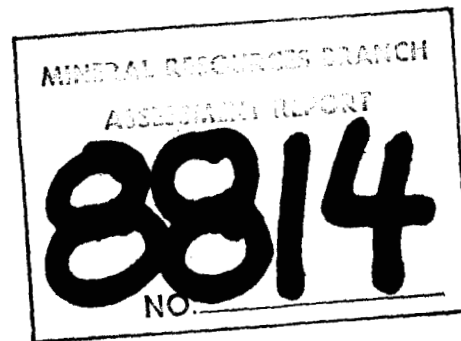


80 - # 966 - 8814

REPORT ON GEOCHEMISTRY  
KATHY CLAIM  
OMINECA MINING DIVISION  
RECORD NUMBER 1493

NTS 93N/9 MANSON LAKES  
124°27'N 55°40'W



AUTHOR: J.N. HELSEN  
OWNER: NORANDA MINES LIMITED  
OPERATOR: MATTAGAMI LAKE EXPLORATION LIMITED  
DATE: NOVEMBER 1980

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ABSTRACT

During the 1980 field season a geochemical soil survey was carried out on the KATHY claim near Manson Creek. A total of 821 soil samples and 220 mosses were collected on three different grid systems established on the property during the same season. The soils were analyzed for W, Mo, Cu, Pb, Zn, Ag, Sb, As and Sn, whereas the mosses were analyzed for gold. Pb, Zn, Sb, Mo and W show the most interesting values with apparently some interdependency between Pb, Zn, Sb and Mo. The other elements seem much less interesting in terms of anomalous values.

## LOCATION AND ACCESS

The KATHY claim is located at about 2.5km southeast of the Manson Creek settlement, which is accessible via good gravel roads from either MacKenzie or Ft. St. James.

The property itself can be reached easily via several 4x4 roads after crossing the Manson River.

The average altitude is about 1,000m above sea level.

The Lost and Skeleton Creeks drain the major part of the KATHY claim.

A location map and a property map are given on every grid map.

PROPERTY DEFINITION

The property consists of one claim, the KATHY claim, of 20 units with the record number #1493. This property is owned by Noranda Mines Limited and operated by Mattagami Lake Exploration Limited.

The KATHY claim surrounds the JOY claims owned and optioned from Mr. Neil Scafe of Ft. St. James, B.C. (Figure 1).

PURPOSE OF THE WORK DONE

A geochemical survey was carried out during the 1979 field season on the KATHY claim and duly reported for assessment purposes.

During the 1980 field season more work was performed on this property. This work consisted mainly of a geochemical soil survey (part I) and a geophysical survey (part II) in areas showing some anomalous values in soils.

This work was performed by a crew consisting of the following people:

G. Schwab	Party Chief
P. Thomas	Senior Assistant
W. Mandziuk	Junior Assistant
C. Squair	Junior Assistant
F. Noone	Junior Assistant

A total of 105 mandays were spent on the geochemical survey on the property early during the field season (May and June) as well as during the second half of the month of August. The geophysical survey (part II) will be reported separately.

## GENERAL GEOLOGY OF THE AREA

The geology of the area has been described in GSC Map 876A, Manson Creek (Armstrong, 1946) and very recently by Tipper, H.W., Campbell, R.B., Taylor, G.C., and Stott, D.F. (1979 GSC Map 1424A, Parsnip River Sheet 93).

The geology of the area comprises a belt of Pennsylvanian-Permian Cache Creek metasediments and volcanics squeezed between the Germansen batholith (granitic) in the southwest and the Wolverine Complex in the northeast. The Germansen batholith has been dated as Upper Cretaceous (Columbian Epoch) whereas the Wolverine Complex, although of unknown age, is believed to be Proterozoic.

The Manson Creek Fault Zone, which is known for gold, lead and copper mineralization, is believed to run through the property. This may explain some of the anomalous values for copper, lead and zinc in some of the soils.

A tungsten anomaly, known for years as the GLO occurrence on the Mineral Inventory Map NTS 93N, is situated in an outcrop of very brittle schists containing quartz veins with minor galena and scheelite.



## WORK DONE

The work performed on the KATHY claim consisted mainly of follow-up work as a direct result of the 1979 geochemical survey. As mentioned earlier, the geophysical survey will be reported separately.

Some minor geological surveying was done as well but this work will not be dealt with here.

A total of 821 soil samples were collected on the KATHY claim or around the claim for background determination purposes. The majority of the samples were taken on the Anomaly grid either at 10m or 25m intervals. Some 37 soils were taken in the northwest corner of the KATHY claim on the Reconnaissance grid at 100m intervals. The last set of soils, some 60 samples, were collected, also at 100m intervals, on the Lost Creek grid in the southwest corner of the property (Figs. 2 & 7).

The soils were taken generally from the B-horizon just below the A-horizon. These soils range from black to dark to medium grey and brown but the predominant colour is brown.

All the samples were analyzed for W, Mo, Cu, Pb, Zn, Ag, As, Sb and Sn by the Noranda Exporation Company laboratories in Vancouver.

In addition to the 821 soils some 220 mosses (sphagnum-type) were collected on the Anomaly grid for gold determination. These moss samples were taken at 10m, 20m or 25m intervals, depending on the grid line surveyed. The moss sample location numbers coincide with the soil sample numbers.

The sample locations for both soils and mosses as well as the values for 9 elements are plotted on the various grid maps. For the sake of simplicity the elements were grouped into the following pairs: W & Mo; Cu & Zn; Pb & Ag; and As & Sb (Figs. 3, 4, 5, 6, 8, 9, 10, 11). Au values in mosses are plotted on a separate map (Fig. 12).

The threshold values are in essence, those used for the 1979 geochemical soil survey, and will be kept for this 1980 survey as well. These values are given below:

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TABLE 1: Threshold values for the KATHY claim soil survey

---

Element	W	Mo	Cu	Pb	Zn	Ag	As
Soils (ppm)	20	6	100	20	140	2.0	140

---

No threshold values were calculated for the Sn in soils because of the high proportion of zero values. As a matter of fact, out of about 820 Sn analyses the following five samples contained some Sn:

Soil # 1150	4 ppm Sn
Soil # 1287	2 ppm Sn
Soil # 1302	7 ppm Sn
Soil # 1486	2 ppm Sn
Soil # 2161	15 ppm Sn

All other values being zero, the Sn results have not been plotted on any of the geochemistry maps.

With regards to gold, out of 211 mosses no value was greater than 6 ppb. 111 values were below the 1 ppb detection limit and 100 values ranged from 1-6 ppb. The calculated threshold is 4.3 ppb. A workable threshold is set at 5 ppb.

Statistics for antimony on 731 soils gave a mean value (background) of 1.2 ppm Sb and a standard deviation of 2.7 ppm Sb. Accepting a threshold (t) as the sum of the mean ( $\bar{x}$ ) + 2 standard deviations (2s) we obtain a value of 6.6 ppm Sb (i.e. 7 ppm Sb for this property). It should be kept in mind that about 51% of these Sb values are zero values.

## RESULTS AND CONCLUSIONS

From the geochemical results on some eight hundred soils collected in three different areas of the KATHY claim and some two hundred mosses, the following observations could be made.

Gold: no anomalous values were observed in the mosses. The only high 6 ppb value is not considered anomalous but rather a borderline case. This value does not coincide with high As, Ag or Sb values (Fig. 12).

Tin: with the exception of 5 samples, all the values are 0 ppm.

Copper: only twenty soils show slightly anomalous values for copper, the highest of which contains only 330 ppm. The property is not considered to be enriched in copper (Figs. 4 and 9).

Lead: several lead anomalies occur in soils on the property. The highest lead content was observed in sample #1202 with 1,160 ppm. Galena crystals are known to occur in quartz veins (Figs. 5 and 10).

Zinc: high zinc values coincide with high lead values, although it is not a general rule. There seem to be more anomalous zinc values than lead values implying a greater mobility for zinc. On the other hand, no sphalerite mineralization was ever encountered. The highest zinc content was found in sample #2237 (1,600 ppm Zn)(Figs. 4 and 9).

Silver: with a threshold for silver set at 2.0 ppm only seventeen soils could be considered anomalous to some extent. The two highest silver contents were found in soils #1346 and #1403 with respectively 22 ppm and 8 ppm. These two high silver contents do not coincide with high lead contents. As a matter of fact it is rather an exception (samples #1200, #1202, #1403) than a rule to imply that high lead contents coincide with high silver contents (Figs. 5 and 10).

Molybdenum: no molybdenum was observed as mineralization on the property, nevertheless some anomalous values occur in the soils (some 125 samples) ranging from 6 ppm Mo to 48 ppm. The majority of these values, some 68%, however lie between 6 ppm and 10 ppm i.e. they are threshold boundary cases. Very few anomalous molybdenum values match up with anomalous tungsten values (Figs. 3 and 8).

Tungsten: scheelite is known to occur in quartz veins and in quartz pods and lenses in the schists at the trenches. Nevertheless, the tungsten contents of the soils are low with only 28 soils with values above the 20 ppm threshold. Most of these anomalous values lie on or slightly above the threshold, and only a few are considerably higher i.e. soil #1247 with 240 ppm W; soil #1255 with 120 ppm W; soil #1348 with 55 ppm W. None of these have high molybdenum contents (Figs. 3 and 8).

Arsenic: the threshold for this element was set at 140 ppm. Only eight soils show above threshold values with the highest value being 1,400 ppm As. This anomaly however is an isolated one coinciding with no other element (Figs. 6 and 11).

Antimony: with a threshold set at 7 ppm Sb for this property, only 21 soils appear to be anomalous. Anomalous antimony seems to coincide with anomalous lead, zinc and/or molybdenum or any combination of these elements. With only two exceptions (soils #1431 & #1436) anomalous antimony does not seem to be very compatible with anomalous tungsten (Figs. 6 and 11).

The overall conclusion drawn from this geochemical survey can be summarized as follows:

1. gold in mosses did not show any anomaly.
2. the KATHY claim is impoverished in tin in soils.
3. neither arsenic or copper showed any exciting behavior.
4. with a few exceptions, the silver values are rather low and do not coincide with lead.

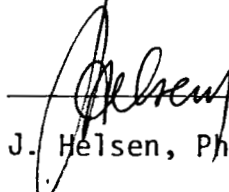
5. the property, at least on the grid systems, seems to be anomalous to some extent with regards to Pb, Zn, Sb, Mo and W. Among these elements Pb, Zn, Sb and Mo seem to show some interdependency. All these elements are recommended for further work if warranted.

CERTIFICATE

I, Jan Helsen, of the City of Edmonton, Province of Alberta,  
do hereby certify that:

1. I am a geologist residing at 11515 - 75 Avenue,  
Edmonton.
2. I am a graduate of the University of Leuven, Belgium  
with a "Licenciaat in Geologie".
3. I am a graduate of McMaster University, Ontario,  
with a M.Sc. (1970) and a Ph.D. (1976) in geology.
4. I have been practicing my profession since 1976 and  
am at present Exploration Geologist with Mattagami  
Lake Exploration Limited.
5. I am a fellow of the Geological Association of Canada.
6. I supervised the work that is described in this  
report.

Dated: November 30, 1980

  
J. Helsen, Ph.D.



## APPENDIX I

## BREAKDOWN OF THE COSTS OF THE CHEMICAL ANALYSES

APPENDIX I: Breakdown of the Costs of the Chemical Analyses

A total of 821 soil samples were collected on several grid systems on the KATHY claim, and subsequently forwarded to the Noranda Exploration Company laboratories in Vancouver for geochemical analysis of the following elements: W, Mo, Cu, Pb, Zn, Ag, As, Sb, and Sn. A few samples were analyzed for gold as well.

An outline of the analytical procedures as applied by the Noranda labs is given below.

The cost for these 821 soils can be broken down as follows:

First element i.e. Mo @ \$ 1.25/soil	\$ 1,025.25
Consecutive elements i.e. Cu, Pb, Zn + Ag @ \$ 0.60/element/soil	1,097.40
Other elements i.e. W, Sn, As + Sb @ \$ 2.50/element/soil	<u>8,210.00</u>
Total for 9 elements in 821 soils	<u>\$ 10,333.65</u>

Some 220 mosses were analyzed for gold by X-Ray Laboratories (Toronto) using the McMaster University nuclear facilities in Hamilton, Ontario. The cost per sample consists of \$ 5.00 for irradiation and \$ 0.35 for sample preparation.

Total cost for 220 Au analyses @ \$ 5.35/ sample	<u>\$ 1,177.00</u>
TOTAL ANALYSES COSTS	<u>\$ 11,510.65</u>



## ANALYTICAL PROCEDURES FOR GEOCHEMICAL ANALYSES

### Methodology of the Geochemical Laboratory

Physical methods of sample treatment.

Rock and core samples involve crushing and pulverizing with a rotary plate or a ring and puck pulverizer, whichever is appropriate. Subsequently, the -200 mesh sample is rolled to insure uniformity.

For sediment and soil samples, these are dried at ca. 80°C for 24 to 48 hours.

The samples are then sieved to -80 mesh with nylon screen; the +80 mesh (reject) material is discarded.

The panned - heavy mineral samples are analyzed as received without further sample preparation, except where the material is too coarse; this material is passed through a -40 mesh screen.

### Perchloric-nitric acid decomposition (HClO<sub>4</sub>-HNO<sub>3</sub>)

The analysis of soil, sediment and rock geochemistry to determine the lighter transition elements, is carried out by decomposition with a perchloric plus nitric acid mixture. The procedure for preparing geological samples for trace analysis by atomic absorption is as follows:

Weigh 0.40g of sample and digest with 4ml perchloric acid (70%) plus nitric acid (4+1) for 4 hours at reflux temperature. After digestion, each sample is diluted to 10ml with water. This solution is used for the determination of Cd, Cr, Co, Cu, Fe, Pb, Mn, Mo, Ni, Ag, V and Zn with a Varian AA-475 complete with background correction. Complete dissolution of such elements as Cr, Fe, Mn and V is not always achieved, and may be of little significance for geochemical exploration purposes.

### A brief description of elements requiring specific techniques

Determination of mercury and the elements that form volatile hydrides i.e. As, Bi, Sb, Se and Te are carried out with a hydride vapour generation accessory (Varian M-65). The hydride is formed by sodium borohydride reaction with an acidified solution of the sample. This enables measurement of trace quantities by atomic absorption.

Fluorine: 0.25g sample is sintered with sodium carbonate-potassium nitrate flux and dissolved in water. The fluoride content is compared to standards on a specific ion electrode meter. (U.S. G.S. Paper 700-C).

Gold: 10.0g sample is digested with aqua regia. Gold is extracted into MIBK from the aqueous HCl solution. Atomic absorption is used to determine gold, and a sensitivity of 10ppb is attained. (At. Absorpt. Newsl. 6, 126, 1979).

Tin: 0.5g sample is heated with ammonium iodide: tin present as cassiterite is converted into stannic iodide, which sublimes. The sublimate is dissolved in 1M HCl. A pink tin complex is formed with gallein. This allows colorimetric comparison with standards to determine tin to as low as 2 ppm. (R.E. Stanton, 1962).

Tungsten: 1.0g sample is sintered with carbonate flux and is leached with water. The leachate is treated with KSCN. This forms a yellow tungsten thio-cyanate which is extracted into tri-n-butyl phosphate. This permits colorimetric comparison with a standard series to ca. 4 ppm (F.N. Ward, 1963).

Uranium: Sample digestion will depend on the extraction requested, however, if not specified, an aliquot is taken from the perchloric-nitric decomposition. The aliquot is taken diluted with water and buffer, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex). Sensitivity of 0.1 ppm in geological samples is easily obtained.

### Hydrofluoric-perchloric-nitric decomposition (HF/HCl<sub>4</sub>-HNO<sub>3</sub>)

The analysis of silicate rock for major elements, i.e. alkaline and earth alkaline metals, is performed by decomposition with hydrofluoric-perchloric-nitric acid, with subsequent removal of the fluoride ion. Total dissolution of the major constituents is accomplished and this method is suitable for determination of Na, K, Mg, Ca, Mn, Fe, Rb, Sr, and Ba. Silicon is not determined since it volatilizes during dissolution.

This method is not intended to replace the elaborate fusion techniques (eg. LiBO<sub>2</sub> fusion) for major oxide analysis, and should be used as a supplementary method for geochemical exploration where quick results are necessary. (Anal. Chim. Acta 32, 1, 1965).

### Whole rock analysis employing lithiumborate fusion

An atomic absorption procedure is used for the analysis of rock to determine Si, Al, Fe, Mg, Ca, K, Na, Mn, Cr, Sr, and Ti. The method employs a lithium meta-borate (LiBO<sub>2</sub>) fusion and dissolution in diluted nitric acid. This is recommended for whole rock analysis of rocks and core of widely ranging major element composition. (Atomic Absorpt. Newsl. 2, 25, 1969).

The lab intends to implement the Bernas Type teflon-lined bomb for decomposition of ores and minerals at a later date.

The lab will continue the policy that after operating costs of the lab have been covered, any surplus will be rebated on a pro-rated basis.

There is considerable difference of opinion regarding what geochemical methods to use in exploration. Since there is no universally suitable method for any geochemical analysis which is mainly due to varying sample material, in order to maintain quality control and consistent data, it is important to request the same decomposition and analytical methods, when various labs are contracted.

For further information please contact the Noranda Vancouver Laboratory at the following number: (604) 684-9246.

APPENDIX II

STATEMENT OF COSTS

PART I - GEOCHEMISTRY

KATHY CLAIM - 1980 FIELD SEASON

STATEMENT OF COSTS (GEOCHEMISTRY) - KATHY CLAIM, 1980 FIELD SEASON

Wages

Total salary/month for five man crew including payroll  
burden and bush bonus = \$ 8,180.55, i.e. \$ 54.54/manday

Travel, set-up camp, days lost to bad weather	= 25 mandays	= \$ 1,363.50
Geochemical sampling	= 60 mandays	= 3,272.40
Linecutting of grid system	= 20 mandays	= 1,090.80

Accommodation

\$ 30.00/manday x 105 mandays	=	3,150.00
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Equipment Rental

SBX-11 radiophone for 21 days x \$ 5.00/day	=	105.00
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Vehicle Rental

1 pick-up truck (Bow Mac) @ \$ 500.00/month	=	350.00
1 panel van (Bow Mac) @ \$ 575.00/month	=	402.50

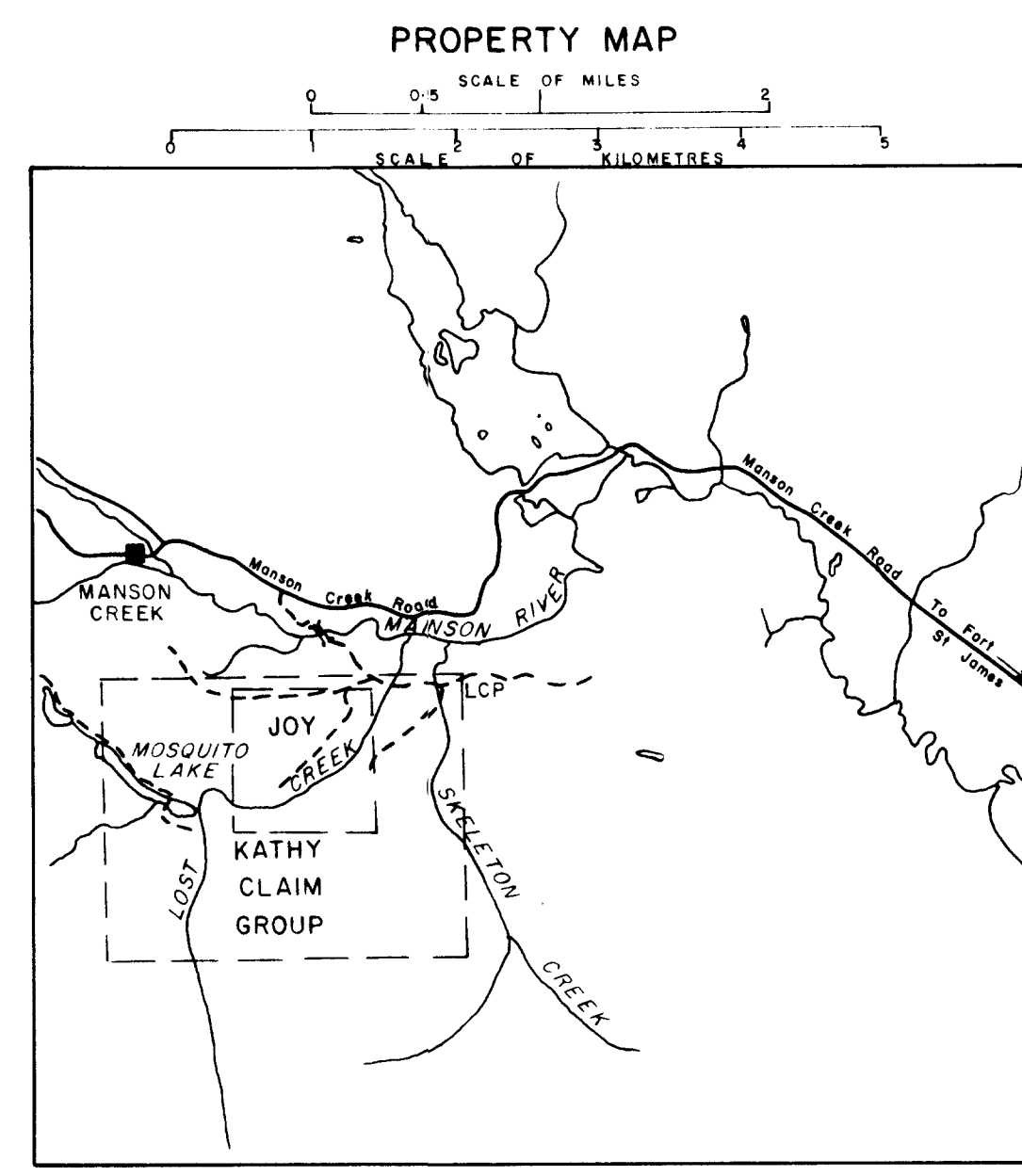
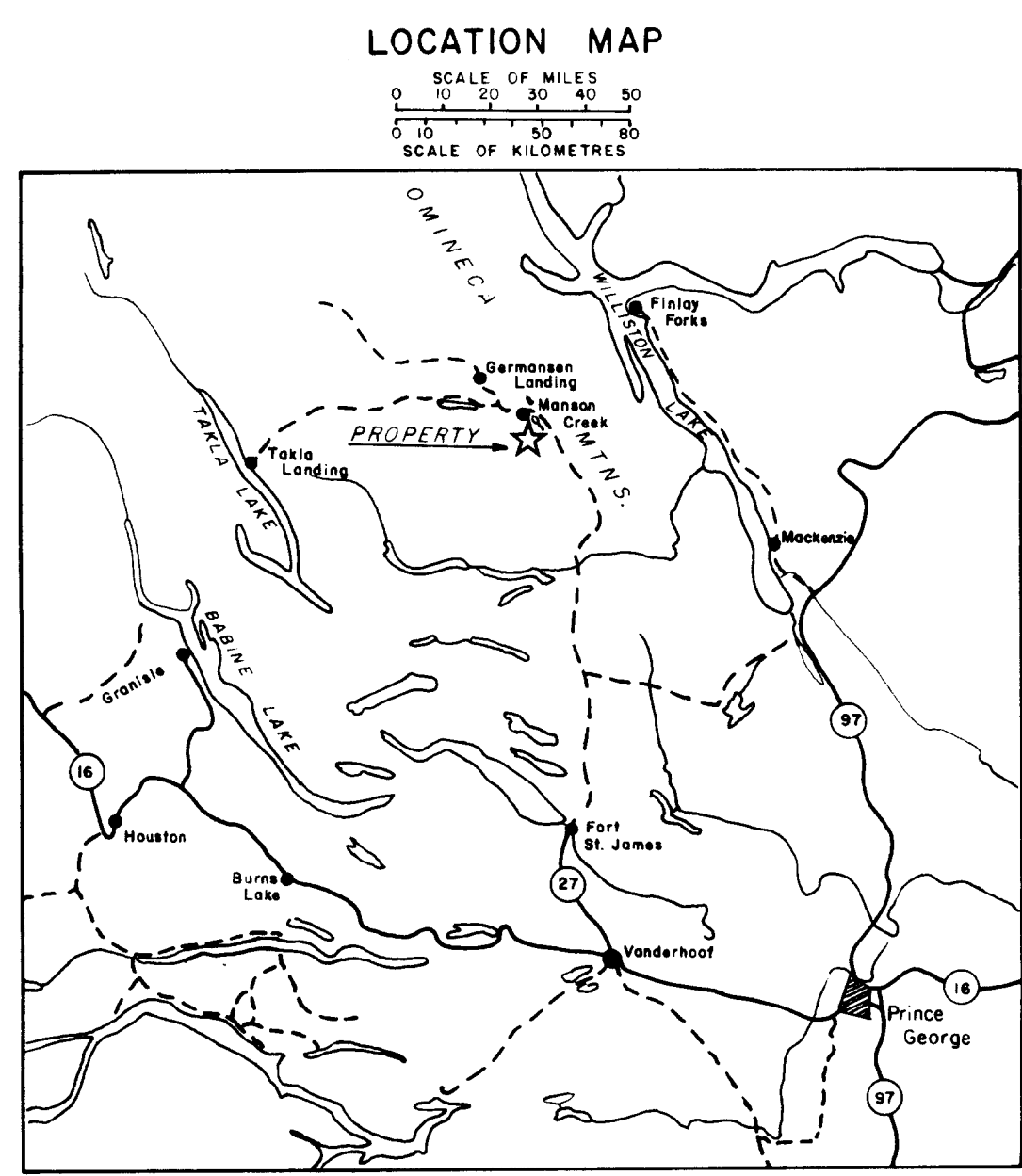
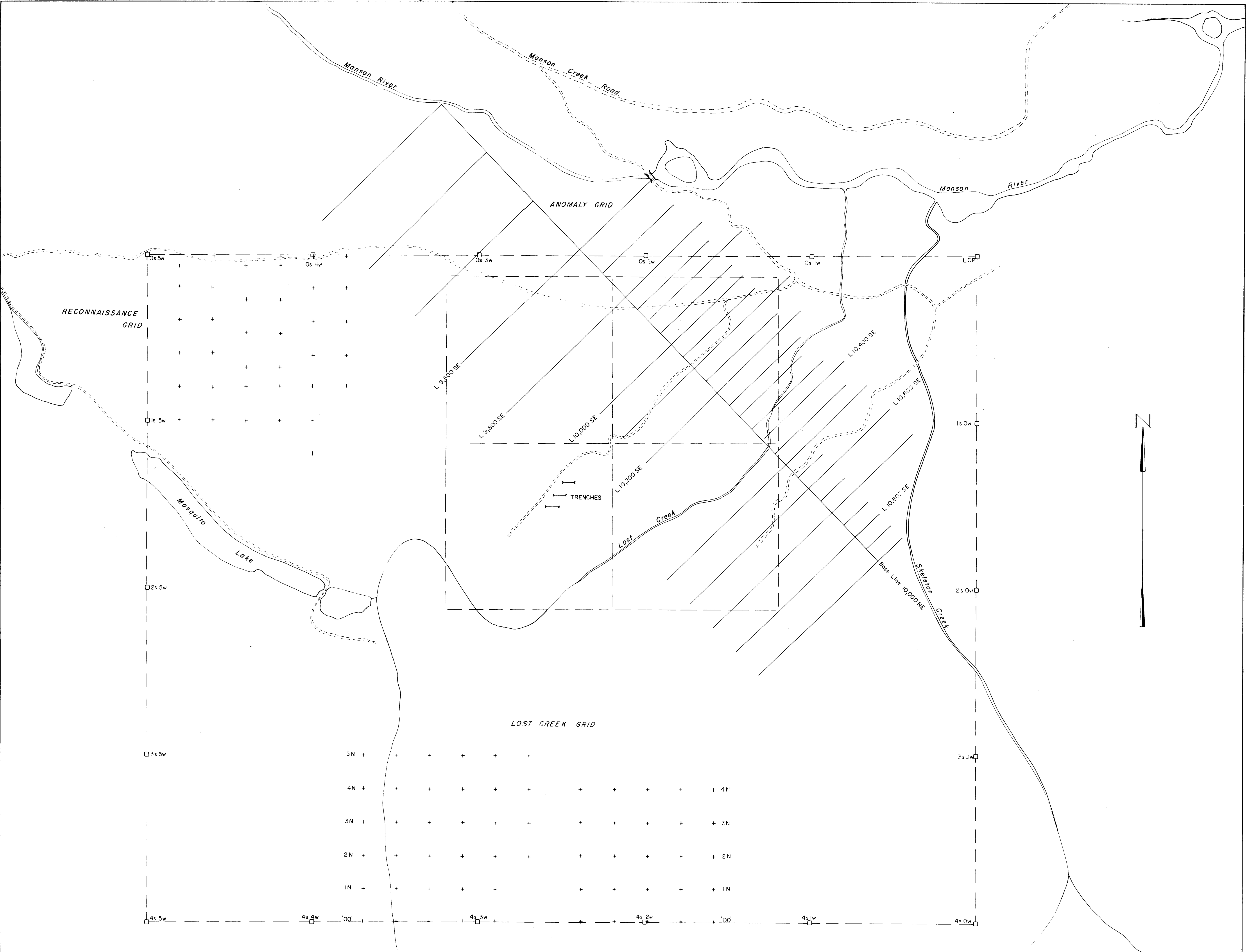
Geochemical Analyses

9 elements in 821 soils	=	10,333.65
220 gold analyses in moss	=	1,177.00

Drafting	=	500.00
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Report Writing	=	<u>400.00</u>
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TOTAL COSTS	=	<u><u>\$ 22,144.85</u></u>
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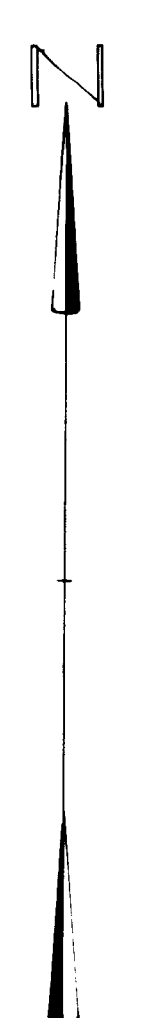
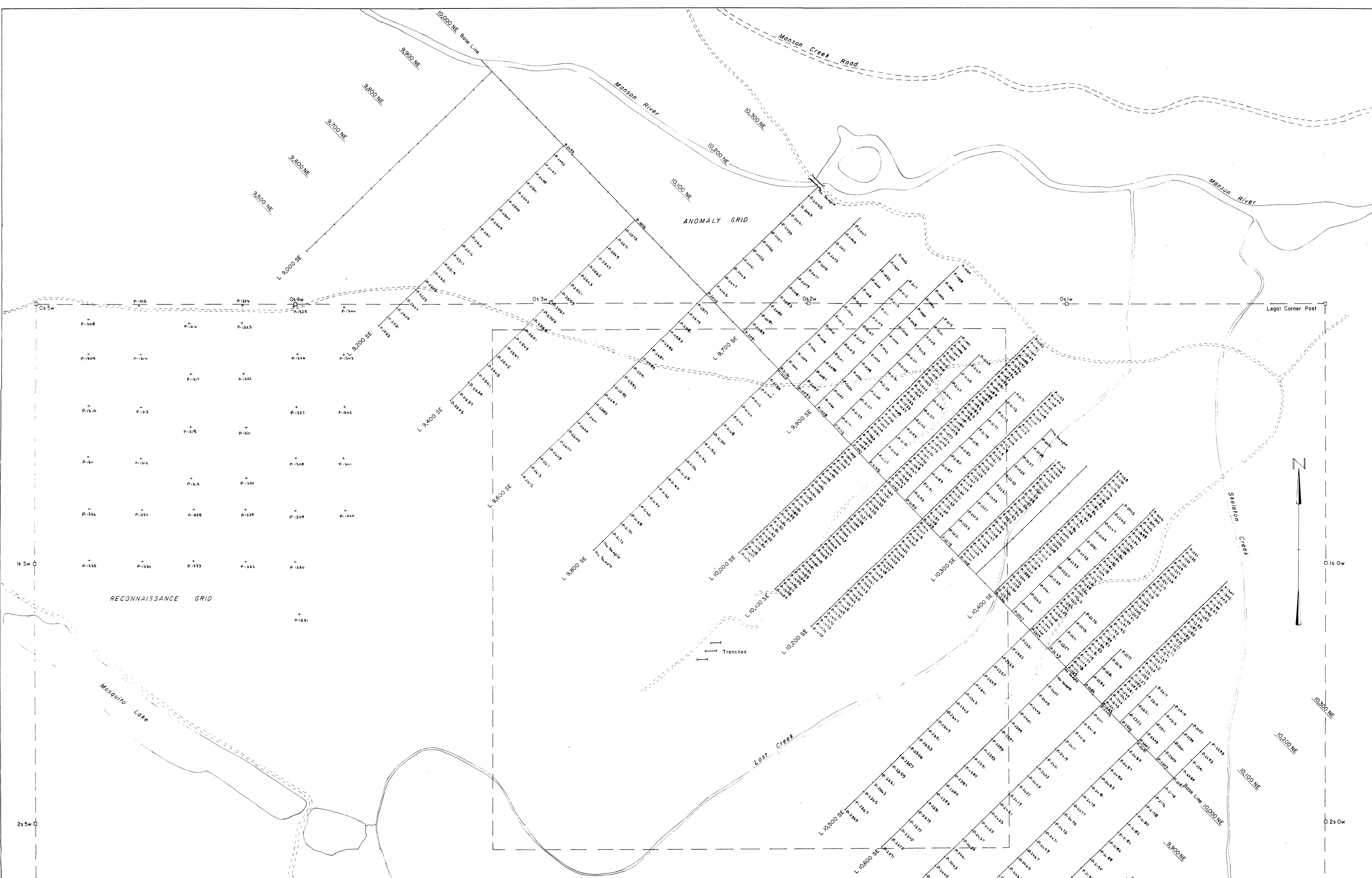
- LEGEND**
- GRAVEL ROAD
  - - - BUSH ROAD (APPROX. LOCATION)
  - || BRIDGE
  - - - CLAIM BOUNDARY

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8814**

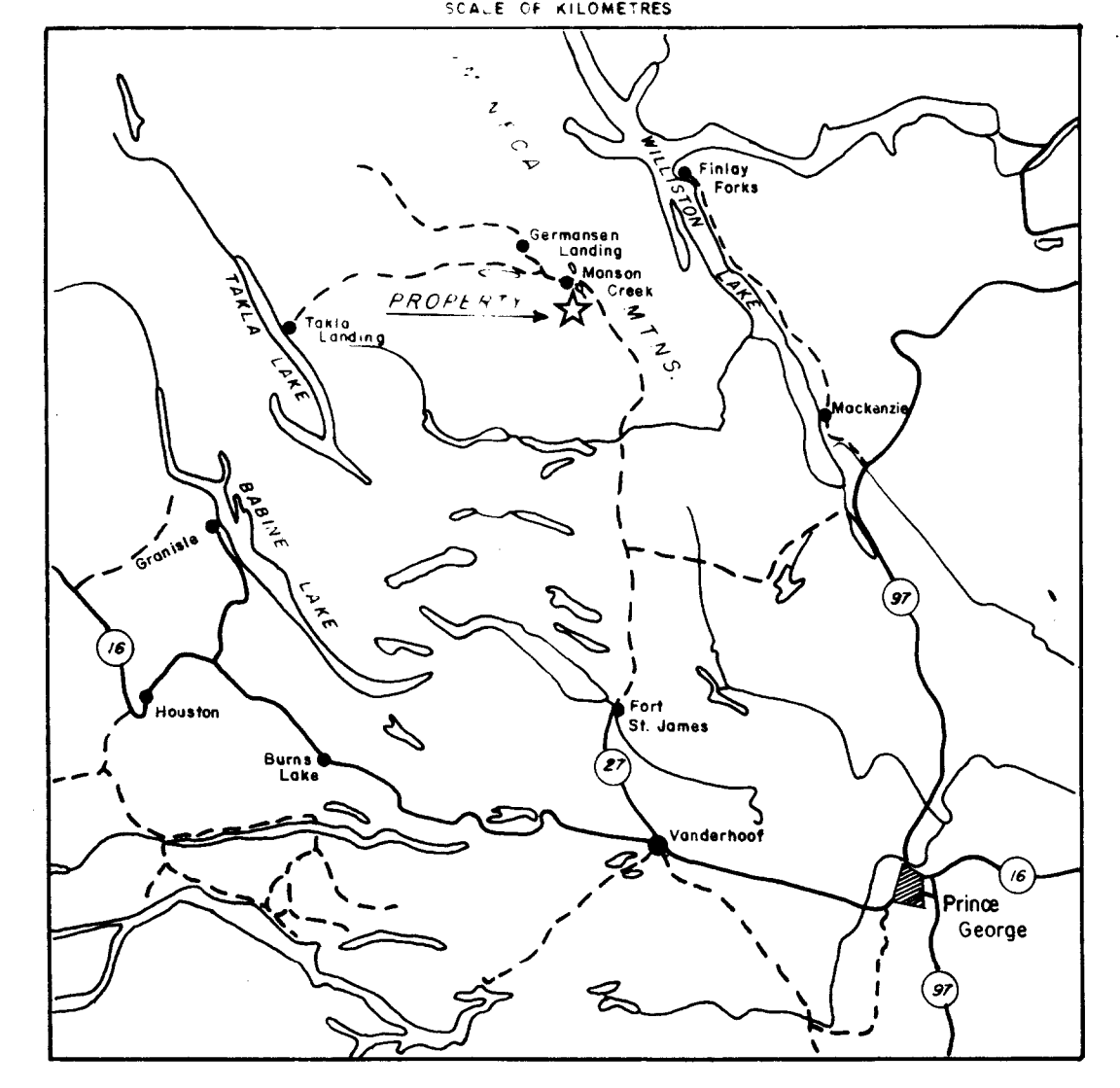
**MATTAGAMI LAKE EXPLORATION LIMITED.**  
WESTERN FIELD OFFICE  
EDMONTON, ALBERTA  
B.C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
FIGURE 1  
GRID LOCATIONS

DRAWN BY: D.R. BULL.  
DATE: NOVEMBER 1980

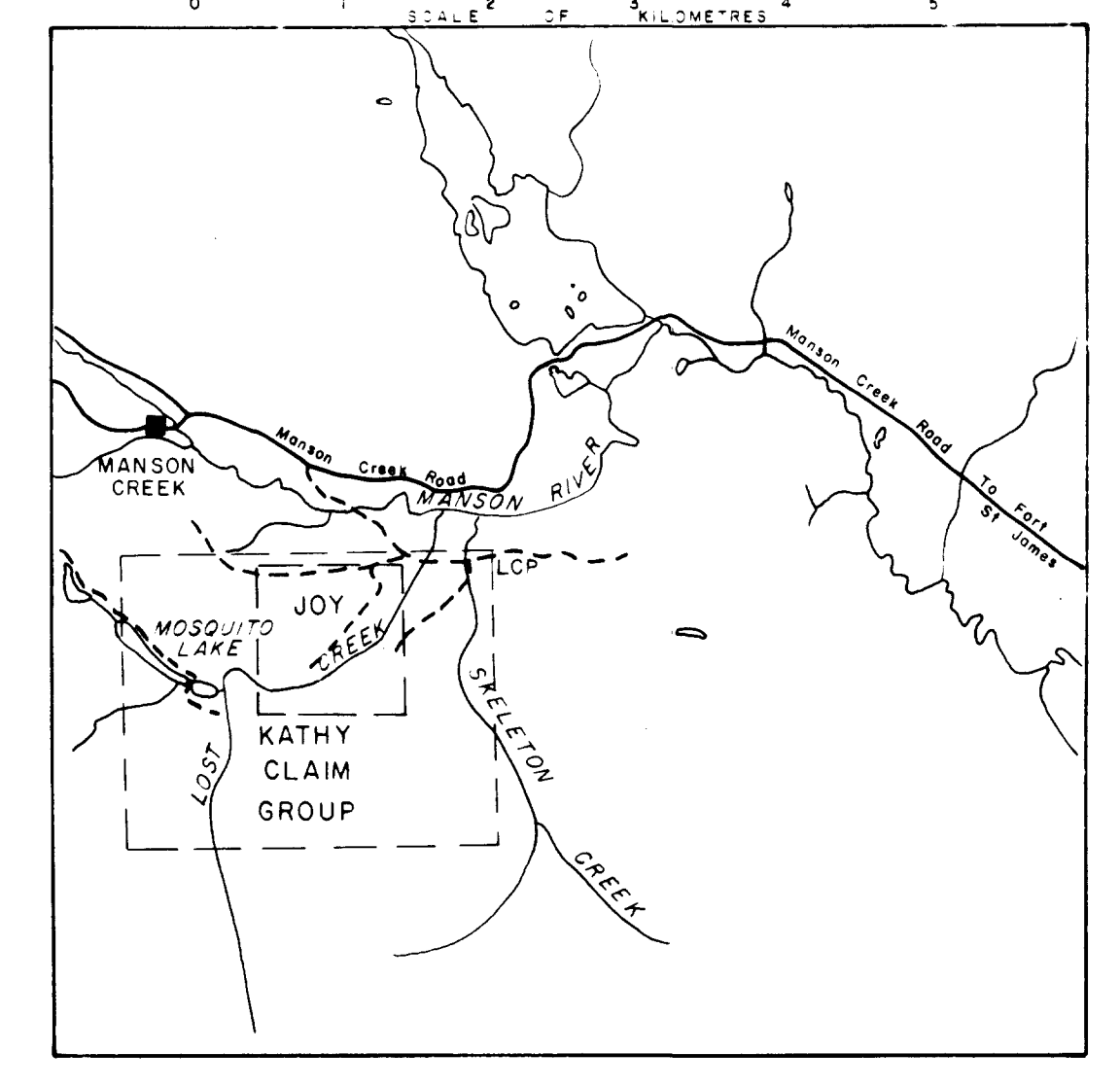
Scale of Metres  
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LOCATION MAP



PROPERTY MAP



- LEGEND
- GRAVEL ROAD
  - - - BUSH ROAD (APPROX LOCATION)
  - BRIDGE
  - - - CLAIM BOUNDARY

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8814**  
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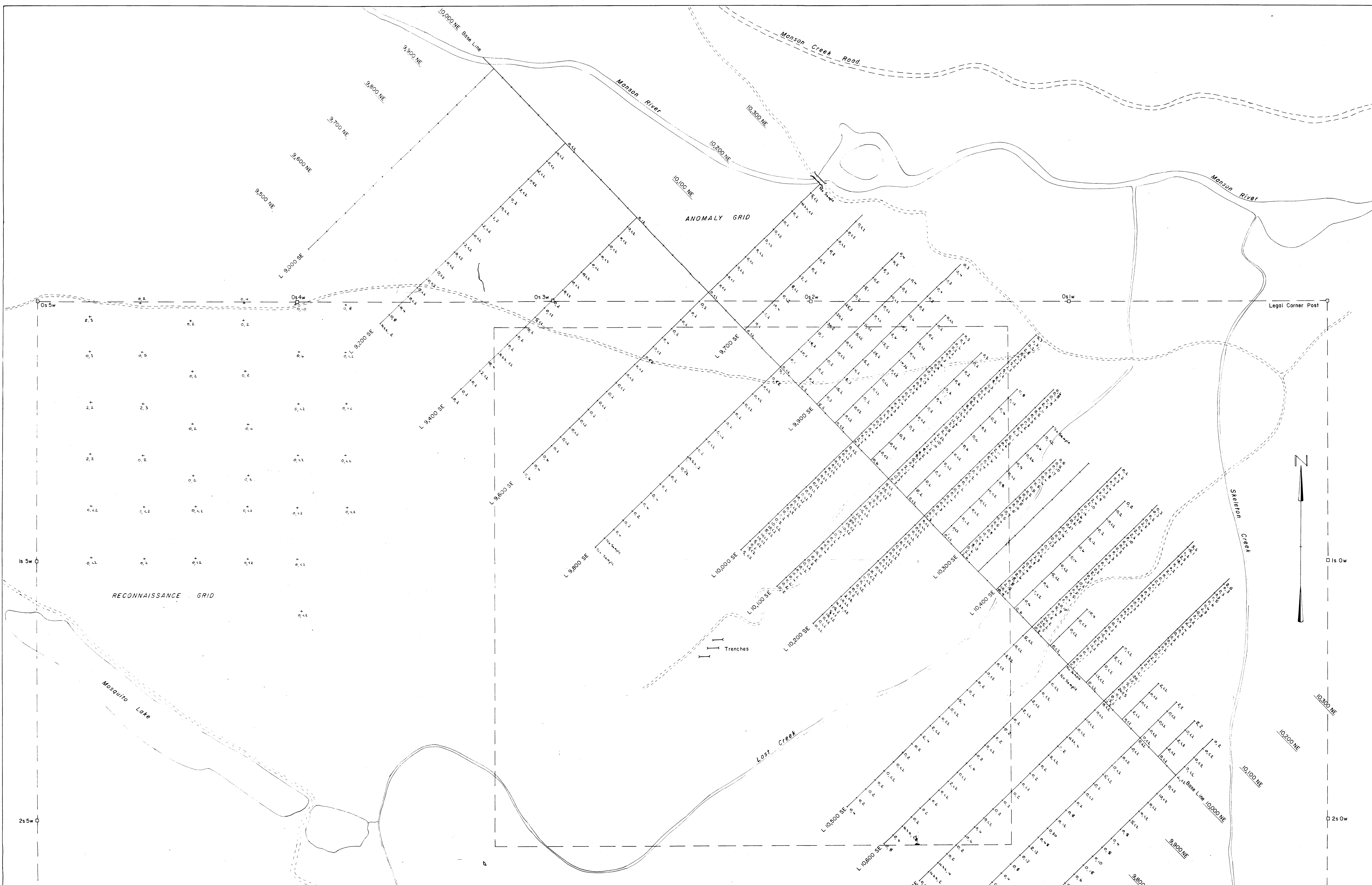
MATTAGAMI LAKE EXPLORATION LIMITED  
WESTERN FIELD OFFICE  
EDMONTON, ALBERTA.

B. C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
ANOMALY GRID & RECONNAISSANCE GRID.  
FIGURE 2  
SOIL SAMPLE LOCATIONS

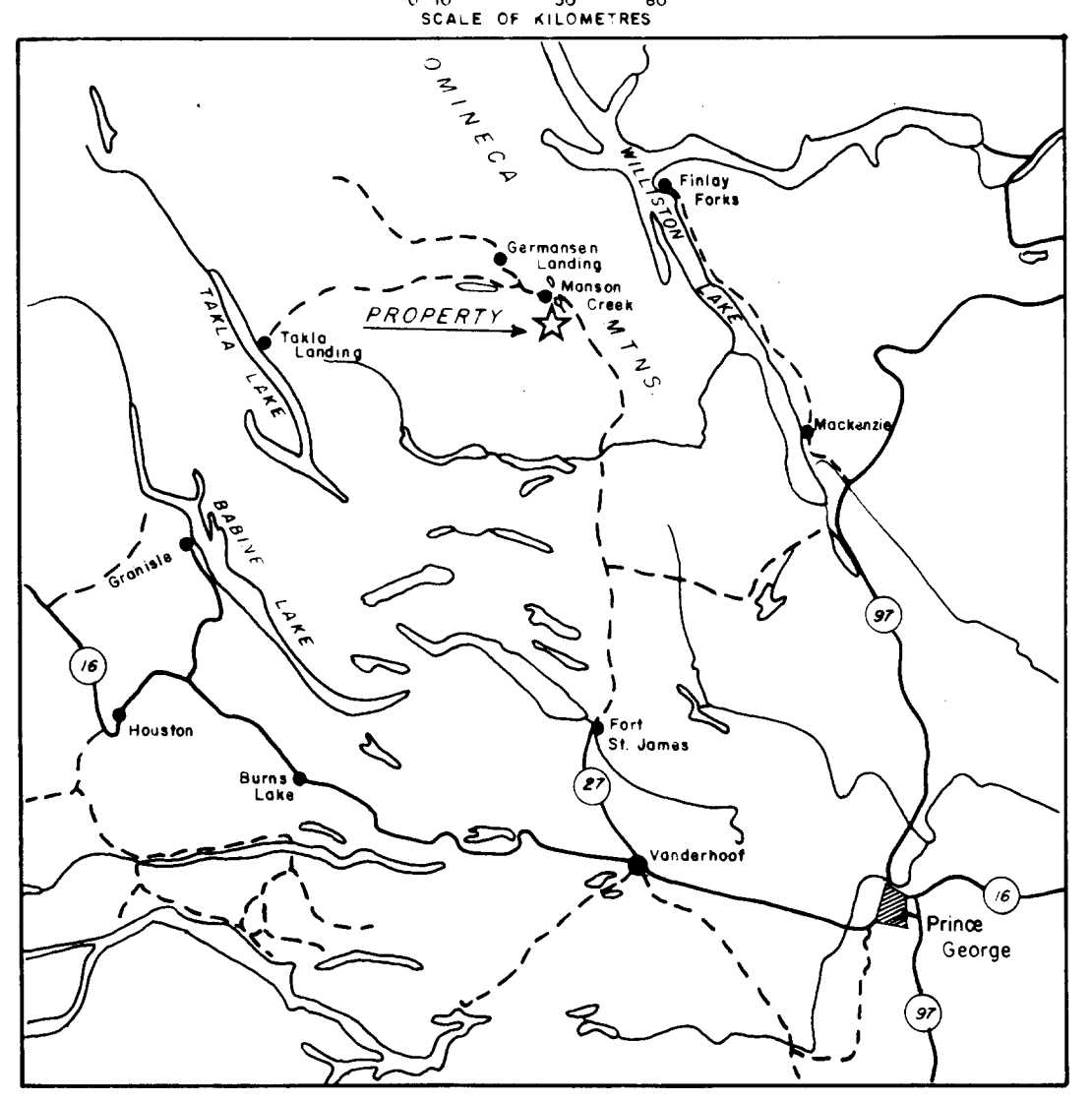
DRAWN BY: D.R.BULL.  
DATE: NOVEMBER 1980

Scale of Metres  
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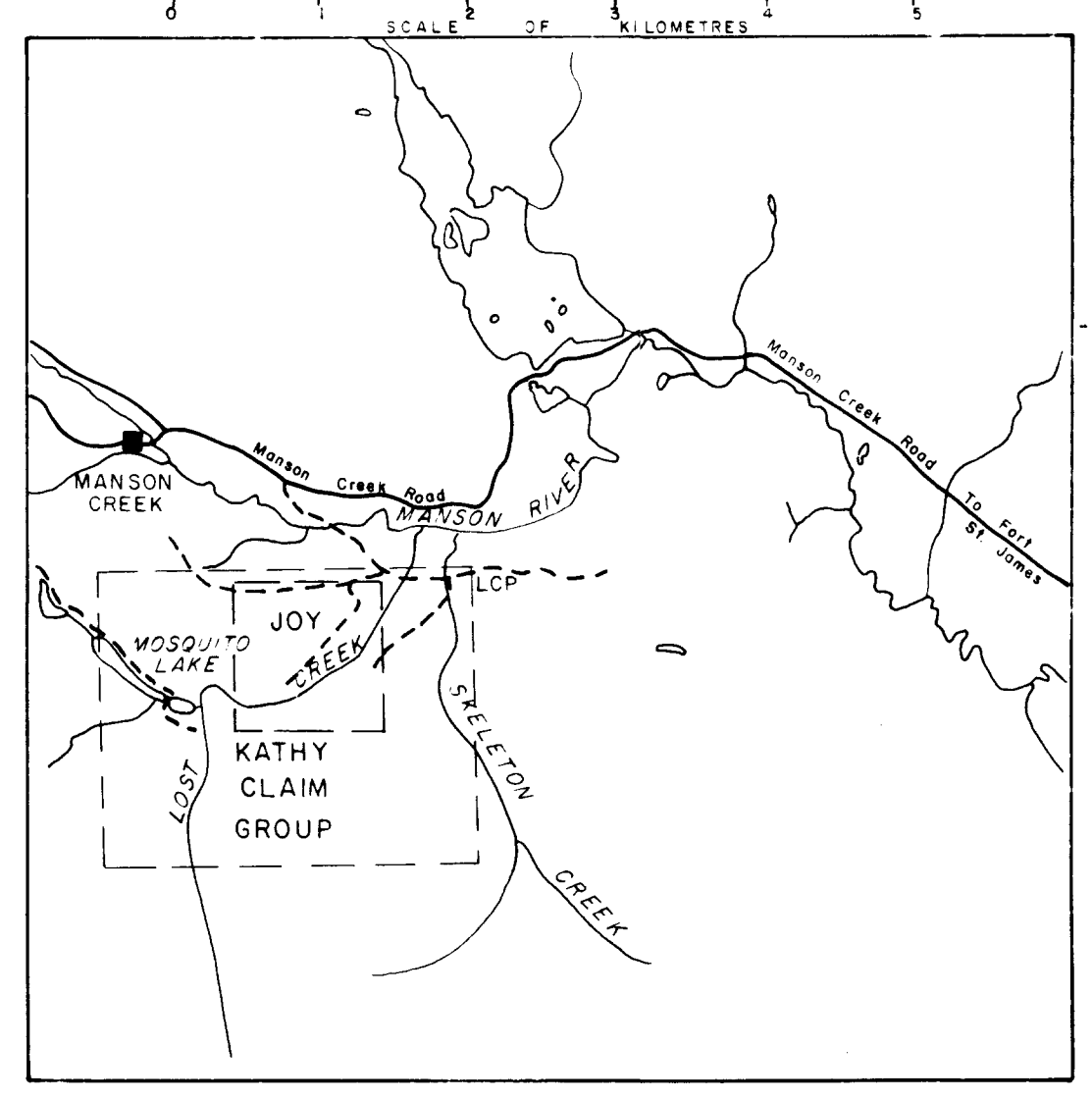




LOCATION MAP



PROPERTY MAP



LEGEND

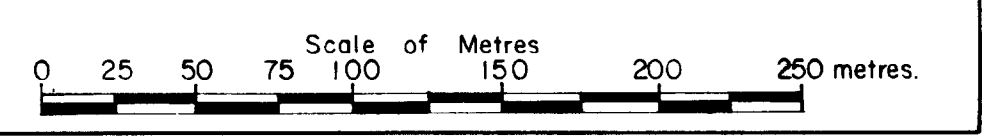
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- - - BUSH ROAD (APPROX. POSITION)
- ||| BRIDGE
- - - CLAIM BOUNDARY

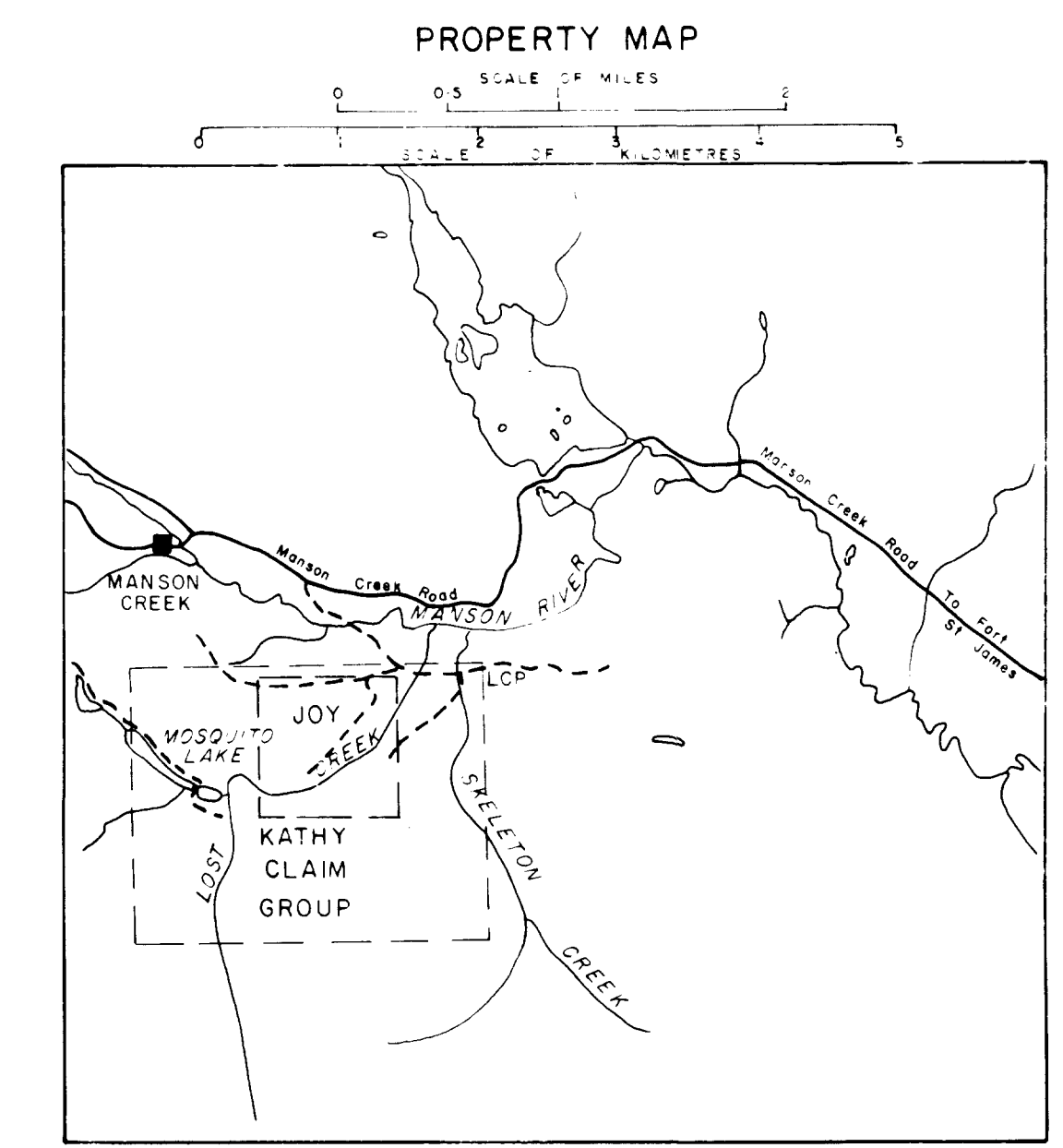
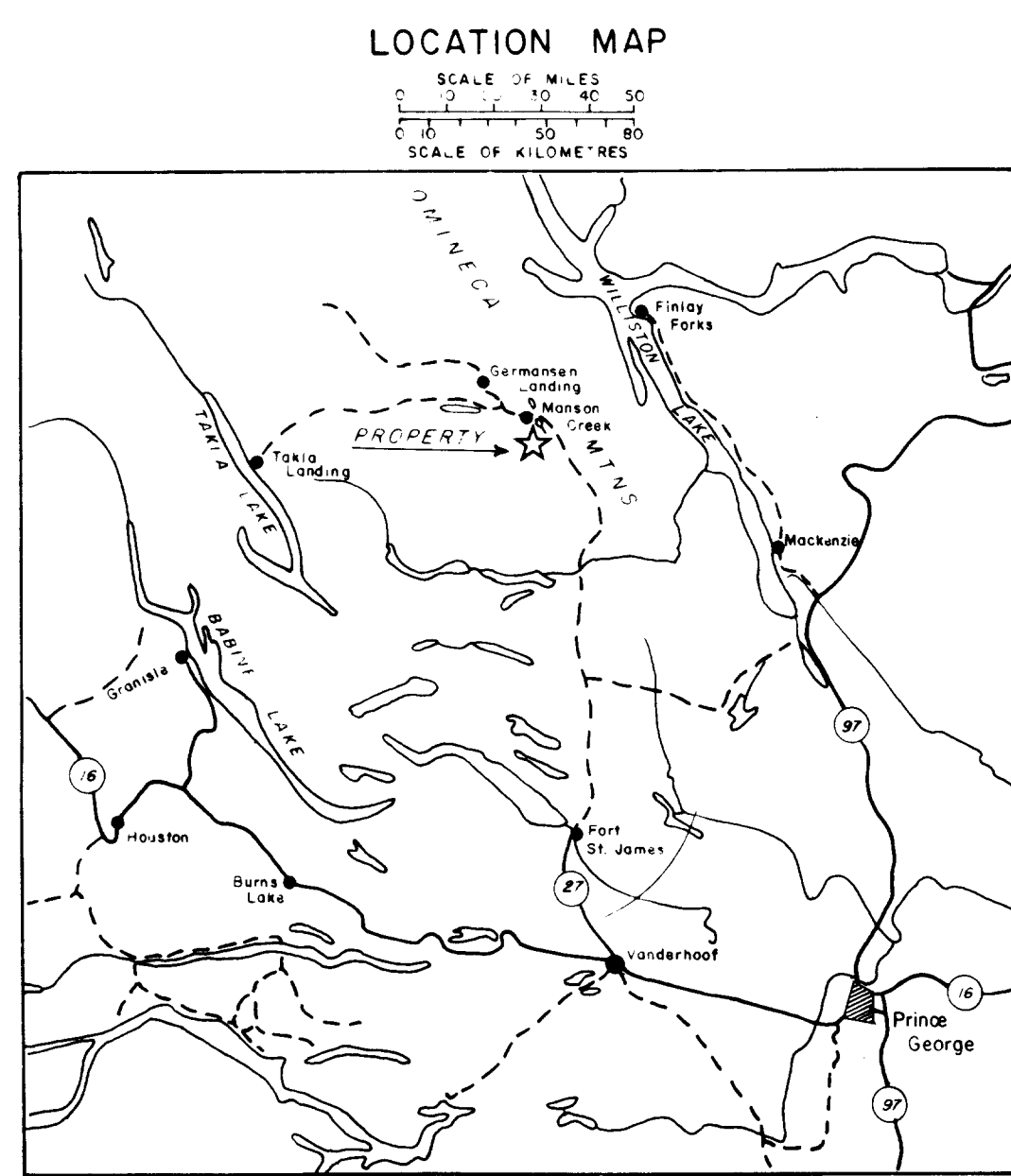
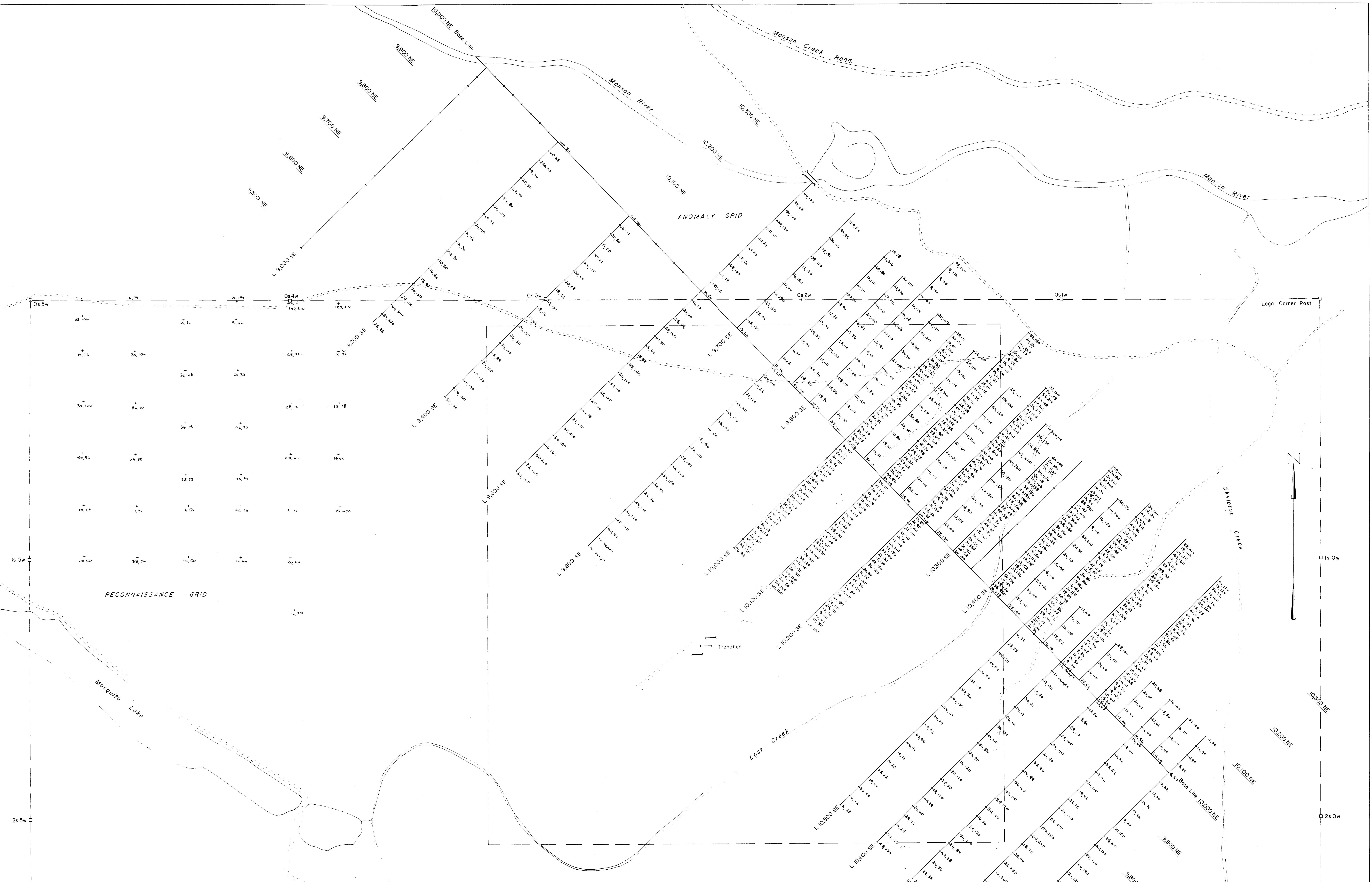
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B. C. TUNGSTEN PROJECT.  
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ANOMALY GRID & RECONNAISSANCE GRID.  
FIGURE 3

SOIL GEOCHEMISTRY W, Mo. (ppm)  
DRAWN BY: D.R.BULL.  
DATE: NOVEMBER 1980





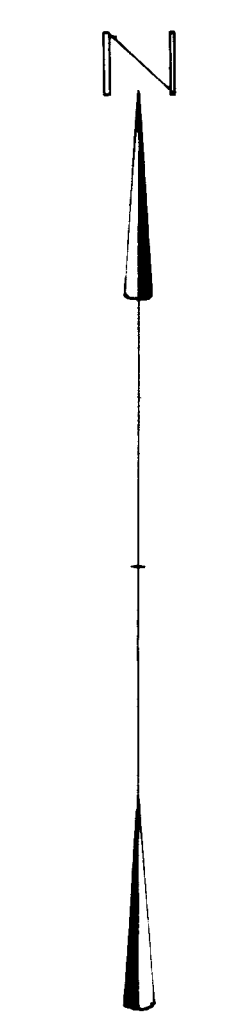
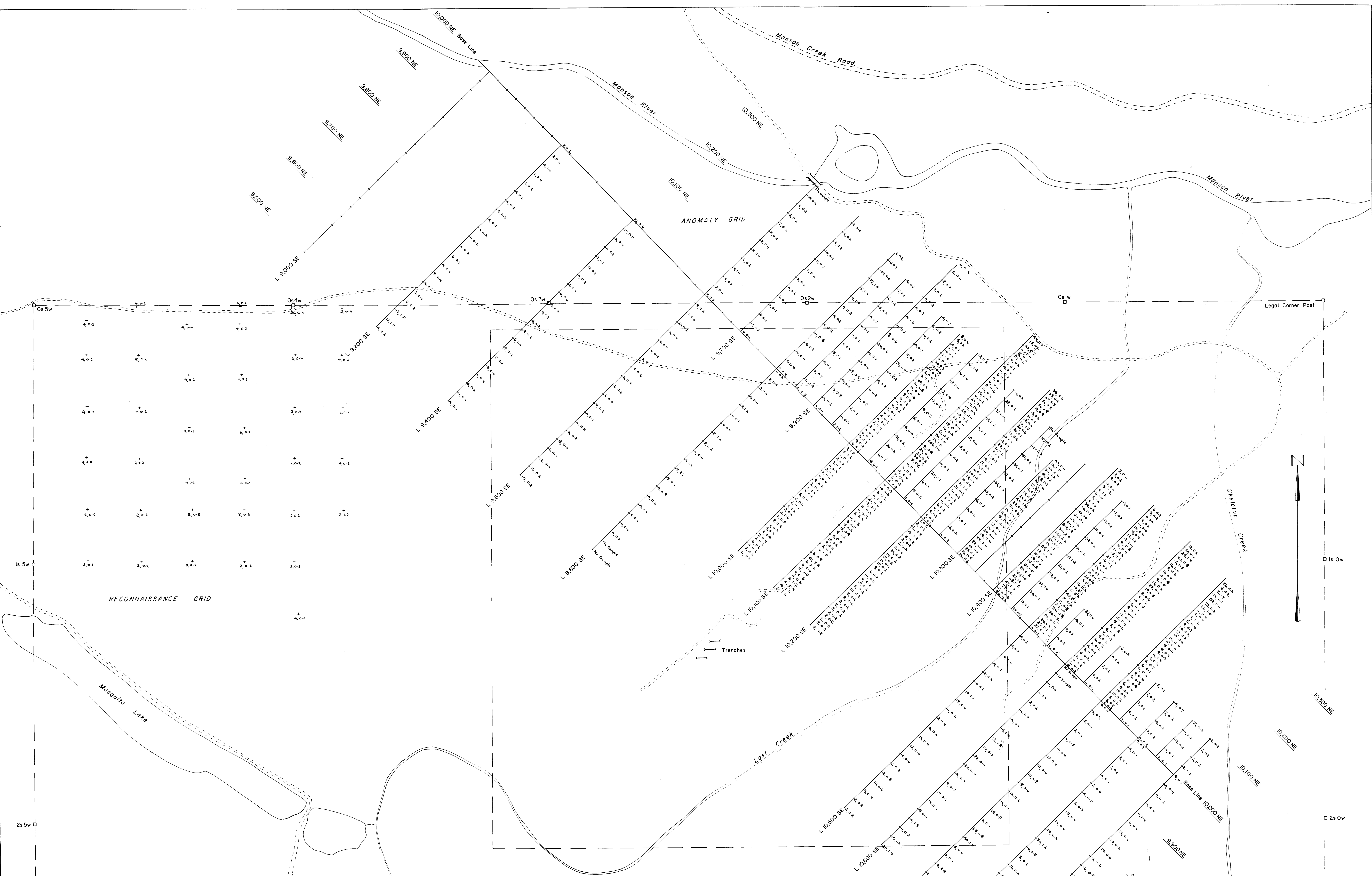
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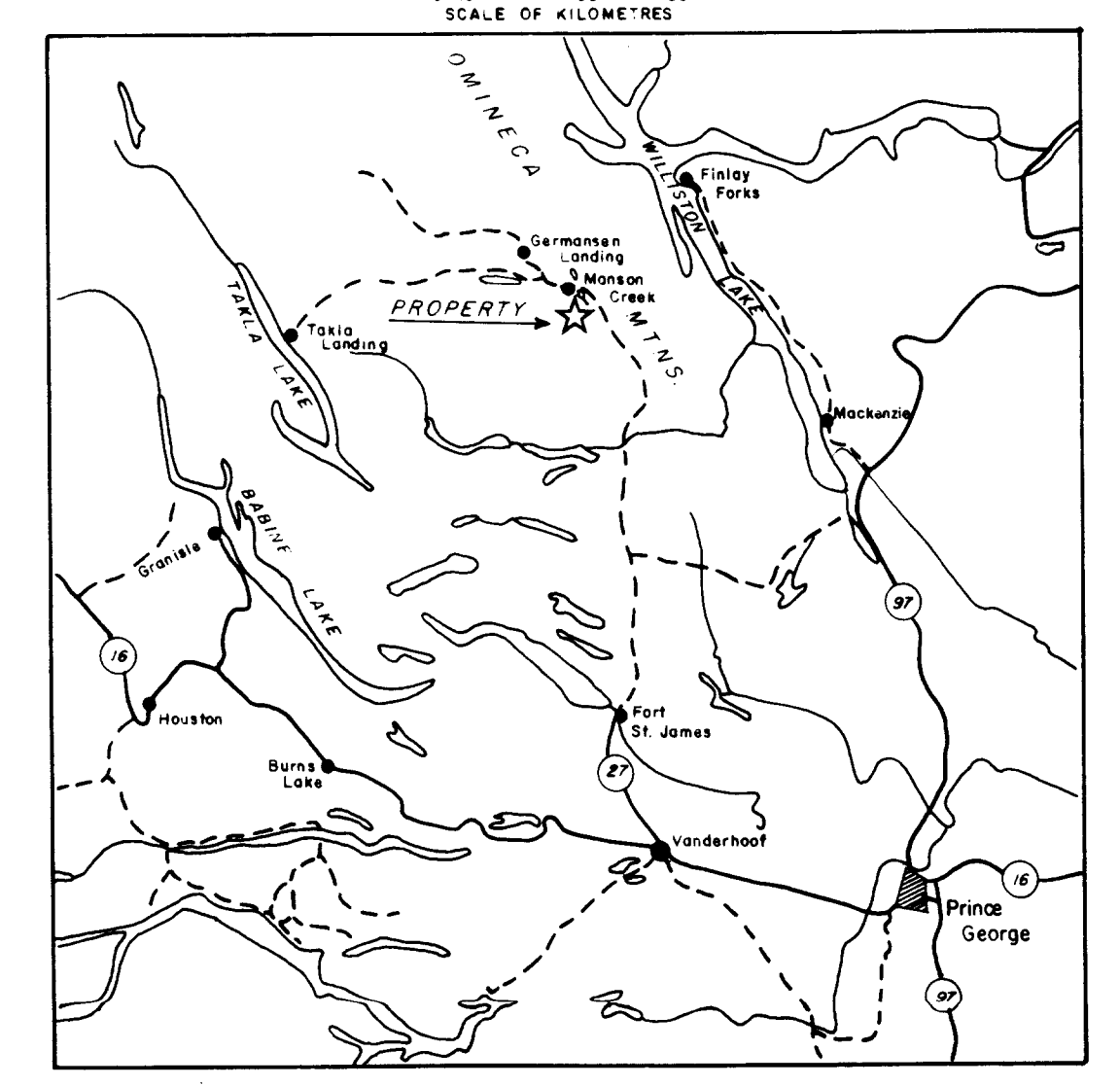
MATTAGAMI LAKE EXPLORATION LIMITED.  
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EDMONTON, ALBERTA.  
B. C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
ANOMALY GRID & RECONNAISSANCE GRID.  
FIGURE 4  
SOIL GEOCHEMISTRY Cu,Zn (ppm)

DRAWN BY: D. R. BULL  
DATE: NOVEMBER 1980  
Scale of Metres  
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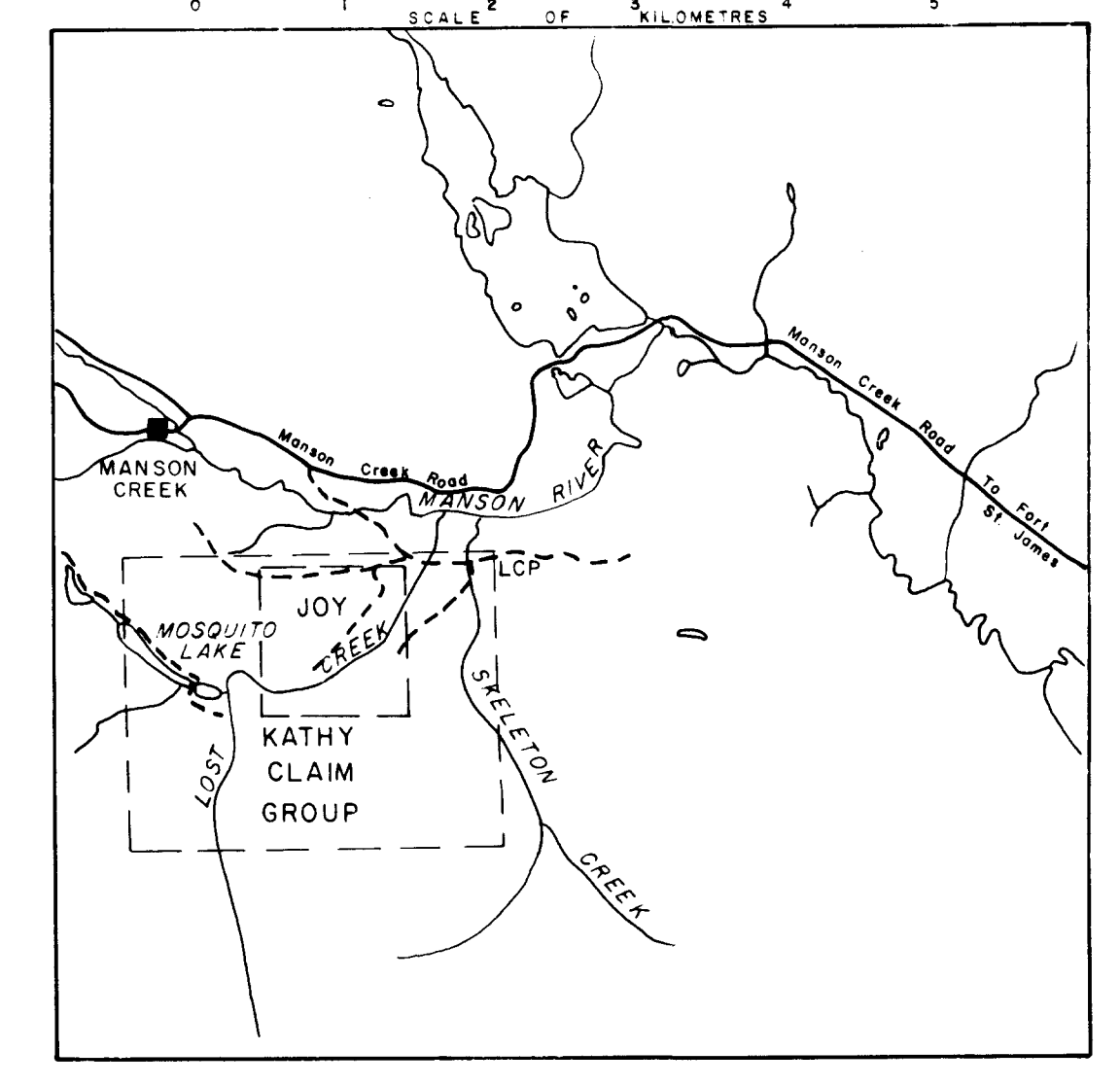




LOCATION MAP



PROPERTY MAP



- LEGEND
- GRAVEL ROAD
  - - - BUSH ROAD (APPROX LOCATION)
  - BRIDGE
  - CLAIM BOUNDARY

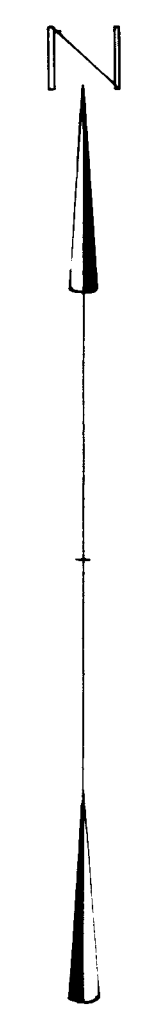
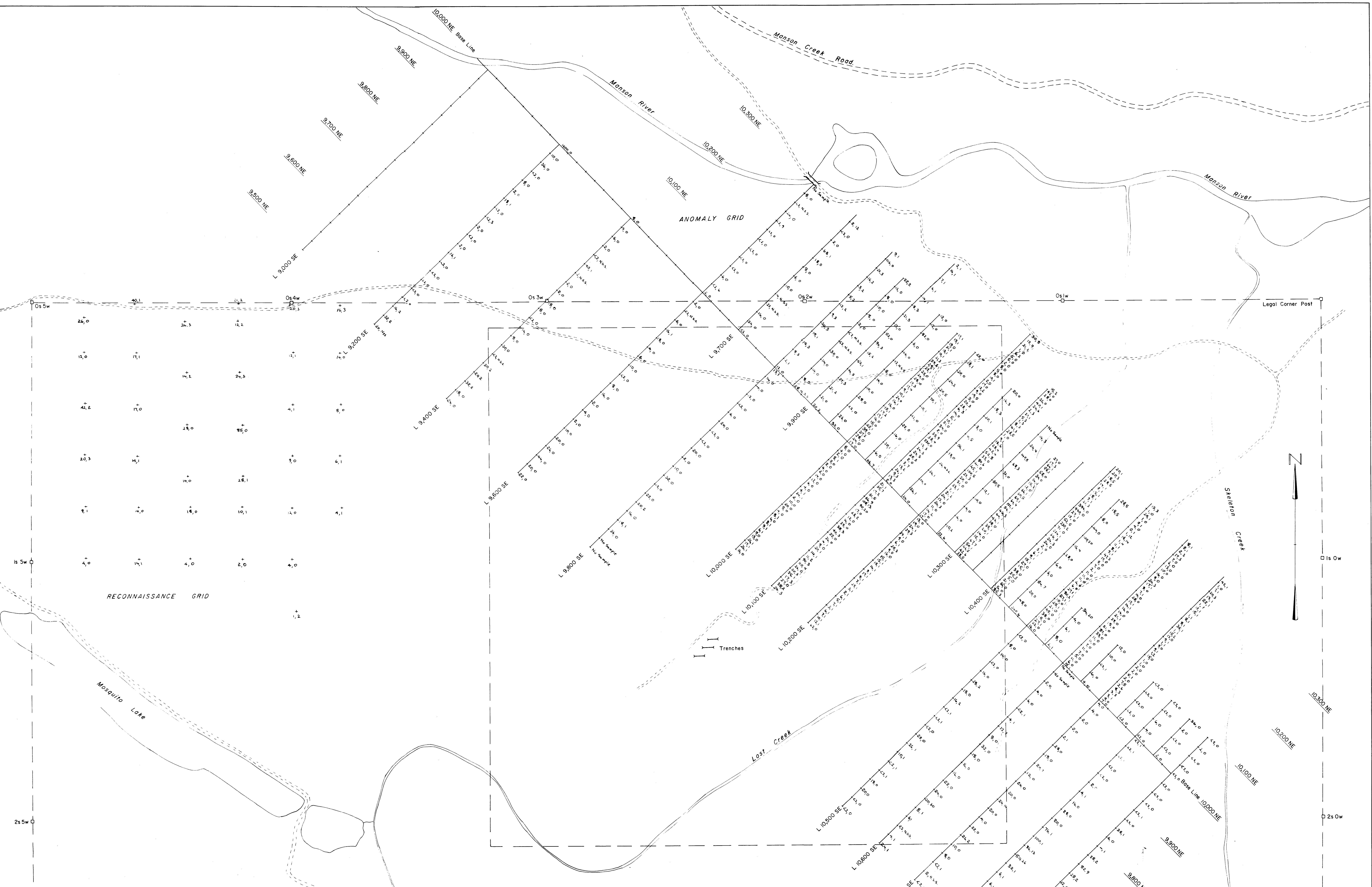
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B. C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
ANOMALY GRID & RECONNAISSANCE GRID.  
FIGURE 5  
SOIL GEOCHEMISTRY Pb, Ag (ppm)

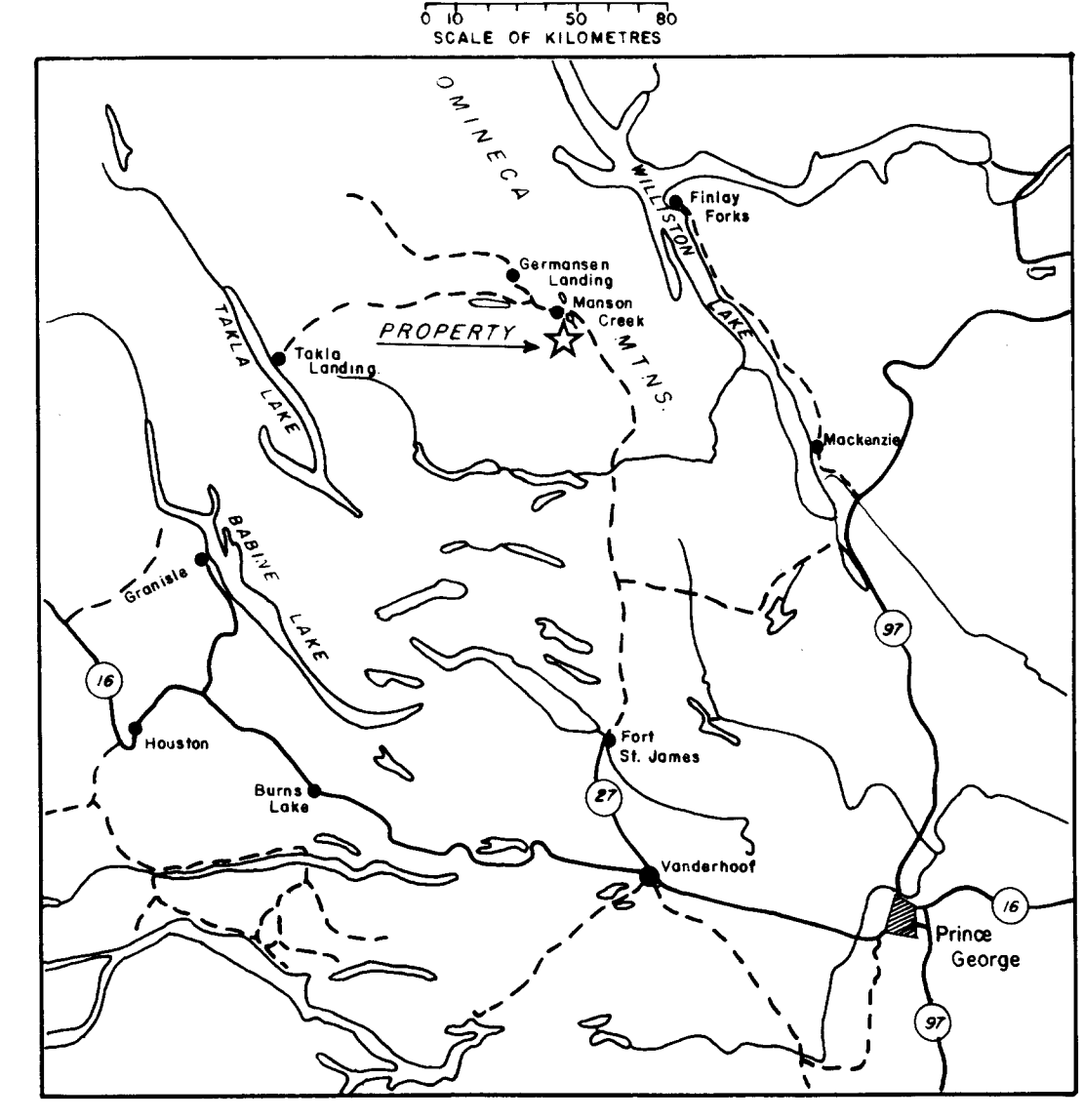
DRAWN BY: D.R. BULL.  
DATE: NOVEMBER 1980

Scale of Metres  
0 25 50 75 100 150 200 250 metres.

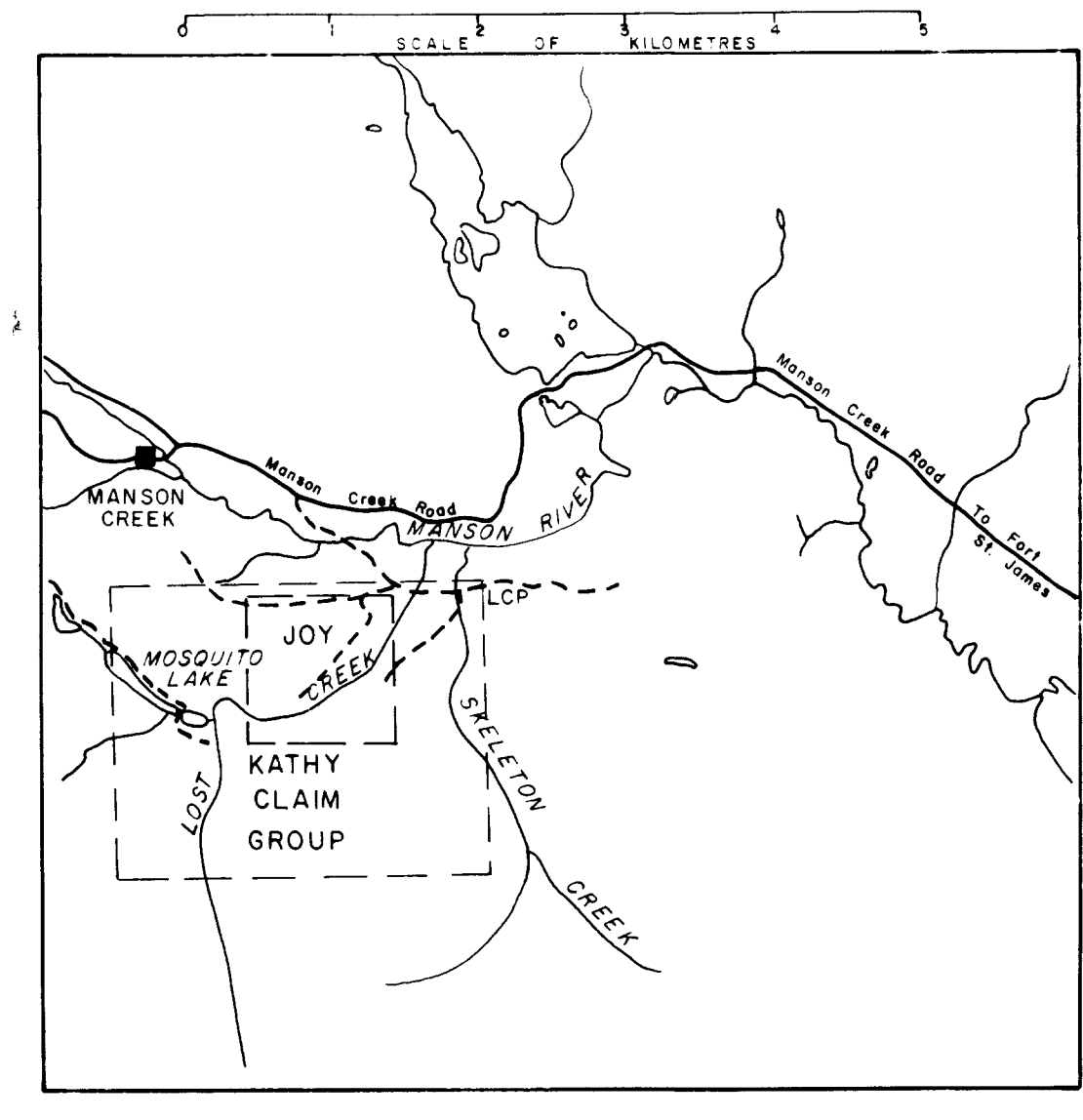




LOCATION MAP



PROPERTY MAP



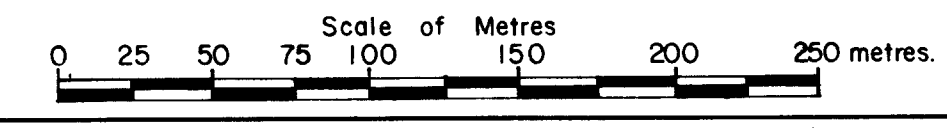
- LEGEND**
- GRAVEL ROAD
  - BUSH ROAD (APPROX LOCATION)
  - BRIDGE
  - CLAIM BOUNDARY

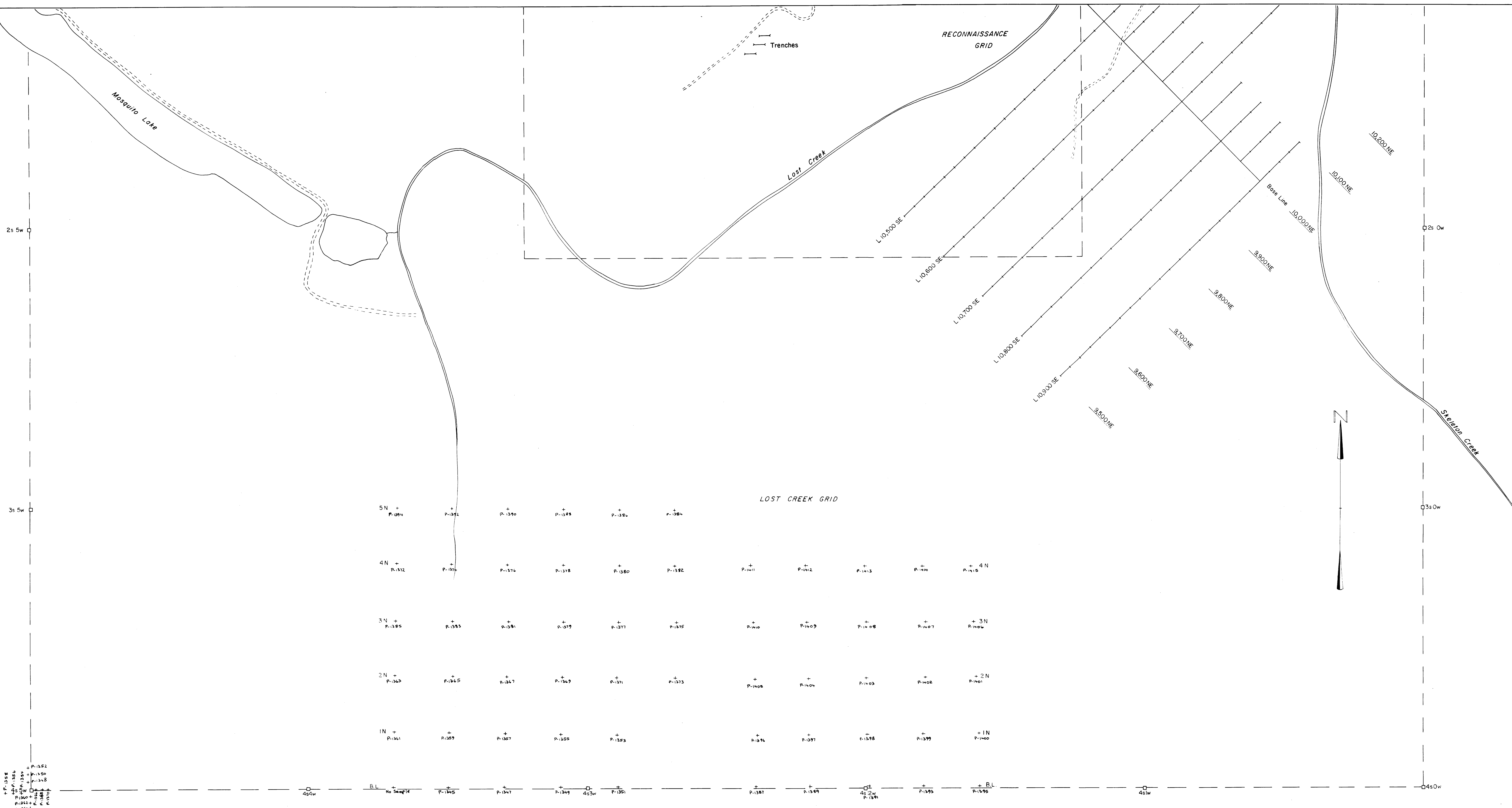
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EDMONTON, ALBERTA.

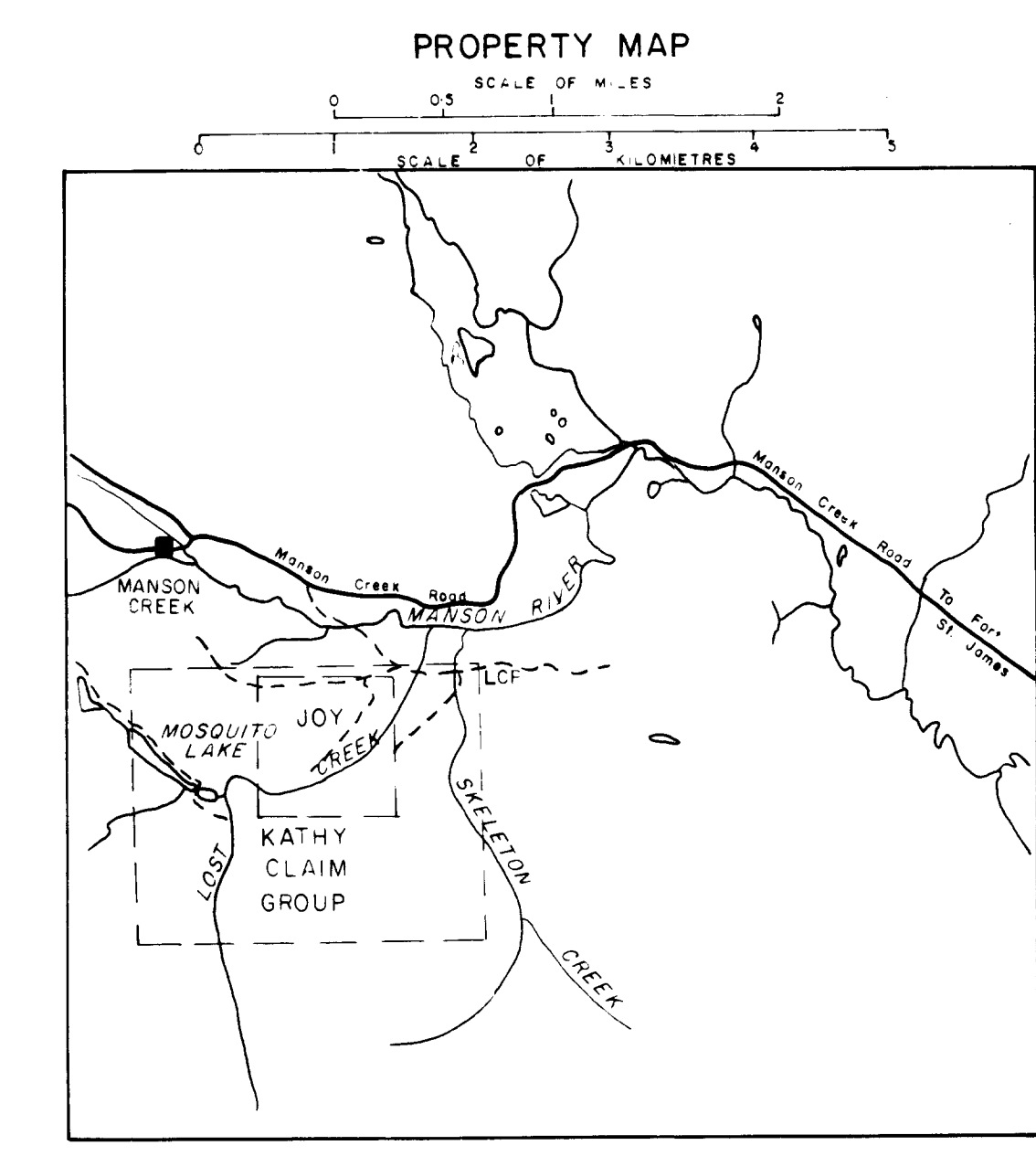
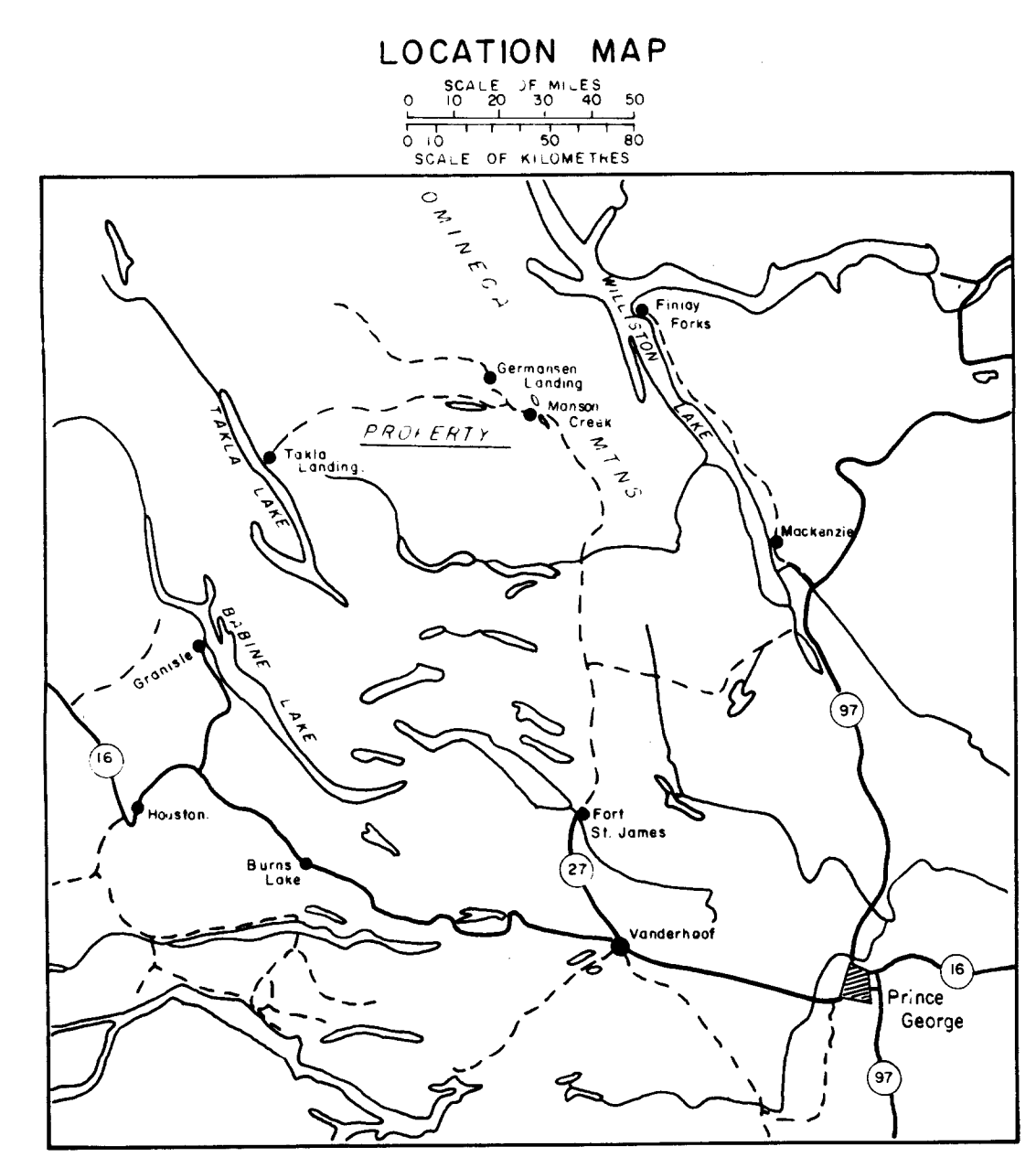
B. C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
ANOMALY GRID & RECONNAISSANCE GRID.  
FIGURE 6  
SOIL GEOCHEMISTRY As, Sb (ppm)

DRAWN BY: D.R. BULL.  
DATE: NOVEMBER 1980





P-1358  
P-1359  
P-1360  
P-1361  
P-1362  
P-1363  
P-1364  
P-1365  
P-1366  
P-1367  
P-1368  
P-1369  
P-1370



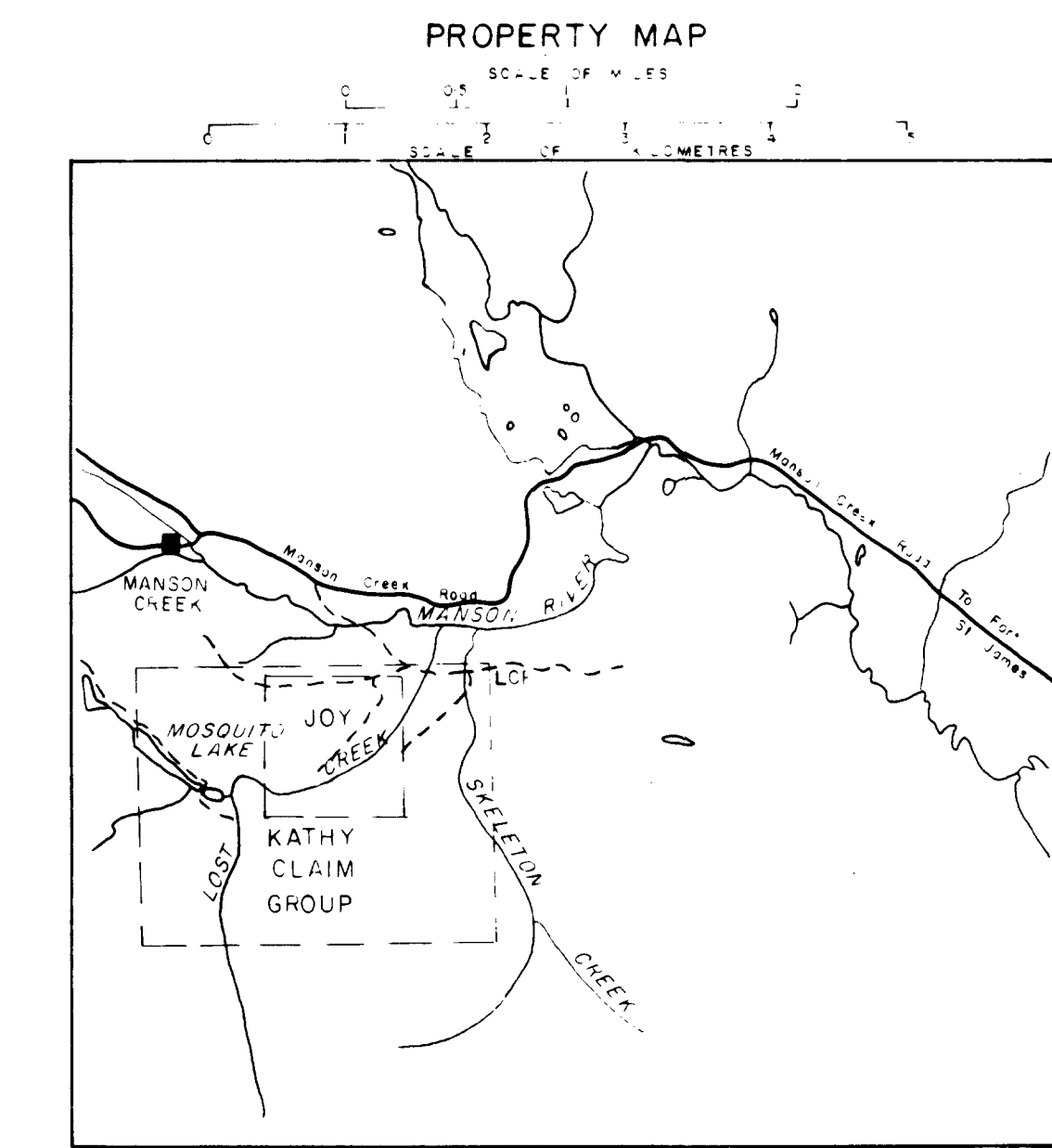
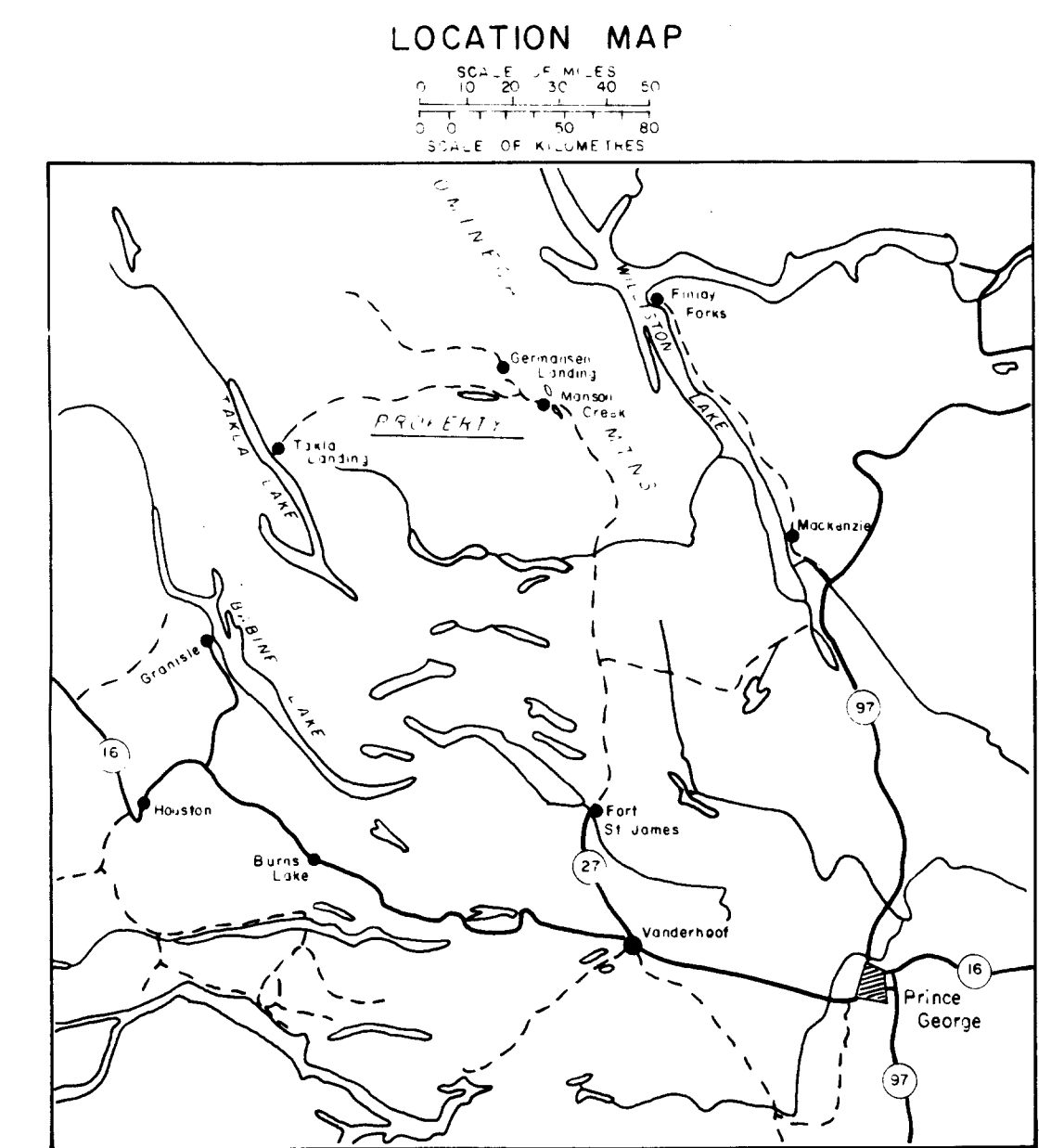
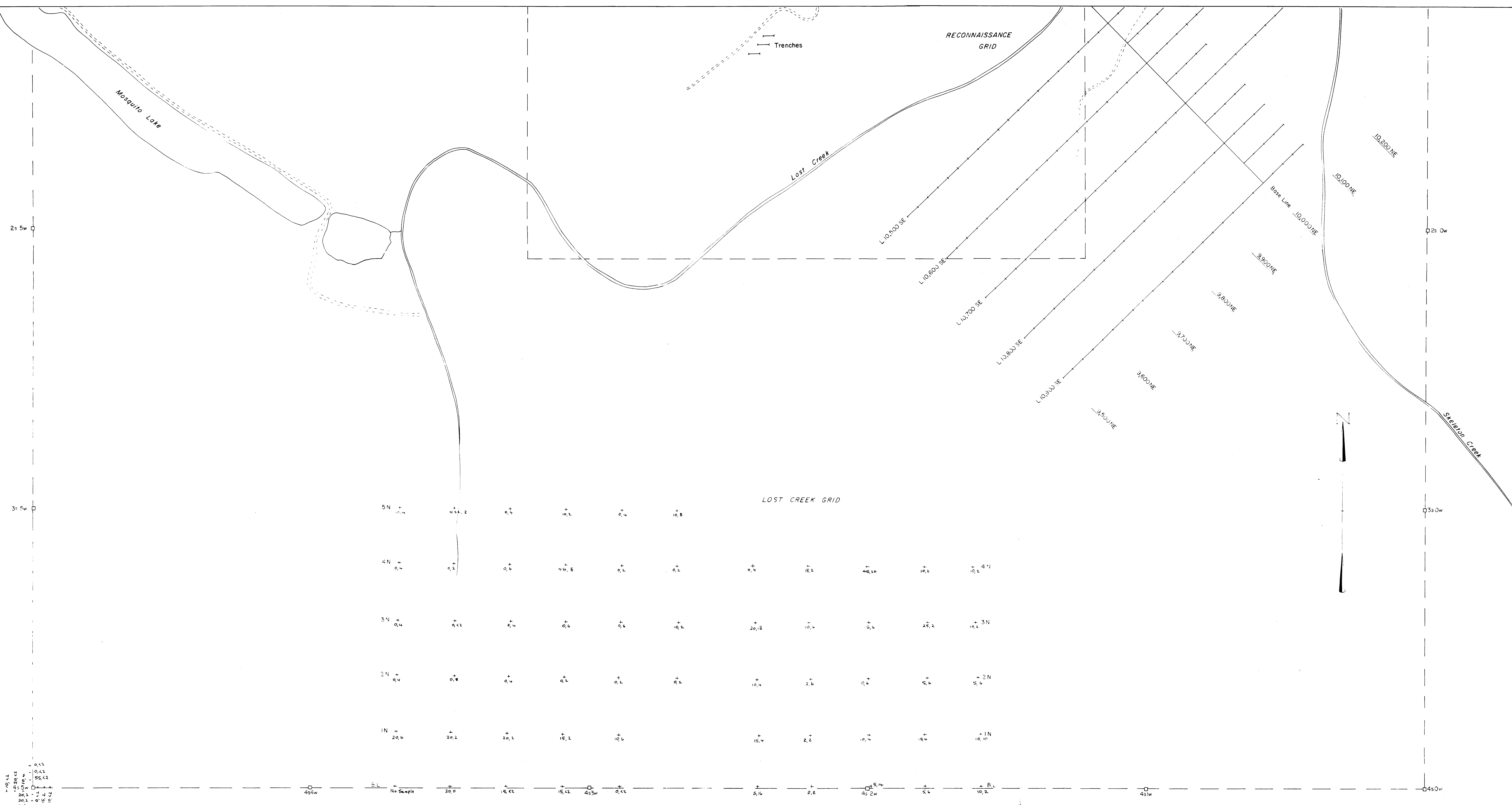
- LEGEND**
- GRAVEL ROAD
  - - - BUSH ROAD (APPROX LOCATION)
  - BRIDGE
  - CLAIM BOUNDARY

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KATHY CLAIM GROUP.  
LOST CREEK GRID  
FIGURE 7  
SOIL SAMPLE LOCATIONS

DRAWN BY: D.R. BULL.  
DATE: NOVEMBER 1980.

Scale of Metres  
0 25 50 75 100 150 200 250 metres.

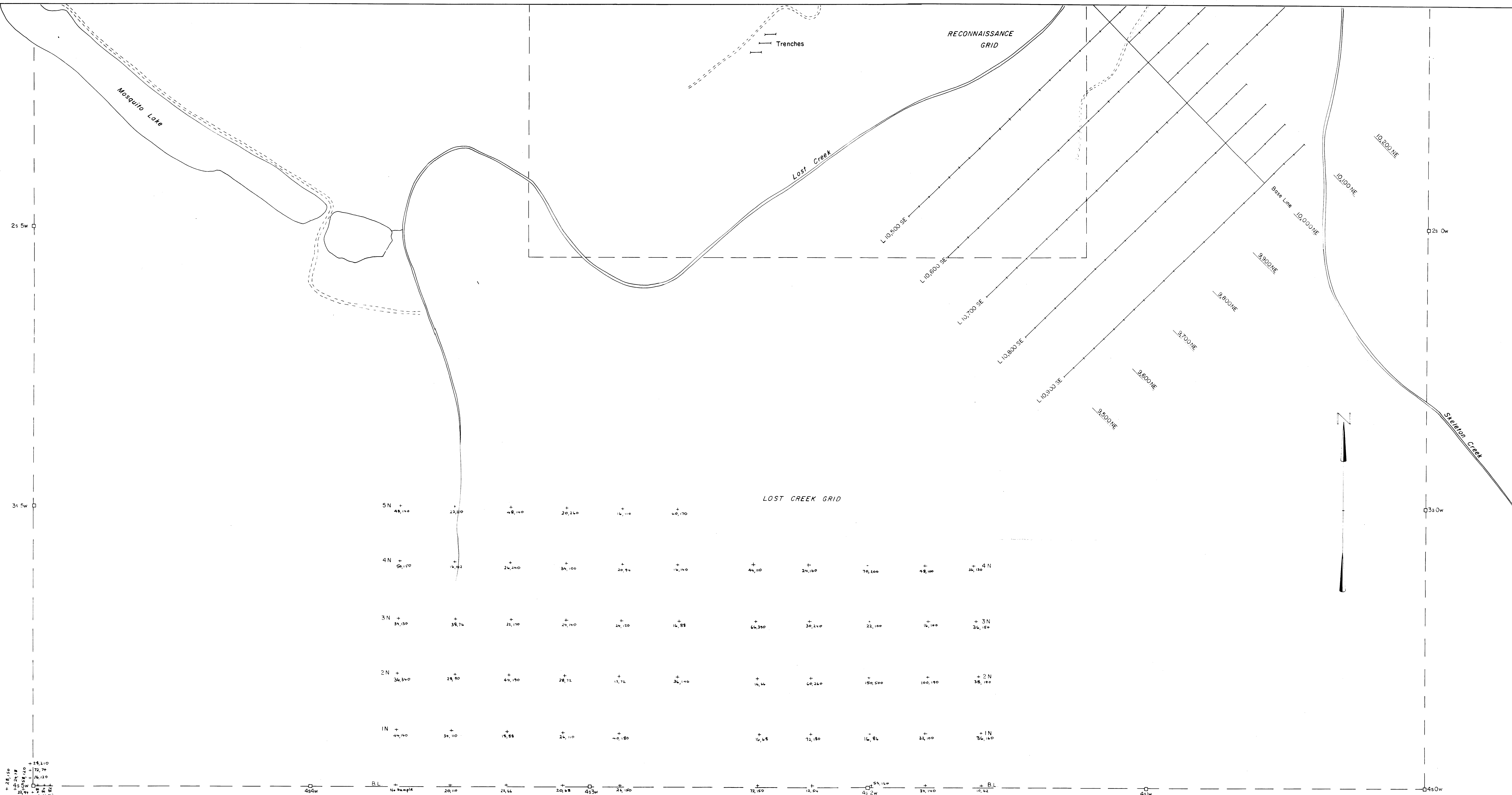


- LEGEND**
- GRAVEL ROAD
  - - - BUSH ROAD (APPROX LOCATION)
  - BRIDGE
  - - - CLAIM BOUNDARY

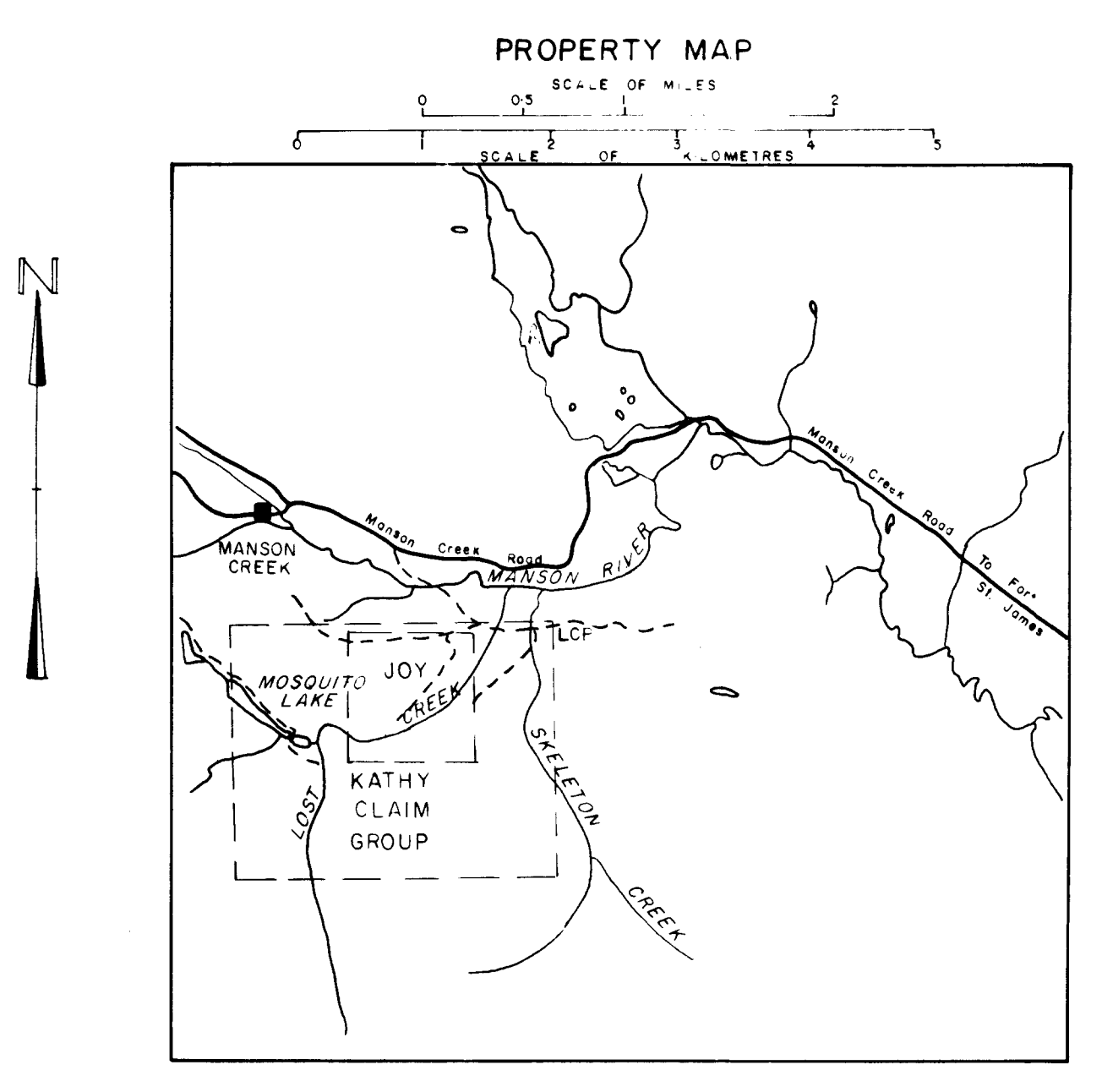
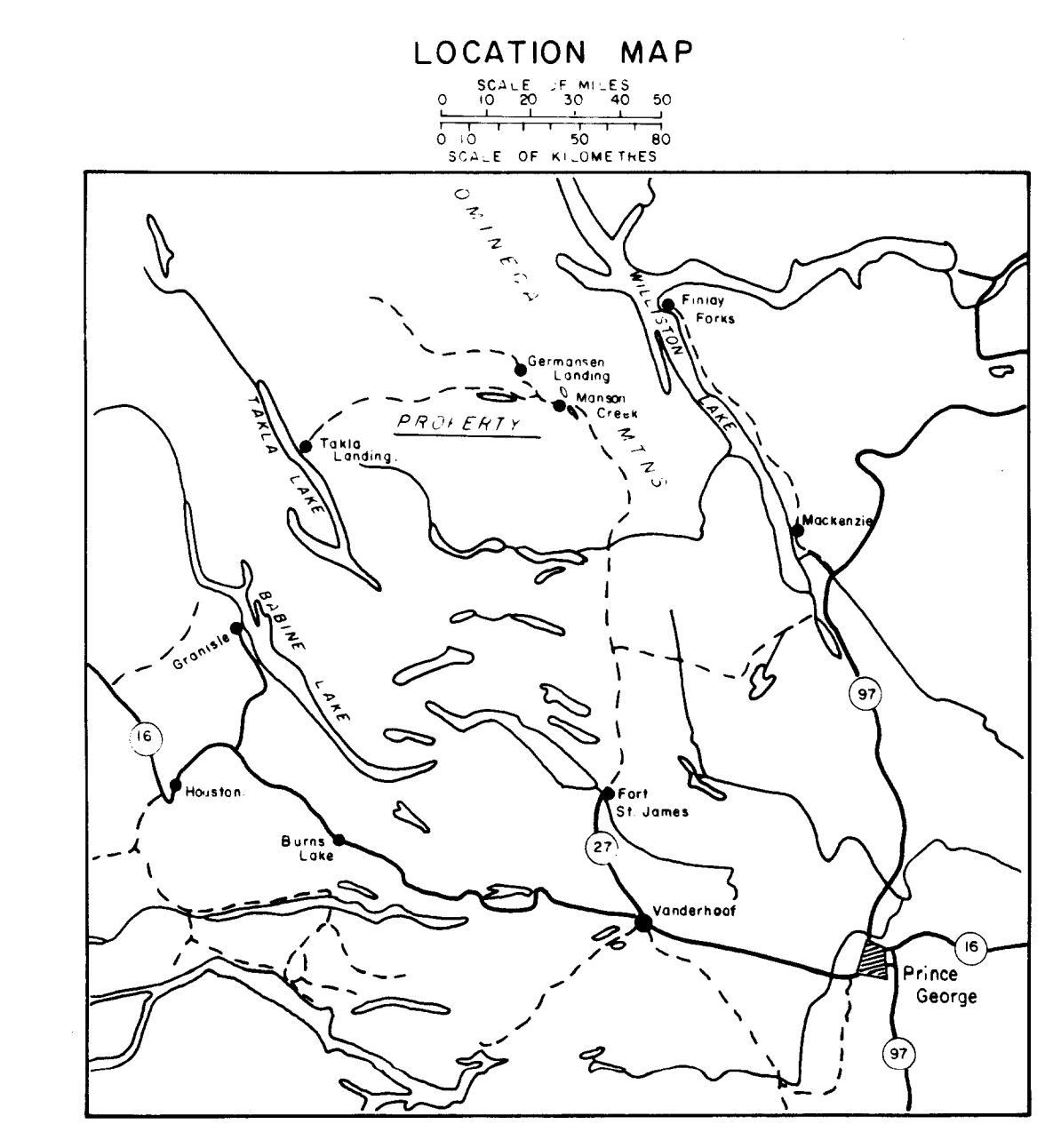
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 EDMONTON, ALBERTA.  
 B.C. TUNGSTEN PROJECT.  
 KATHY CLAIM GROUP.  
 LOST CREEK GRID  
 FIGURE 8  
 SOIL GEOCHEMISTRY W. Mo. (ppm)

DRAWN BY: D.R. BULL  
 DATE: NOVEMBER 1980  
 Scale of Meter: 0 25 50 75 100 150 200 250 meters.



+ 28,150  
 + 28,218  
 + 28,285  
 + 28,352  
 + 28,419  
 + 28,486  
 + 28,553  
 + 28,620  
 + 28,687  
 + 28,754  
 + 28,821  
 + 28,888  
 + 28,955  
 + 29,022  
 + 29,089  
 + 29,156  
 + 29,223  
 + 29,290  
 + 29,357  
 + 29,424  
 + 29,491  
 + 29,558  
 + 29,625  
 + 29,692  
 + 29,759  
 + 29,826  
 + 29,893  
 + 29,960  
 + 30,027  
 + 30,094  
 + 30,161  
 + 30,228  
 + 30,295  
 + 30,362  
 + 30,429  
 + 30,496  
 + 30,563  
 + 30,630  
 + 30,697  
 + 30,764  
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 + 31,501  
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 + 32,104  
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 + 32,506  
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 + 36,124  
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 + 36,459  
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 + 37,464  
 + 37,531  
 + 37,598  
 + 37,665  
 + 37,732  
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 + 45,571  
 + 45,638  
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 + 45,772  
 + 45,839  
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 + 46,576  
 + 46,643  
 + 46,710  
 + 46,777  
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 + 49,323  
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 + 49,457  
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 + 49,725  
 + 49,792  
 + 49,859  
 + 49,926  
 + 50,000



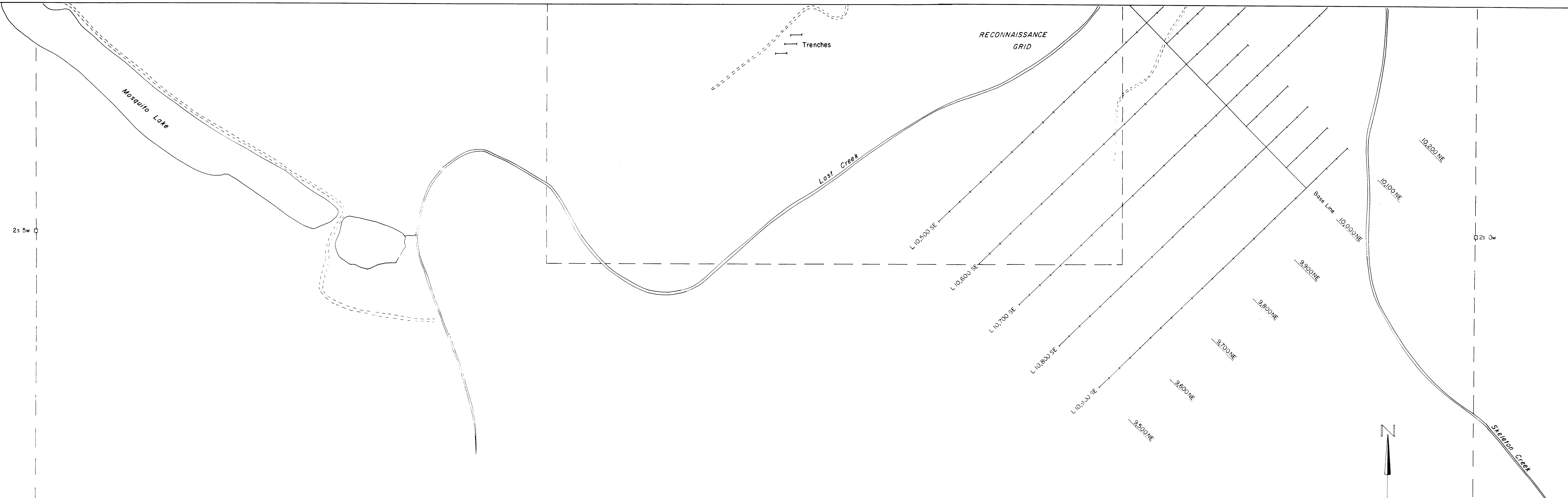
**LEGEND**  
 --- GRAVEL ROAD  
 - - - BUSH ROAD (APPROX LOCATION)  
 --- CLAIM BOUNDARY

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 B.C. TUNGSTEN PROJECT.  
 KATHY CLAIM GROUP.  
 LOST CREEK GRID  
 FIGURE 9  
 SOIL GEOCHEMISTRY Cu, Zn (ppm)

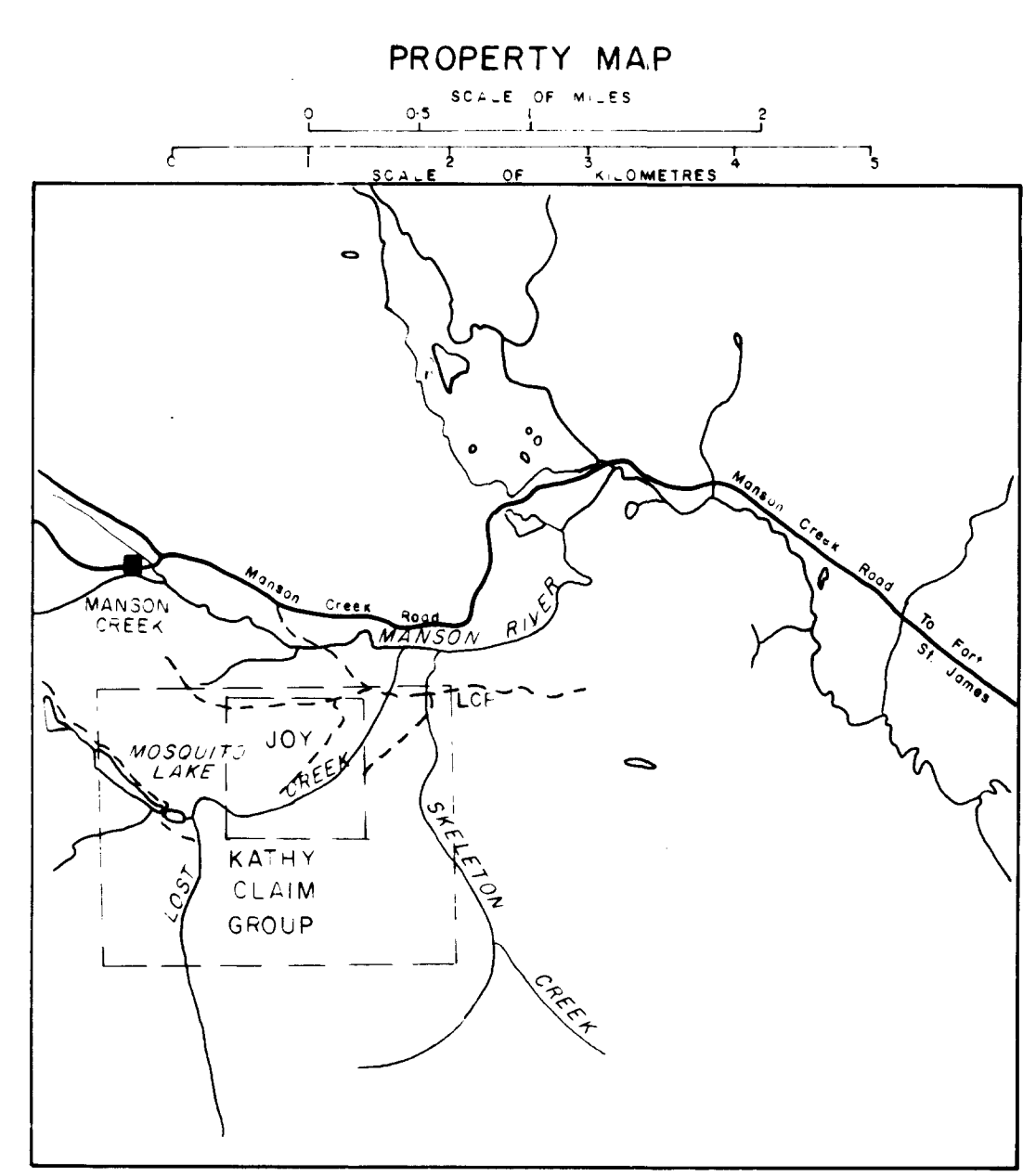
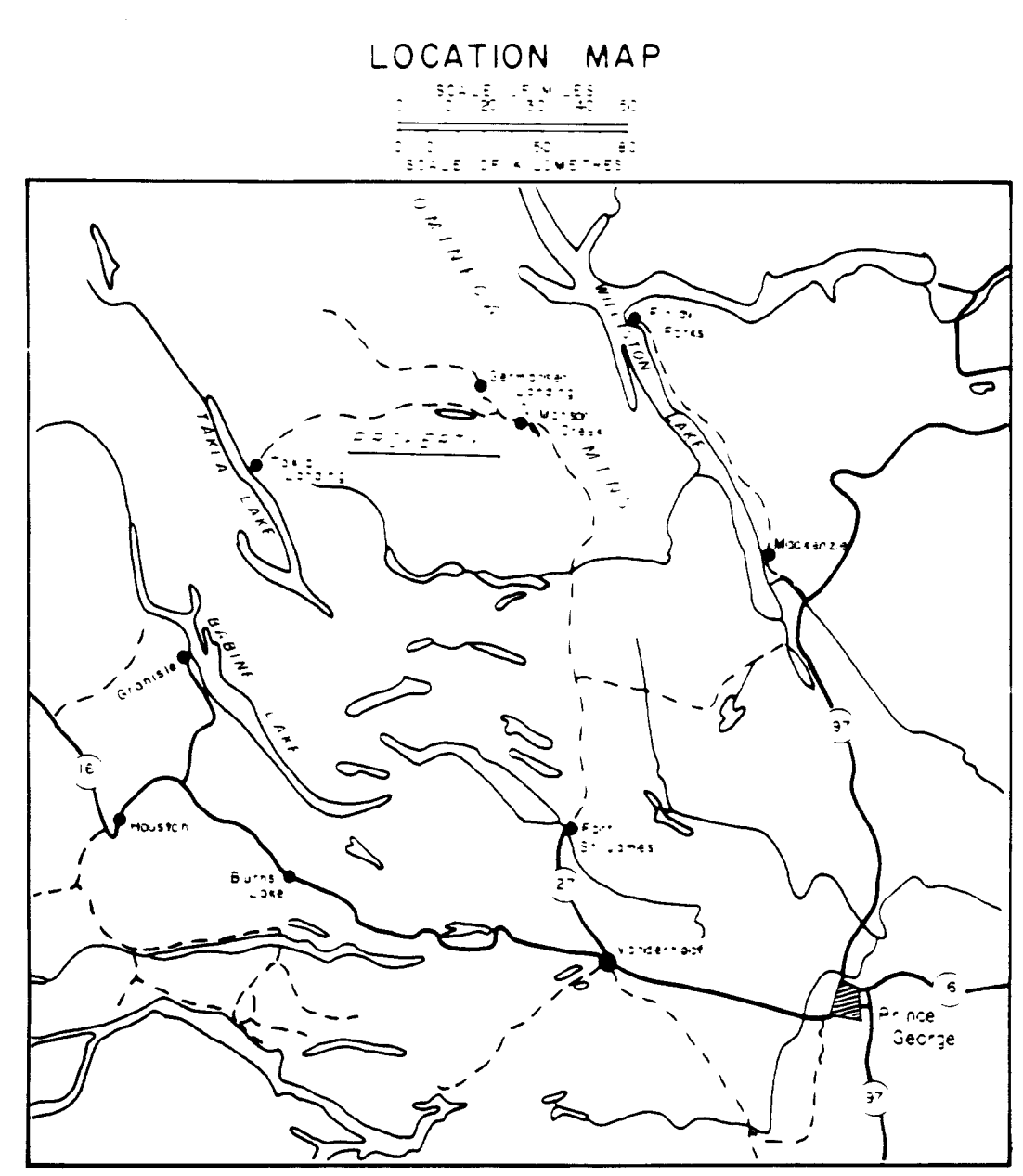
DRAWN BY: D.R. BULL  
 DATE: NOVEMBER 1980  
 Scale of Metres: 0, 25, 50, 75, 100, 150, 200, 250 metres.





LOST CREEK GRID

5N	+	24,0.2	16,0.2	24,0.2	22,0.2	10,0.4	10,0.2									
4N	+	20,0.2	6,0.2	30,0.4	14,0.4	12,0.2	10,0.2	6,0.4	7,1.0	10,0.4	6,1.0	6,0.8	+	4N	6,0.8	
3N	+	14,0.2	10,0.2	28,0.4	24,0.4	10,0.4	12,0.2	16,1.0	6,1.0	14,0.8	8,1.4	+	3N	10,1.0	10,1.0	
2N	+	2,0.2	16,0.2	28,1.0	10,0.4	4,0.2	10,1.0	14,0.6	28,0.8	10,0.8	14,3.4	+	2N	10,0.8	10,0.8	
1N	+	10,0.2	6,0.2	14,0.2	10,0.2	20,0.2		22,0.4	10,0.8	12,0.4	10,0.4	+	1N	10,0.4	10,0.4	
		454w	BL	No Sample	4,0.2	2,0.2	6,0.2	453w	40,0.4	16,1.4	6,0.4	452w	24,1.0	10,0.2	BL	451w



LEGEND

--- BUSH ROAD (APPROX LOCATION)

--- CLAIM BOUNDARY

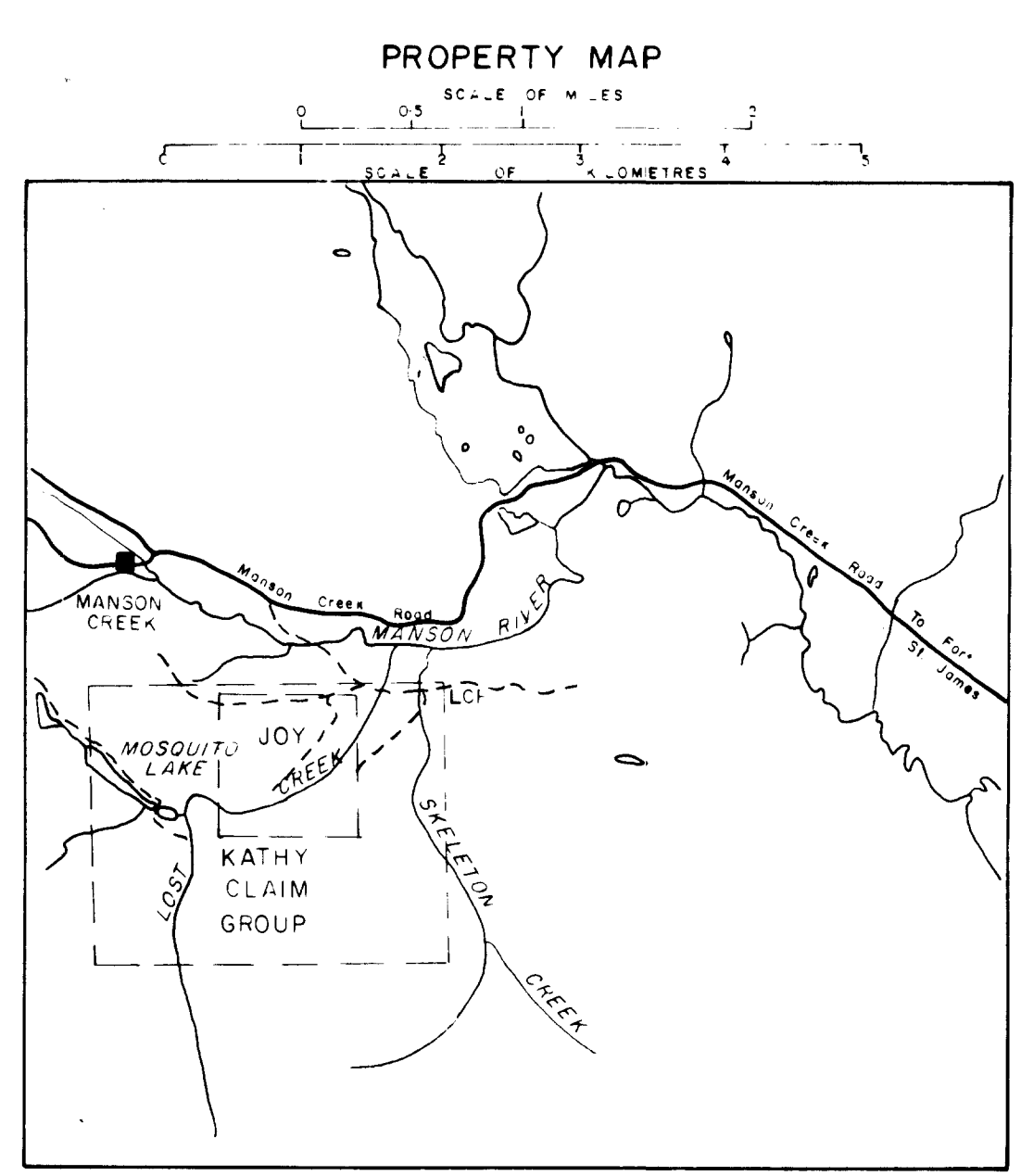
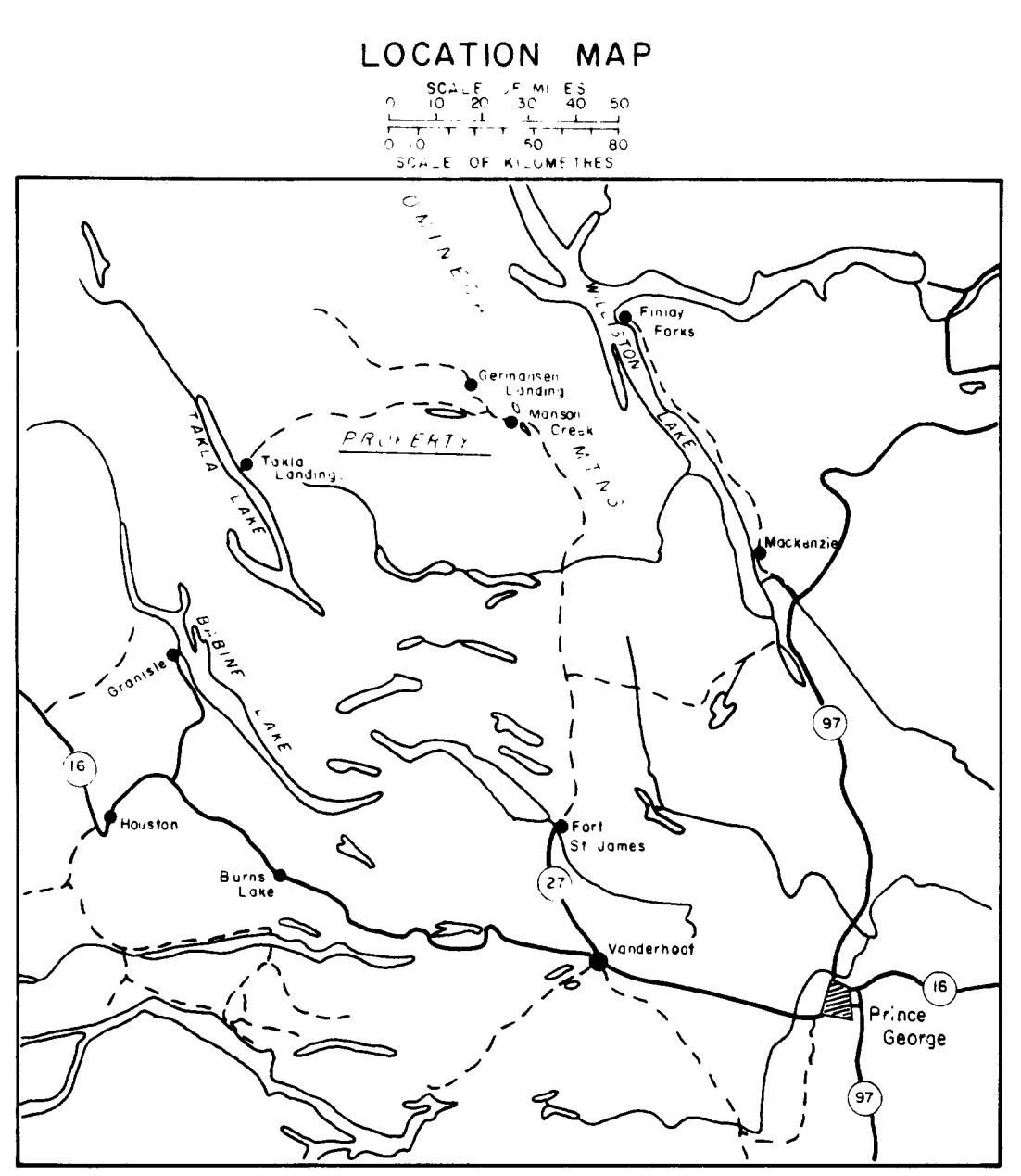
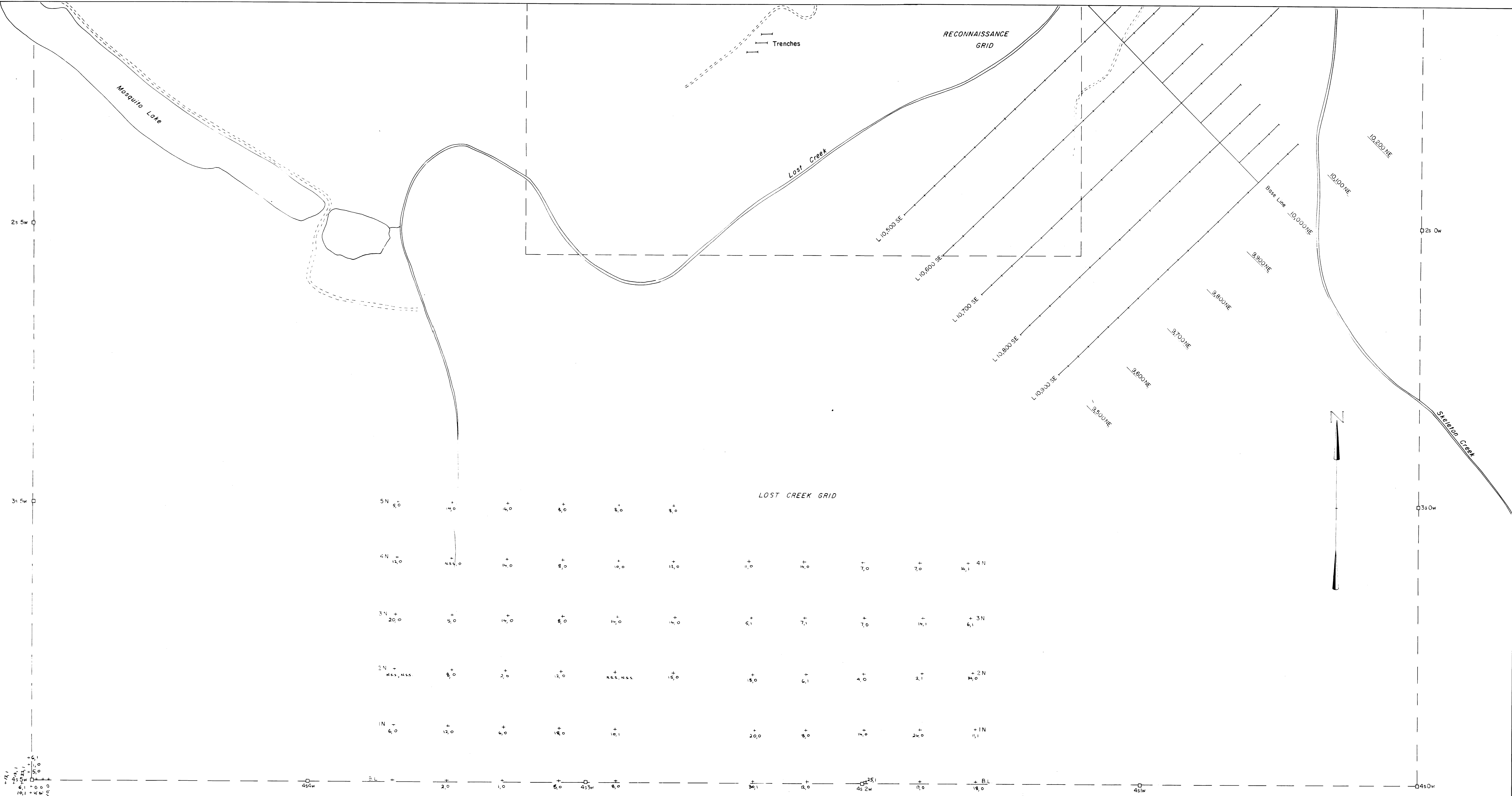
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WESTERN FIELD OFFICE  
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B.C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
LOST CREEK GRID.  
FIGURE 10  
SOIL GEOCHEMISTRY Pb,Ag (ppm)

DRAWN BY: D.R.BULL.  
DATE: NOVEMBER 1980

Scale of Metres  
0 25 50 75 100 150 200 250 metres.



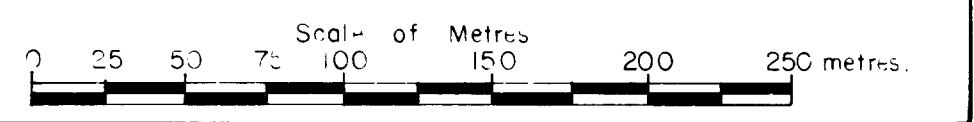
**LEGEND**  
 --- BUSH ROAD (APPROX LOCATION)  
 --- CLAIM BOUNDARY

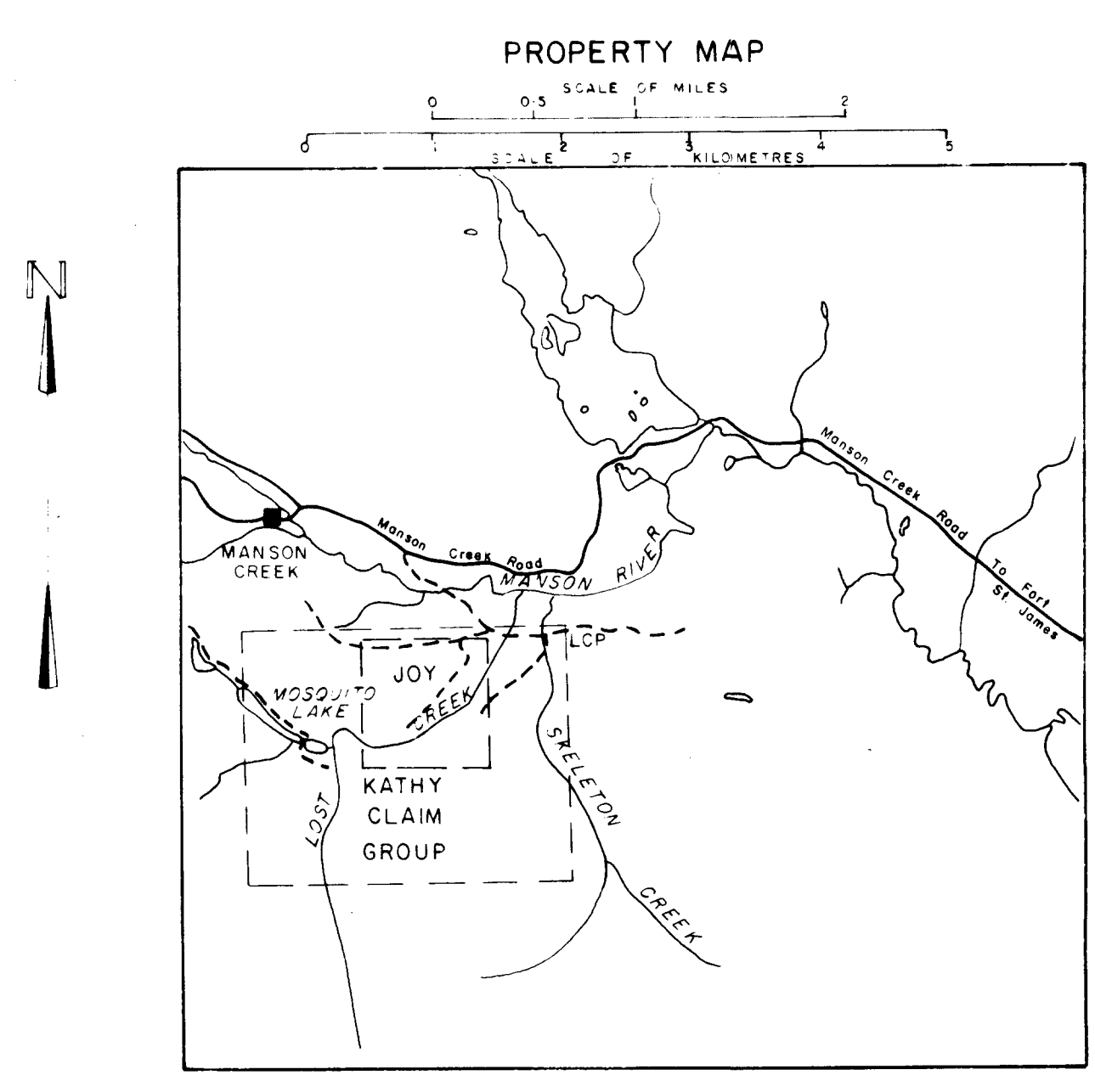
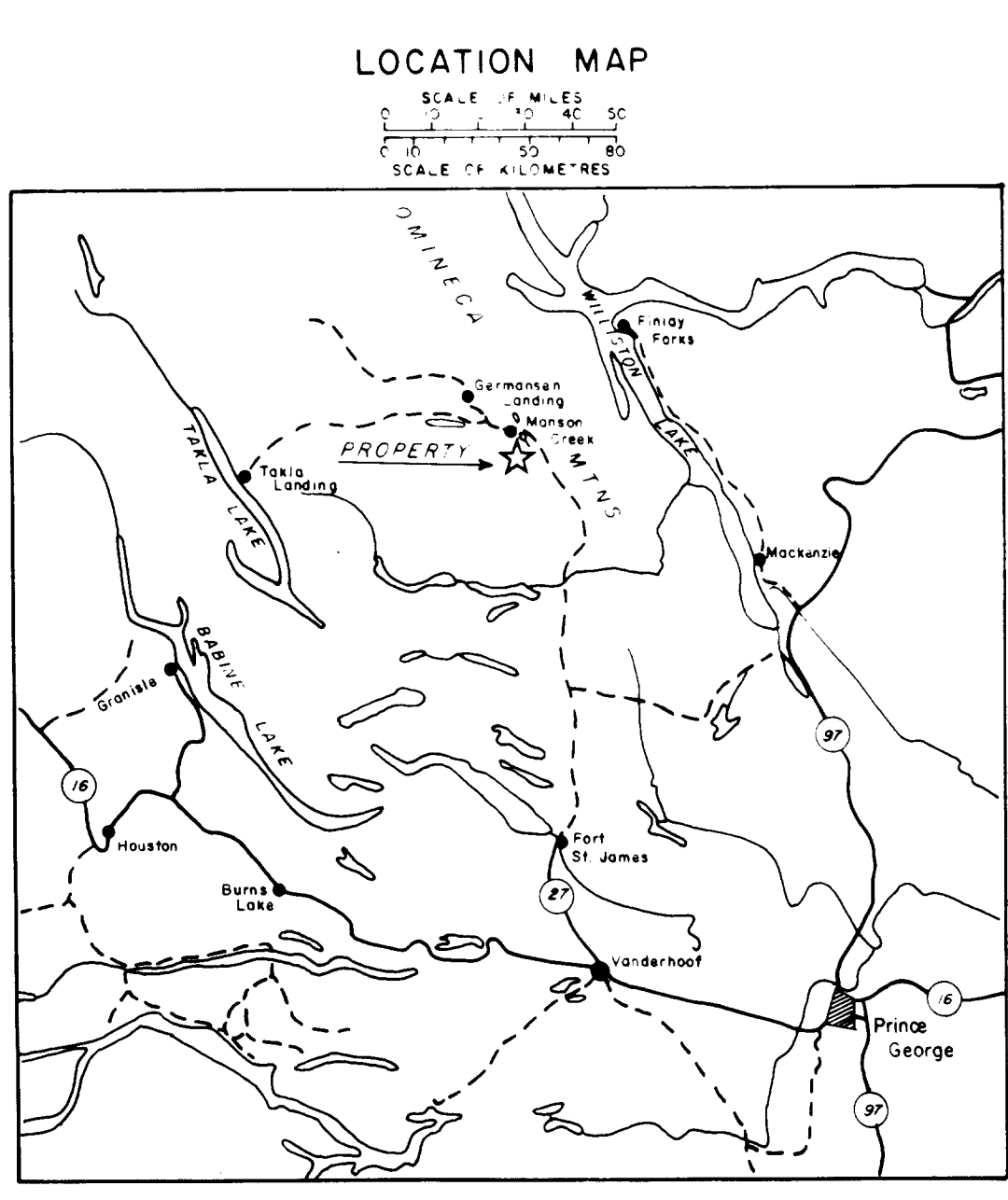
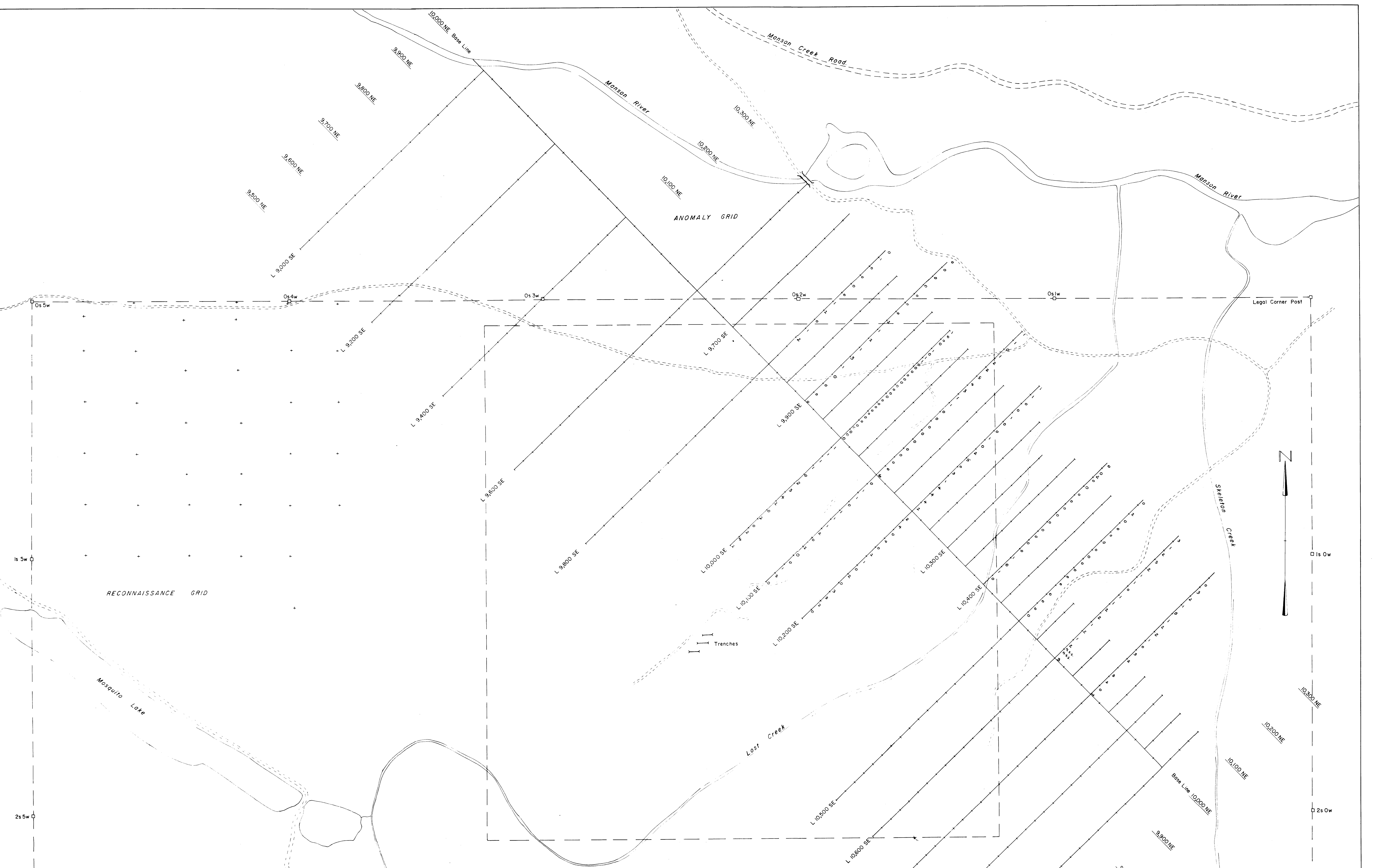
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B.C. TUNGSTEN PROJECT.  
 KATHY CLAIM GROUP.  
 LOST CREEK GRID  
 FIGURE II  
 SOIL GEOCHEMISTRY As., Sb. (ppm)

DRAWN BY: D.R. BULL.  
 DATE: NOVEMBER 1980





- LEGEND**
- GRAVEL ROAD
  - - - BUSH ROAD (APPROX LOCATION)
  - BRIDGE
  - CLAIM BOUNDARY

MINERAL RESOURCES BRANCH  
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B. C. TUNGSTEN PROJECT.  
KATHY CLAIM GROUP.  
ANOMALY GRID & RECONNAISSANCE GRID.  
FIGURE 12  
GOLD VALUES IN MOSS (ppb)

DRAWN BY: D.R.BULL.  
DATE: NOVEMBER 1980

Scale of Metres  
0 25 50 75 100 150 200 250 metres.