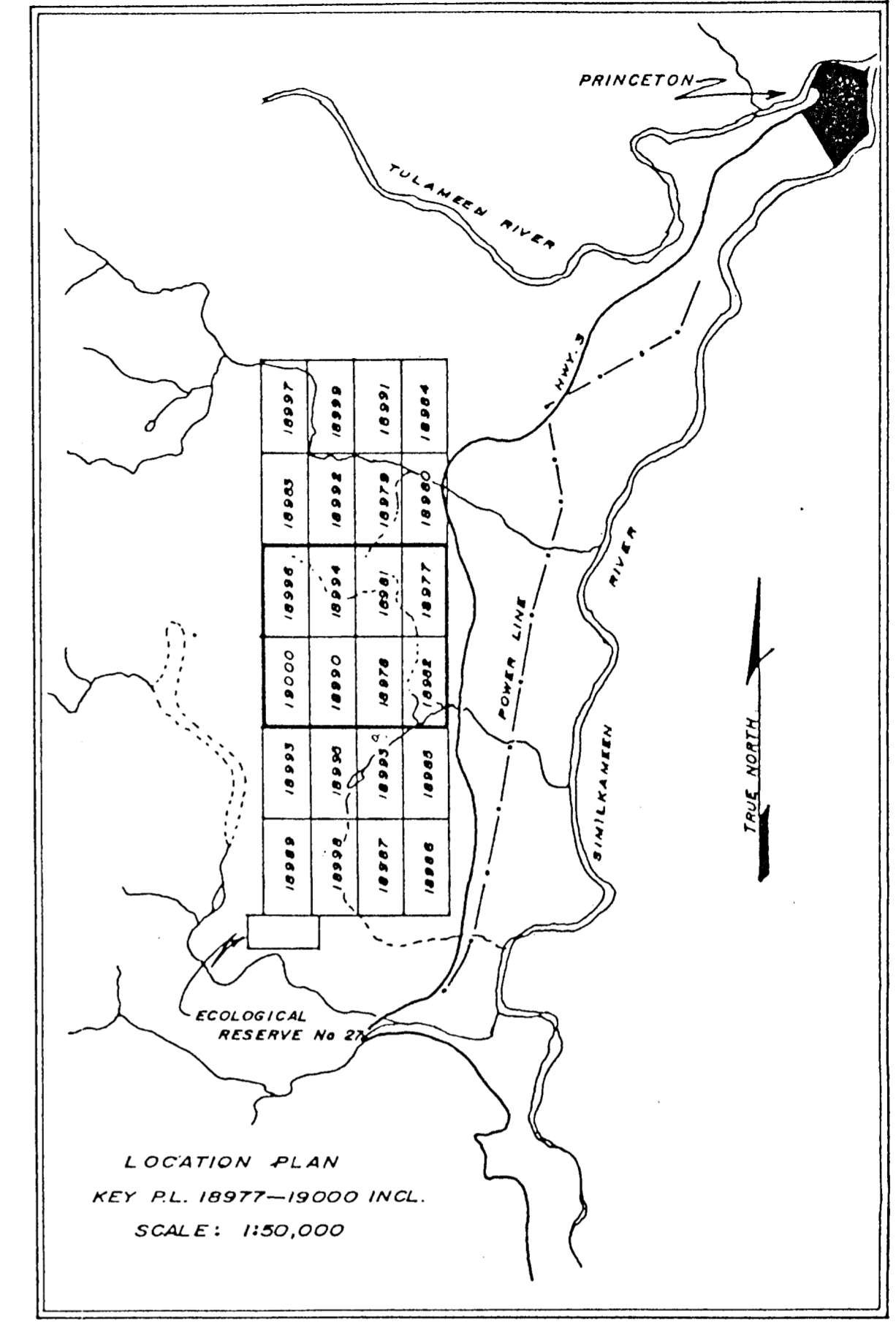
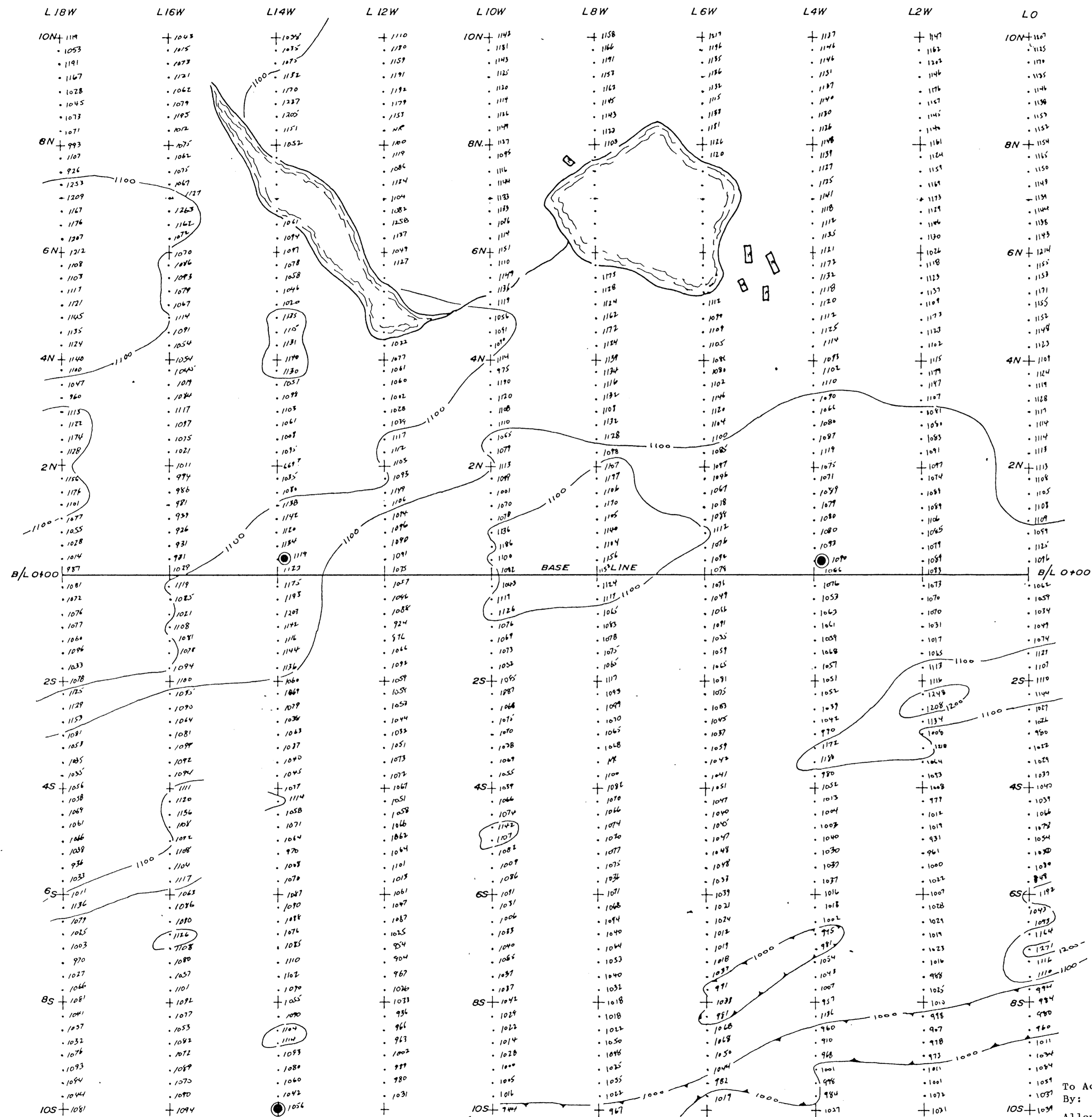
GRID-1 GEOLOGICAL BRANCH ASSESSMENT REPORT

16,128

KEY DIVERSIFIED METALS CORP. MAGNETOMETER SURVEY PRINCETON BASIN SIMILKAMEEN M.D. B.C.

SCALE 1:4000

To Accompany Report By: Allen Geological Engineering Ltd. Per *Alfred S. Allen* P.Eng. June 1987.



**NOTE 1** Reconnaissance survey (i.e) compass, hipchain and flagged lines only

**NOTE 2** Instrument employed SCINTREX 16S-2 MP-4 magnetometer

● Claim Post noted

▲ Approx. location of base station for grid note

**GRID-2**

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

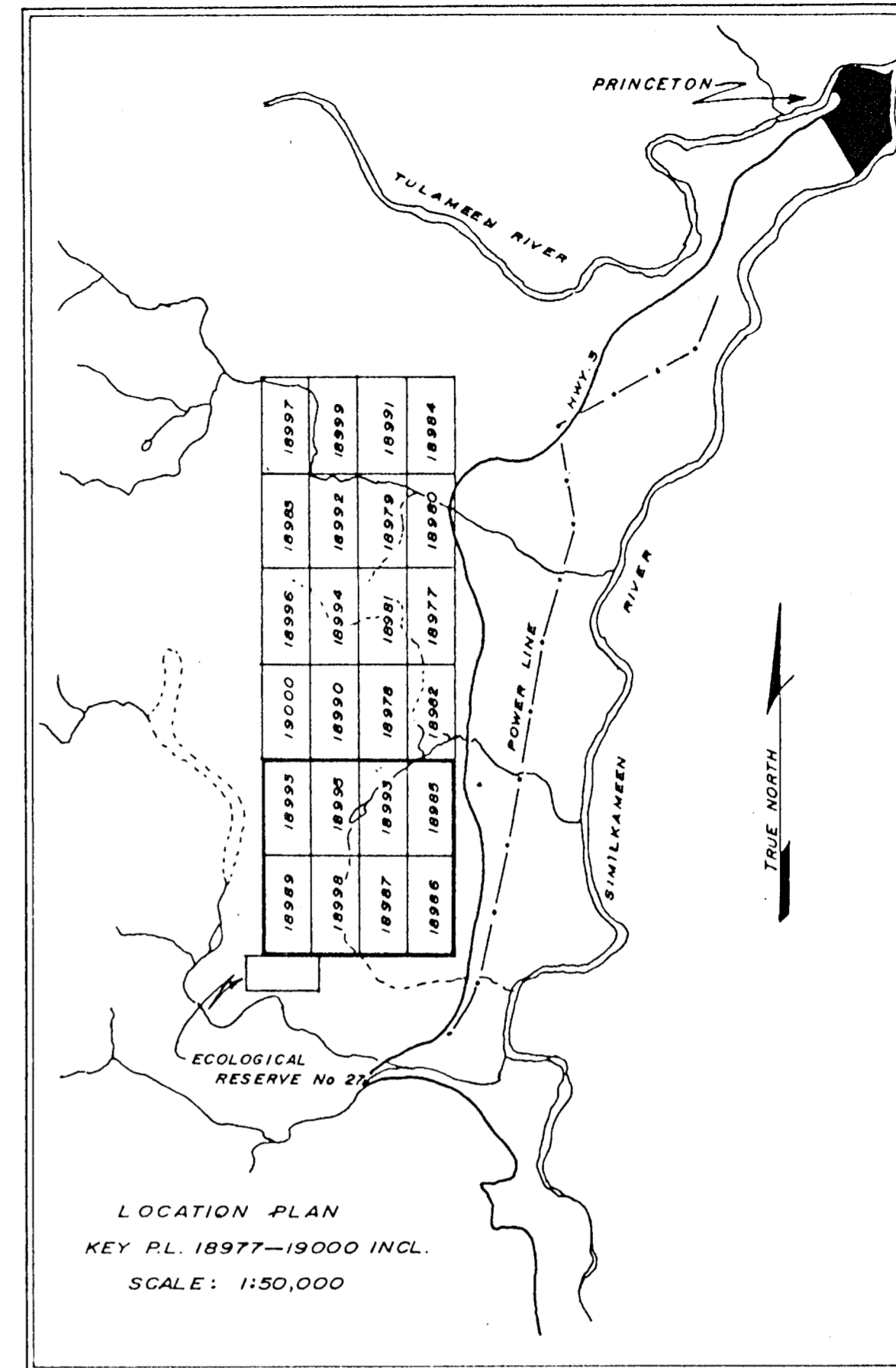
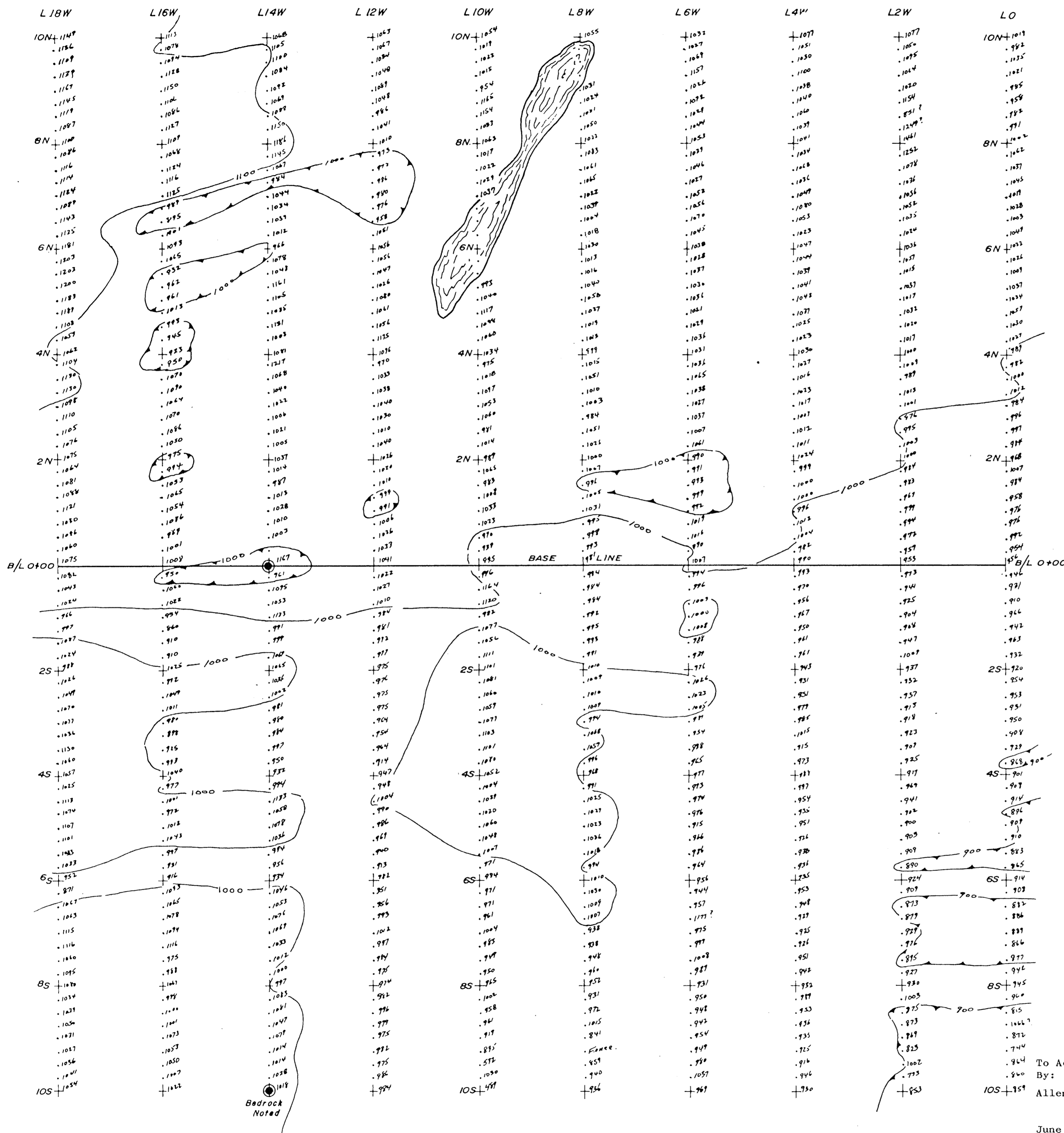
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KEY DIVERSIFIED METALS CORP.  
MAGNETOMETER SURVEY  
PRINCETON BASIN SIMILKAMEEN M.D. B.C.

SCALE 1:4000

0 100 200 300

To Accompany Report  
By: Alfred R. Allen P.Eng.  
Alfred R. Allen  
June 1987.



NOTE 1 Reconnaissance survey (ia) compass, hipchain and flagged lines only

NOTE 2 Instrument employed SCINTREX 1GS-2 MP-4 magnetometer

● CLAIM POST NOTED

GRID-3  
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

16,128

KEY DIVERSIFIED METALS CORP.  
MAGNETOMETER SURVEY  
PRINCETON BASIN SIMILKAMEEN M.D. B.C.  
SCALE 1:4000

To Accompany Report  
By: Allen Geological Engineering Ltd.  
Per Alfred R. Allen P. Eng.  
June 1987.

