

**ASSESSMENT REPORT  
ADDITIONAL BIOGEOCHEMICAL SAMPLING  
on the  
DNA 1 & 3 CLAIMS  
KEEFER LAKE, LUMBY AREA, B.C.  
VERNON MINING DIVISION  
82L1W**

**By**

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**May 20, 2001**

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**26,630**

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## SUMMARY

The DNA property, consisting of two co-ordinate grid claims totaling 24 units, is located in southern British Columbia approximately 63 kilometres east of Vernon. Locally, it is situated on the eastern end of Monashee Mountain three kilometres west of Keefer Lake. It is readily accessible from a provincial highway by a logging road and a short bush road.

The general claims area has a long, intermittent history of placer gold mining dating from the 1870's to the present. Small quantities of gold were produced from a number of creeks in the district and local streams near the property. Base and precious metal properties are also known in the area.

The DNA claims are relocations of the Dona claims, which were originally staked in 1973 by El Paso Mining and Milling Company to cover a gold-arsenic geochemical anomaly discovered during a regional stream sediment-prospecting program. Subsequent work on the claims by El Paso during 1973-74 defined an area approximately 700 metres by 215 metres strongly anomalous in gold, silver and arsenic and moderately anomalous in lead.

When El Paso ceased operating in British Columbia they assigned the property to several of its former geologists. They optioned it to a local mining promoter who, after six years, ran into financial problems and let the property lapse. It was promptly re-staked by Jones, one of the original owners and co-author of this report.

The property has been optioned out to various companies: Keefer Lake Resources Inc. in 1982-88; Phelps Dodge Corporation of Canada in 1992; and Carbon Reef Resources in 1993. The largest program was conducted by Phelps Dodge who gridded and soil sampled a large area which included, but expanded on, that area covered by El Paso. Their results confirmed the large gold-arsenic geochemical anomaly. The above companies filed assessment reports on the work they conducted.

In 1999 a trial biogeochemical survey was conducted on the property financed by the owners. Two areas were selected for this work, the Northwest and Southeast grids. The former covered a part of the large geochemically anomalous area which had been trenched by El Paso, the latter an area near the southern end of same soil sampled area where little work was conducted. The purpose of this work was to test its effectiveness as an exploration tool on this mostly overburdened-covered property.

It was planned to use dry twigs from Lodgepole pine as a sampling medium since past experience by the contractor (Morrison, B.Sc) found that twigs from these trees commonly yielded very high silver values. Silver, associated with gold on this property, can be used as a pathfinder for gold. Unfortunately, these trees were only abundant on the Southeast grid, so Balsam fir was used on the Northwest grid. Morrison had also found from experience that Balsam fir commonly has a much lower silver background

than Lodgepole pine, resulting in a different silver background for each grid. A total of 60 samples were collected and assayed for 30 elements using the I.C.P method. Elements which appeared to be the most indicative of the mineralized zone were silver, arsenic, antimony, cadmium and manganese.

The Northwest grid results indicated that elevated values of silver were coincident with elevated arsenic and manganese and reasonably coincident with cadmium and antimony. These elevated values are coincident with the large anomalous area located during the El Paso and Phelps Dodge soil surveys.

The Southeast grid results showed very high silver values in the southern part of the grid. Most of the grid also returned high values for arsenic and cadmium, indicating significant coincidence of these three elements. Antimony values were low and manganese assays displayed no distribution patterns.

In 2000 the biogeochemical survey on the Southeast grid was extended. Balsam fir was sampled so that the sample medium for this area and the 1999 Northwest grid would be the same. Significant values for arsenic, cadmium and manganese were obtained, while silver values were very low. As, Cd and Mn accompanied by weak silver values define a northwest-trending linear zone which may (?) reflect a mineralized intrusive.

The 1999 and 2000 biogeochemical surveys were essentially a test of this type of sampling program over a known gold-base metal mineralized zone. The results indicate that it was effective since it confirmed the presence of elevated values of silver, arsenic, antimony, cadmium and manganese in the areas tested. Since these elements accompany gold values on this property they may be considered as pathfinders for gold.

It was recommended that detailed soil sampling be conducted on an expanded grid to include the area covered by the biogeochemical survey. Significant areas defined from this work should be tested with limited backhoe trenching.

## INTRODUCTION

The DNA property hosts a gold prospect which, from previous exploration, is indicated to have the potential for hosting a moderate sized, low grade gold deposit. The following report was prepared as a requirement for filing assessment work conducted on the property during the period September 6 to September 12, 2000. During this period, additional biogeochemical sampling was conducted as an extension of the "Southeast Grid" over which sampling was initiated in 1999. This previous biogeochemical sampling was conducted to test its effectiveness as an exploration tool over areas where soil sampling by previous operators found to be strong to moderately anomalous in Au, As, Ag and Pb. The results of the 1999 sampling indicate that it was effective since it confirmed the presence of elevated values of silver, arsenic, antimony, cadmium and manganese in the areas tested (Northwest and Southeast Grids). While the shape of each element's contoured values differ somewhat from each other, they may be described, in part of each grid, as being either coincident or partially coincident one element with the other. Since these elements accompany gold values on this property they may be considered as pathfinders for gold. This type of sampling could be used to further explore untested parts of this largely overburden-covered property.

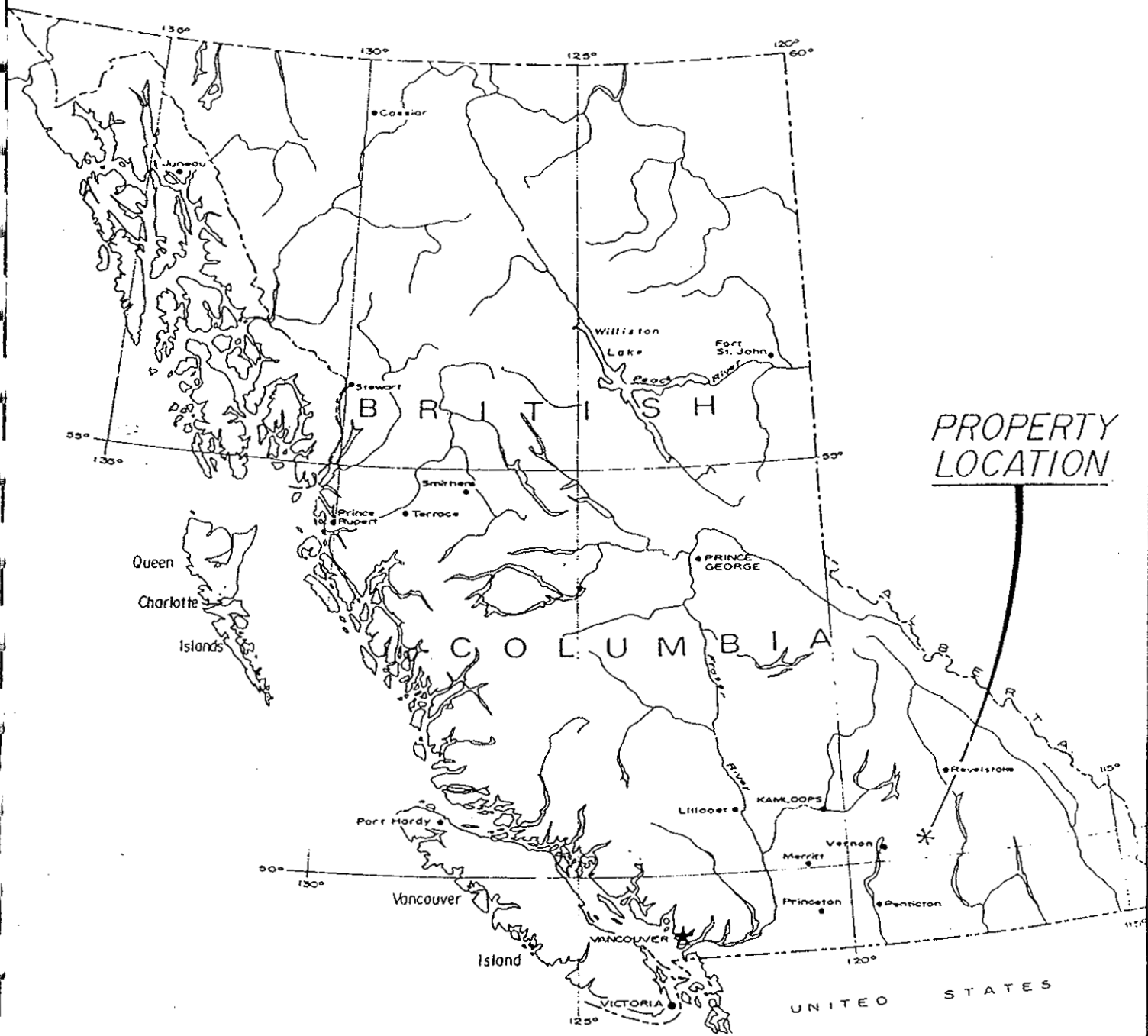
This report describes the work conducted and the results obtained. All fieldwork was conducted by the author who is familiar with the property having conducted and supervised the exploration programs on it by El Paso Mining and Milling Company during 1973-74. At that time the property was acquired by staking by the company and consisted of seventeen two-post claims - Dona 1-17. The writer restaked the property in 1991 as Donna 1-17 when the original claims lapsed. These were later restaked as coordinate grid claims resulting in the property now consisting of the 24 unit DNA 1 and DNA 3 claims.

This report also summarizes all exploration conducted and the results obtained on the property prior to the 1999 program.

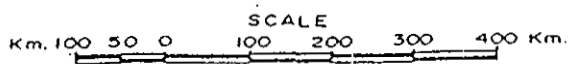
### Location and Access

50°08' north latitude)      to approximate centre of  
118° 24' west longitude)      the claims

The DNA claims are located in the Vernon Mining Division of southern British Columbia approximately 63 km east-southeast of Vernon. Locally, they are situated near the headwaters of the Kettle River, on Monashee Mountain, 3 km west-northwest of Keefer Lake and 2 km southeast of Yeoward mountain (Figure 1).



PROPERTY  
LOCATION



<b>Harold M. Jones &amp; Associates Inc.</b>	
<b>DNA CLAIMS LOCATION MAP</b>	
<b>Kefer Lake Area Vernon M.D., B.C.</b>	
<b>NTS 82-L-1W</b>	
<b>Drawn By: H.M. Jones</b>	<b>Figure No. 1</b>
<b>Date: May 20, 2001</b>	

The property is readily accessible from B.C. highway No. 6 at a point approximately 85 road kilometres east of Vernon. Here, the Keefer Lake Forest Access Road originates and is followed northeasterly for 9 km to a bridge crossing Kettle River. Instead of crossing the bridge, one continues straight ahead a few hundred metres on a narrow road, the Yeoward Mountain cattle road, then branch off to the north and follow an old cat road into the property. The latter is a good road but is now partially overgrown by second growth alder and requires brushing out. It provides access to the south and central part of the property.

The property is situated within an active logging area. A new road, originating from the Monashee Creek Forest Access road, follows Yeoward Creek southeasterly to and into the northern part of the DNA claims (see Figure 2).

### **Topography and Vegetation**

The claims lie on the eastern end of Monashee Mountain which is characterized by relatively steep slopes leading up to a rounded, relatively flat, north northwest trending ridge top. Elevations range from approximately 1340 metres to 1650 metres. The central part of the property is located within an old burn, which is now covered by thick brush and, locally, very thick second growth fir and hemlock. The northern and northeastern part of the property has stands of commercial-sized fir, hemlock, pine and spruce. Flagging tape observed in these areas suggest that additional logging is planned.

### **Property**

The property consists of two coordinate grid claims totaling 24 units and covering approximately 600 hectares (Figure 2). They are:

Claim name	Record No.	No. of units	Expiry date
DNA 1	310836	20	June 20, 2002*
DNA 3	310838	4	June 19, 2002*

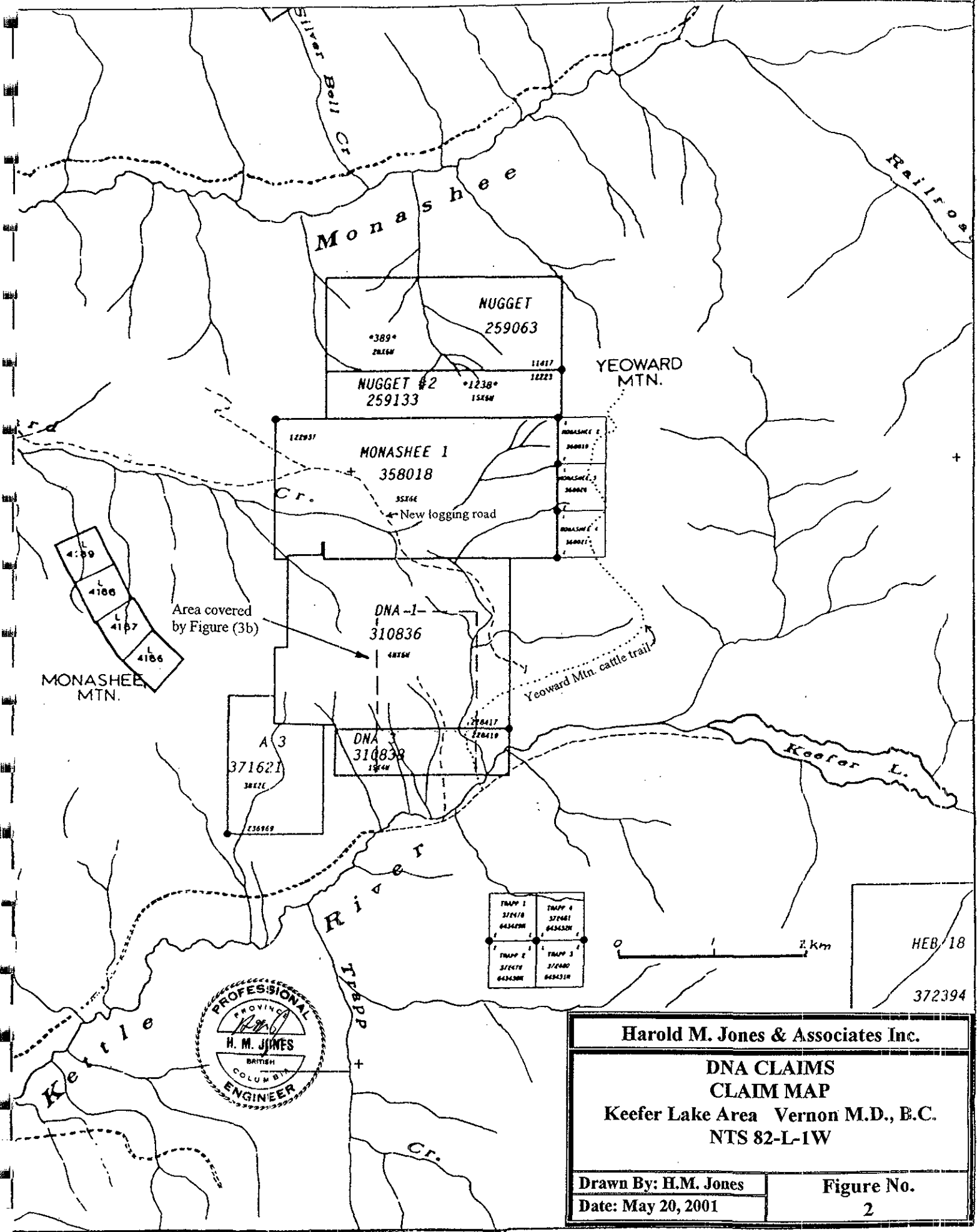
\* Based on acceptance of this assessment report.

The claims are owned by Harold M. Jones, #86-5531 Cornwall Drive, Richmond, B.C. (90%) and Robert W. Yorke-Hardy, Box 298, Vernon, B.C. (10%).

### **History**

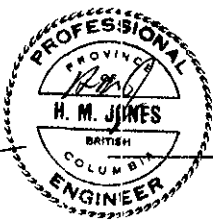
The general area east of Vernon has a gold placer history dating from the 1870's to the present. Limited production came from a number of streams in the district. In proximity to the DNA claims placer mining was conducted on Monashee and Cherry Creeks, 14 km



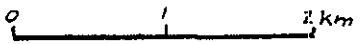


MONASHEE MTN.

Area covered by Figure (3b)



TRAPP 1 372478 6434298	TRAPP 4 372481 6434328
TRAPP 2 372479 6434308	TRAPP 3 372480 6434318



HEB/18

372394

<b>Harold M. Jones &amp; Associates Inc.</b>	
<b>DNA CLAIMS CLAIM MAP</b>	
<b>Keefe Lake Area Vernon M.D., B.C. NTS 82-L-1W</b>	
<b>Drawn By: H.M. Jones</b>	<b>Figure No.</b>
<b>Date: May 20, 2001</b>	<b>2</b>

and 7 km respectively to the northwest; Barnes Creek 10 km to the southeast and Marsh Creek 5 km to the southwest of the property.

Veins mineralized with pyrite, chalcopyrite, galena and sphalerite with significant values in gold and silver were explored on the St. Paul Group, located on Monashee Mountain approximately 1.5 km to the west of the DNA claims. Intermittent mining from this property produced a small tonnage of both direct shipping and milling ores. The last production was in the mid 1970's. A site inspection by the co-writer (Jones) in 1973 noted the remains of a set of shaking tables (an attempt to recover free gold?).

Mineralization on the original Dona claims was located as a result of a district stream sediment sampling-prospecting program conducted in 1973 by El Paso Mining and Milling Company. The area selected for this work was a part of the Monashee Mountain Range known to host placer gold and was relatively accessible. A sediment sample taken from a small tributary of the upper Kettle River near Keefer Lake returned anomalous values in gold and arsenic. Follow-up stream sampling and prospecting confirmed the stream anomaly as well as located quartz float mineralized with coarse pyrite and arsenopyrite, samples from which assayed in the range of 17 gpt (0.50 opt) gold and 6515 gpt (190 opt) silver. Reconnaissance soil lines run at this time returned a number of samples anomalous in Au, Ag, As and Pb. As a result of these encouraging results the original Dona claims were staked and a soil sampling survey conducted. The results of the survey defined a large area anomalous in Au, Ag, As and Pb (see Figure 3b).

El Paso conducted a detailed geochemical soil survey over a part of the original Dona claims, the area of which now is mostly covered by the southeastern part of DNA 1 claim. The survey was successful in locating a large area anomalous in Au, Ag, As, and Pb. The Au and As anomalies were respectively 670 m and 850 m long, while the Ag and Pb anomalies were 520 m and 365 m long, all of which were coincident. All were approximately elongate with the widest parts up to 200 – 215 m wide. Each element had smaller satellite anomalies on trend to the northwest and southeast of the main anomaly. The southeast end of the anomalous area terminated at the base of the ridge where deep glacial till fills the valley floor, the northwest end was open.

Au, Ag and As anomalies were very strong. The Au anomaly was defined by those values  $> 0.09$  ppm Au (90 ppb) – most values were  $> 0.02$  ppm Au – with highs of 3.2-4.2 ppm Au; As by those values  $> 350$  ppm As, with highs of 1500-2300 ppm As; and Ag by those values  $> 2.6$  ppm Ag, with highs of 5.6-6.2 ppm Ag. Pb values were weaker with those values  $> 52$  ppm Pb being considered anomalous. Pb highs were 385-770 ppm Pb.

Background values were low for all elements except silver, which was unusually high at 1.5 ppm Ag. Figure 3(b) is a composite map showing the geochemical anomalous zone correlated with the surface geology and workings. The contours are 0.04 ppm Au and 150 ppm As. These values clearly defined the zone of interest and encompassed all of the highly anomalous assays. El Paso's trenching program partially tested this large anomalous zone.

In 1974 a backhoe-trenching program accompanied by geological mapping and rock sampling was conducted to test the anomalous area. It was followed by airtrack-type percussion drilling which intersected a number of gold-bearing zones. In 1975 El Paso ceased operating in British Columbia due to the political climate and transferred the claims to their former geologists.

In 1980 the property was optioned to Salamet Resources Corp., who later transferred them to Granex Resources Ltd. who in turn transferred them to Keefer Lake Resources, all in-house companies run by a local Vancouver promoter. The latter company used the property as a basis for the company and conducted intermittent exploration between 1982 and 1988. Work included limited trenching, trench sampling and soil sampling, the latter in previously untested areas. The trenches in the northern part of the property confirmed favourable geology between the northernmost El Paso trenches, and the soil sampling did not locate other areas of interest. Mohawk Oil Ltd. financed the 1984 trenching.

While the agreement with Keefer Lake Resources was in default for several years the writer could not regain title to the ground without resorting to a court case. The original claims lapsed and were immediately restaked by the writer in 1991 as the Donna 1-17 two-post claims.

In 1992 they were optioned to Phelps.Dodge Corporation of Canada. They conducted a detailed geochemical survey over most of the property, duplicating much of that previously done by El Paso. Their results confirmed the presence of a large, coincident gold-silver-arsenic anomaly approximately 700 metres long by up to 215 metres wide. Previous trenching by El Paso of this anomaly exposed a quartz vein stockwork zone occurring mostly within a sill-like dioritic intrusive within intercalated sediments-volcanics of the Thompson Assemblage (formerly Cache Creek formation). Many anomalous gold values were obtained from channel samples in these trenches. El Paso drilled two fences of airtrack percussion holes across the anomaly, many samples from which were anomalous in gold – 0.69 to 1.37 gpt (0.02 to 0.04 opt) gold. Results from this drilling were not considered very reliable – open hole (no casing), poor sampling technique (no proper sample collector), moisture in the hole retarding cutting returns, etc. Diamond drilling was planned for the following season but, due to the Province's political situation referred to earlier, the company ceased their operations in British Columbia. The proposed drill program would have explored the potential of the anomalous zone for hosting a large tonnage, low grade, open pitable gold deposit. Limited trenching at the southern end of the claims by Phelps Dodge did not locate other zones of mineralization.

In 1993 Carbon Reef Resources Ltd. optioned the property and conducted a limited AQ diamond drilling program consisting of three holes totaling 177.44 metres. Very few sections of core were assayed. A more detailed drilling program could not be conducted due to lack of funds. Their report recognized the limited scope of their work and recommended that additional exploration was required.

In 1999 the owners had a preliminary biogeochemical survey conducted on selected parts of the property. The purpose of this survey was to test its effectiveness over one area strongly anomalous on Au, and As and moderately in Ag and Pb (Northwest Grid) and a second area on trend but not strongly anomalous (Southeast Grid). The results indicated that this method of sampling are effective but the background assay values can differ significantly between different types of vegetation (Morrison, M.S. and Jones, H.M., 2000).

## **GEOLOGY**

### **Regional Geology**

The Monashee Mountain area is underlain by a northwest trending belt of Paleozoic sedimentary and volcanic rocks overlain to the north by Triassic sediments and volcanics, and intruded to the south by plutonic rocks of Jurassic age (Figure 3(a)).

The oldest rock unit in the area is the Carboniferous to Permian Thompson Assemblage (formerly Cache Creek Group). It includes sediments, volcanoclastic rocks and limestone pods, the individual members of which are interdigitated on a relatively fine scale. The sequence is believed to have undergone sub-greenschist facies metamorphism coeval with Jurassic-Cretaceous orogenic events, although some deformation may have preceded deposition of the Upper Triassic sediments.

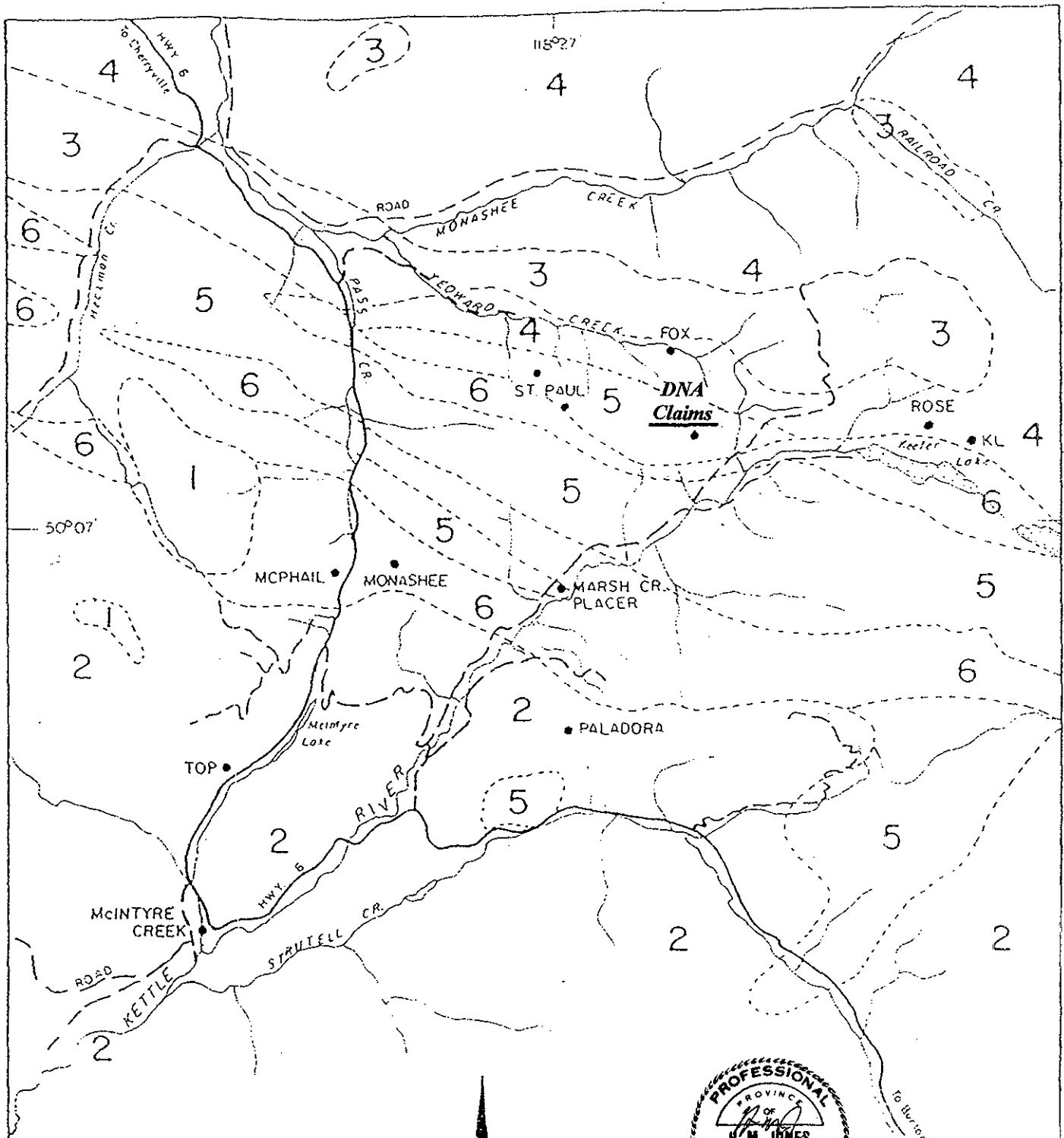
The Thompson Assemblage rocks are unconformably overlain to the north by a sedimentary formation belonging to the Slocan Group, as well as volcano-sedimentary rocks belonging to the Nicola Group. Metamorphism of these rocks is relatively low grade and, like in the assemblage to the south, is believed to be related to Mesozoic orogenic events.

To the south, the Thompson Assemblage has been intruded by plutonic rocks belonging to the Late Jurassic Valhalla Complex. These are predominantly granodiorites but their composition varies widely.

Locally, Tertiary plateau basalts overly the above rocks.

### **Property Geology**

Outcrop is sparse on the property, consequently most of the geological information was obtained from the El Paso trenches (Figure 3b). The initial mapping by El Paso indicated that the property was underlain by northwest trending, interbedded limy argillites and tuffs, which were intruded by a sill-like dioritic unit. Due to variations in the diorite – colour, grain size, texture and alteration – it was difficult in the field, in places, to distinguish it from some of the volcanic (crystal tuff) units. Detail work by Smith (1986) identified quartz latite to dacite flows with interbedded calcareous sediments and tuffs,



- TERTIARY**
- 1 Plateau Lava - basalt
- JURASSIC**
- 2 Intrusive Rocks
- TRIASSIC**
- 3 Nicola Group - andesite, basalt
- 4 Stocon Group - mixed sedimentary & volcanic rocks
- CARBONIFEROUS & PERMIAN (MAY INCLUDE TRIASSIC)**
- 5 Thompson Assemblage - siliceous argillite, volcanoclastic sandstone, quartzite, breccia, greenstone & tuff
- 6 Limestone, chert
- Geological contact
- Mineral occurrences

**Harold M. Jones & Associates Inc.**

**DNA CLAIMS**  
**REGIONAL GEOLOGY**  
**Keefer Lake Area Vernon M.D., B.C.**  
**NTS 82-L-1W**

<b>Drawn By: H.M. Jones</b> <b>Date: May 20, 2001</b>	<b>Figure No.</b> <b>3(a)</b>
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confirming that the dioritic body, in places, was actually flows which formed a part of a complex unit of flows, pyroclastics, and dioritic intrusives.

Bedding attitudes are variable. In the southern trenches the strike varies from  $N10^{\circ}-60^{\circ}$  W, averaging about  $N30^{\circ}$ W, dipping  $15^{\circ}-20^{\circ}$  W. In the northern trenches the attitudes are similar, trending  $N30^{\circ}$ W and dipping at low angles to both the east and west.

All rocks in the district are partially skarnified with actinolite and clinozoisite the commonest alteration minerals in the sediments and limy tuffs. The alteration does not appear to be caused solely by the flows as these limy rocks are in themselves altered with epidote, clinozoisite, and lesser muscovite above and below the latites (Smith 1986).

Numerous quartz veins are present within the flows and dioritic units. The veins are commonly 2-75 mm in width with a few ranging from 15-30 cm in width. All veins are composed of massive white quartz, completely shattered, and bordered by hematite margins up to 4 cm wide for the wider veins. At the base of the hill, a highly fractured, hematitic vein up to 90 cm wide was exposed in trench 1A.

Smith (1986) noted that "the sediments immediately below each flow (i.e. the original tops of each) tend to be rubble of tuffaceous material rich in lime with varying amounts of sulphides and quartz. The sulphides occur both as finely disseminated grains and in pods or masses parallel to the bedding. The sulphide pods consist of arsenopyrite with minor galena and pyrite with rare sphalerite and chalcopyrite".

Whether the mineralized zones are veins forming a stockwork or siliceous alteration zones related to flows is not clear. However, the end product is distinctive hematite-rich, stacked, stockwork-like zones within the intrusive/extrusive units.

The veins (or silicified zones) are randomly oriented but the majority strikes between  $N20^{\circ}$ E and  $N45^{\circ}$ W and dip  $20^{\circ}-45^{\circ}$ W or SW. A small number of veins have a very low dip angle. Many veins appear to be following bedding (or shearing parallel to bedding) but some are related to crosscutting fractures or faults. The veins are very irregular in width and vary along strike from hairline fractures to commonly 6 cm in width, then horsetailing out into hairline fractures again. They often show offsets of 6-60 cm on crosscutting fractures.

## MINERALIZATION

There are very limited surface indications of mineralization on the property. Very few, widely scattered outcrops of quartz and sparse quartz float were located during the original fieldwork. When the geochemical anomalies were trenched, it was noted that the underlying soil and rock, in the mineralized areas, were red-brown due to the abundant hematite alteration. Sections of the trenches devoid or very low in hematite were characteristically unmineralized.



A number of mineralized zones were exposed in the El Paso trenching program, with lesser in those by Keefe Resources and Phelps Dodge. Trenches by the latter companies were mostly located in fringe areas to the known, large, geochemically anomalous area. Mineralization consists of arsenopyrite, pyrite, and much less stibnite, galena, chalcopyrite, tetrahedrite-tennantite and sphalerite, occurring in quartz veins and silicified zones and occasionally in pods or irregular masses of the above sulphides. A mineralized zone consists of a number of parallel veins or siliceous zones concentrated within a restricted area, and commonly dipping at a low angle to the west. Many of these zones are exposed in the El Paso trenching. Channel sampling of the trenches returned values from trace to 29.5 gpt Au and 90 gpt Ag. Grab samples from some veins assayed higher.

In 1974 El Paso drilled 19 airtrack percussion holes totaling 980 metres. They were drilled along trenches 1 and 4, at 15 metre centers, as two fences 225 metres apart. They were planned to be drilled dry to a depth of 60 metres but approximately half of them had to be stopped due to excess moisture in these holes. All holes were sampled in 0.60 metre intervals and fire assayed for gold and silver. A number of sections assayed between 0.69 – 2.1 gpt Au which could be correlated between holes into west dipping zones. While most assays were low some of the higher values, over 60 cm lengths, were 35, 8.9 and 5.1 gpt Au.

While the drilling confirmed the stockwork nature of the mineralized zones, the drill assays did not repeat some of the significant values obtained from samples taken from the same zone in the trench sampling. It was concluded that the airtrack drilling was not suitable for sampling the low grade mineralization discovered on the property and that any future sampling should be by diamond drilling.

## 2000 BIOGEOCHEMICAL SURVEY

### Procedure and Background Data

The survey was conducted as an extension of the Southeast grid sampled in 1999. This grid and the new work include the southern end of DNA 1 claim and the northern part of DNA 3. The 1999 grid consisted of line 7+00W from 6+50 N to 8+50N and line 6+00W from 6+50N to 8+00N. The current work added line 8+00W from 5+50N to 9+00N, extended line 7+00W from 5+50N to 6+50N and from 8+50N to 9+00N, similar extensions to line 6+00W, added lines 5+00W from 5+50N to 9+00N and 4+00W from 5+50N to 9+00N. All lines were laid out using Silva compass and hip chain and well flagged. Stations were marked at 25 metre intervals.

The previous work sampled dry twigs from balsam fir on the Northwest grid and similar twigs from lodgepole pine on the Southeast grid. In the current work it was decided to sample balsam fir on the Southeast grid, the purpose being to bring both areas to a common sample medium. Rather than resample the 1999 part of the latter grid, a few duplicate samples were taken at year 2000 stations, taking one of dry twigs from balsam



fir and the other from twigs from lodgepole pine. It was hoped that expected lower but significant balsam fir assay values would be coincident with anticipated elevated, significant lodgepole pine assay values at these duplicate sample sites.

Previous sampling by Morrison (see Morrison 1987, 1991, 2000) in southern British Columbia found that deadwood twigs of lodgepole pine as the sample medium have a great affinity for silver yielding silver values 10 to 20 times higher than the silver values from other tree species collected from the same areas. Unfortunately, lodgepole pine was sparse on the Northwest grid but reasonably abundant on the Southeast grid. Consequently, the 1999 samples from lodgepole pine returned a number of elevated silver values on the Southeast grid, providing an allusion of much stronger mineralization in this area as compared with that in the Northwest grid area, hence the reason to bring both grids to a common sample medium.

Sixty-six samples were collected, fifty-nine were from balsam fir and seven were from lodgepole pine. The latter were duplicates taken from lodgepole pine at the same site as seven of the balsam fir samples. All samples consisted of deadwood branches from three to five trees of average size, ranging from 25-35 cm diameter, at each sample site. Twigs 5-15 mm in diameter were used, broken into 10 cm lengths, and placed in plastic bags upon which was marked the sample site. Each weighed about 180 grams. All were ashed and analyzed by Acme Analytical Laboratories for 30 elements using the ICP method. Most elements showed very little variation. For this reason, the following five elements - silver, cadmium, arsenic, antimony and manganese appeared to be the most significant and were selected for plotting and contouring. They are shown on Figures 4-8.

## Results

### **Extended Southeast Grid**

Due to the change in sample medium there was insufficient data available from the survey to do a statistical study. Since the purpose of the sampling was to use the same vegetation medium as was used during 1999 on the Northwest grid, it was decided that the same values considered as significant for each element on that grid should also be used on this new grid work. A second reason for using these values is that both grid areas are underlain by similar geology. The values previously chosen for contouring were selected from a visual inspection of the data.

Figures 4, 5, and 6 show stippled areas on lines 6+00W and 7+00W. These areas, in the 1999 survey, had significant values in, respectively, Ag, Cd, and As. They are shown to compare the results of the previous and current survey results.

#### (a) Silver (Figure 4)

The silver values ranged from <0.3 to 7.4 ppm Ag. The duplicate samples from this grid using lodgepole pine ranged from 1.3 to 42.8 ppm Ag, which clearly demonstrates the much higher affinity for silver in lodgepole pine. There was not good correlation between

assays from the two types of vegetation. Sampling on this grid was too limited to establish background values, but it is estimated to be about  $< 1.0$  ppm Ag. Using the 1.5 ppm Ag contour, a discontinuous northwest-trending band of elevated silver values extend across the western part of the grid. This band includes an area of elevated values outlined by lodgepole pine samples in the 1999 survey (see stippled area on figure 4). Three other areas of elevated silver values are also indicated by the 1.5 ppm Ag contours. There is partial coincidence of elevated cadmium and manganese values with silver values  $> 1.5$  ppm Ag on lines 4+00W and 5+00W.

(b) Cadmium (Figure 5)

The cadmium values ranged from 3.2 to 123.0 ppm Cd. The duplicate lodgepole pine samples ranged from 2.9 to 106.8 ppm Cd and correlate somewhat better with the elevated balsam fir assays than those of silver. Background assays are estimated at  $< 25$  ppm Cd with significant values greater than 35 ppm Cd. The 35 ppm Cd contour defines a continuous northwest-trending band from line 8+00W to 4+00W at 6+00N. This band passes through the western edge of the stippled area (elevated Cd in 1999 survey). A broad area on line 4+00W and extending through line 5+00W and off the grid on line 6+00W partially defines a large area of elevated Cd values. It may connect with elevated values on 8+00W at 8+75N.(?) Two other areas of elevated Cd values are outlined on the western edge of the grid.

(c) Arsenic (Figure 6)

The arsenic values ranged from 22 to 1667 ppm As. The duplicate lodgepole pine samples ranged from 46 to 1785 ppm As and do not correlate very well with the assays from the balsam fir samples. Background values are estimated at 250-300 ppm As; significant values are those greater than 500 ppm As. The 500 ppm As contour outlines two areas of highly elevated As values, one on line 8+00W from 6+00N to 6+25N and the other on line 6+00W from 5+75N to 6+25N. The latter area is a continuation to the west of the elevated As values (stippled area on figure 6) outlined in the 1999 survey.

Cd and Mn, and to a much lesser degree Ag, are coincident with As in the continuous band of elevated values following 6+00N along the length of the grid. Four scattered one-sample sites also had moderately elevated As values.

(d) Antimony (Figure 7)

The antimony values showed a very small range of assays from 7 to 16 ppm Sb. Duplicate lodgepole pine samples also showed little variation, ranging from 13 to 23 ppm Sb. Background values are about 10 ppm Sb, and values of 15 ppm Sb or greater may be considered elevated. The results indicate that three areas are very weakly elevated but are not considered significant.

(e) Manganese (Figure 8)

The manganese values ranged from 7,444 to 40,219 ppm Mn. Assays of the duplicate lodgepole pine samples ranged from 7,261 to 16,301 ppm Mn indicating that lodgepole pine has a lower affinity for Mn than balsam fir. Background values are estimated at about 10,000 ppm Mn, and values of 20,000 ppm Mn or greater are considered elevated.

Elevated Mn values are fairly widespread throughout the grid. Mn shows partial coincidence with Ag in the southern part of the grid and good coincidence with elevated Cd and As.

### DISCUSSION

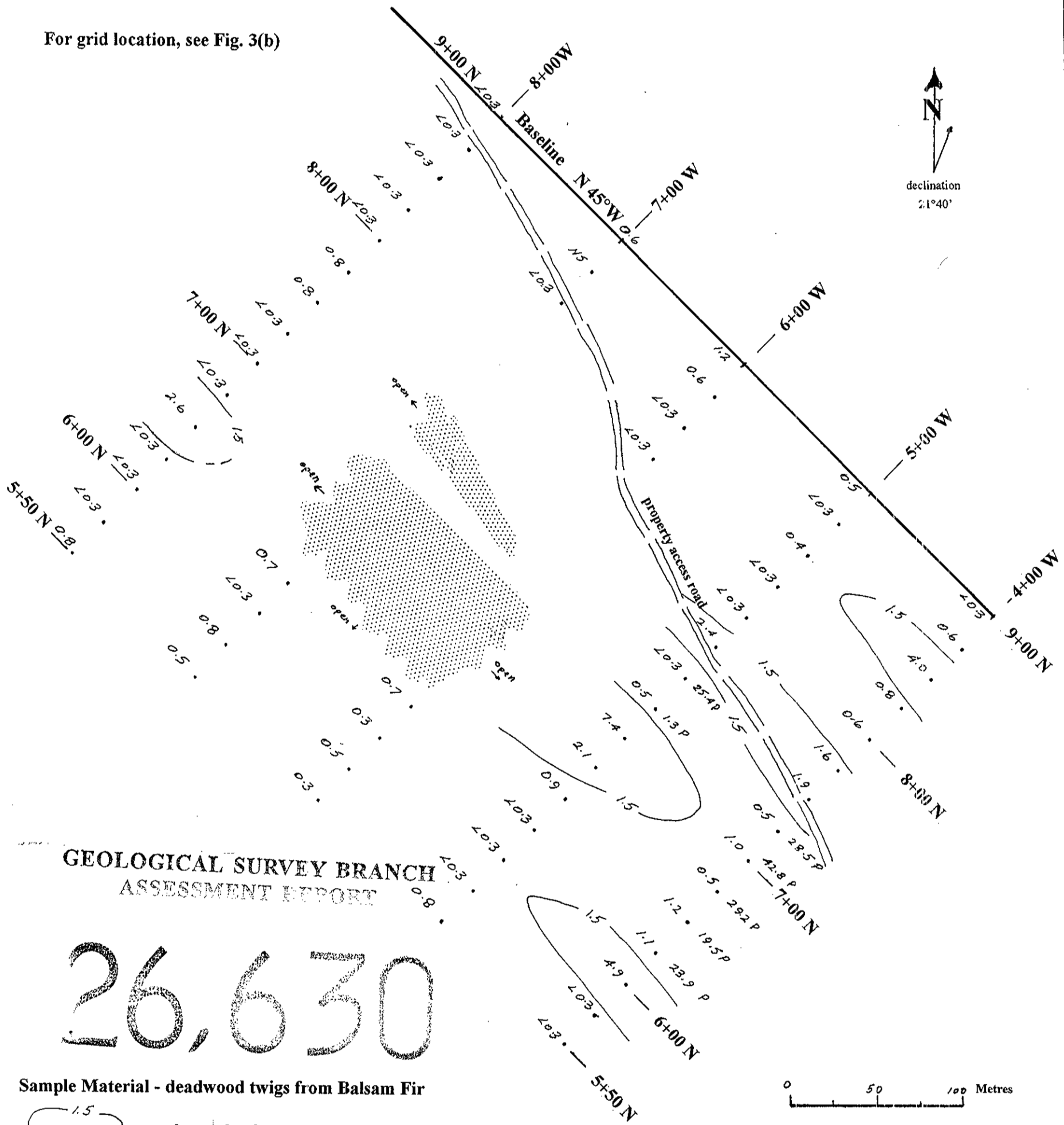
Throughout this report the terms "significant" and "elevated" values are used to describe assay values greater than background values. Normally, such values would be termed anomalous. In the case of the described biogeochemical survey, limited sampling over a too small an area did not permit a meaningful statistical calculation for determining anomalous values.

Arsenic, cadmium and manganese show reasonable coincidence of elevated values along the western part of the grid – approximately following 6+00N over the length of the grid. They trend northwest, which is also the general trend of the known mineralized zone on the DNA claims, which was explored in detail in the 1970's. Outcrop is sparse in the grid area so it is not obvious as to the underlying geology or the cause of the elevated values. It is interesting to note that arsenic anomalies closely followed the known mineralized dioritic intrusive. The above coincident anomaly may possibly reflect a mineralized intrusive near the western edge of the grid.

Silver, which can be used as a pathfinder for gold on this property, returned very low values from the balsam fir samples. Sampling of lodgepole pine on part of this grid in 1999 and the duplicate samples taken from the same tree-type this year returned high silver assays. It would appear that sampling of balsam fir for silver was not very helpful. However, low assays may be of interest since weakly elevated silver values on lines 5+00W and 8+00W line up with elevated silver values from lodgepole pine sampled in 1999 (stippled area Figure 4).

Previous soil sampling in this area returned spotty anomalous gold and arsenic values. The anomalies were not followed up with trenching.

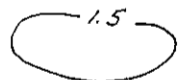
For grid location, see Fig. 3(b)



**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**26,630**

Sample Material - deadwood twigs from Balsam Fir



- elevated values\* >1.5 ppm Ag

25.4 P - 25.4 ppm Ag, check sample from same site using Lodgepole Pine



- elevated values > 20 ppm Ag ( from 1999 survey using Lodgepole Pine)

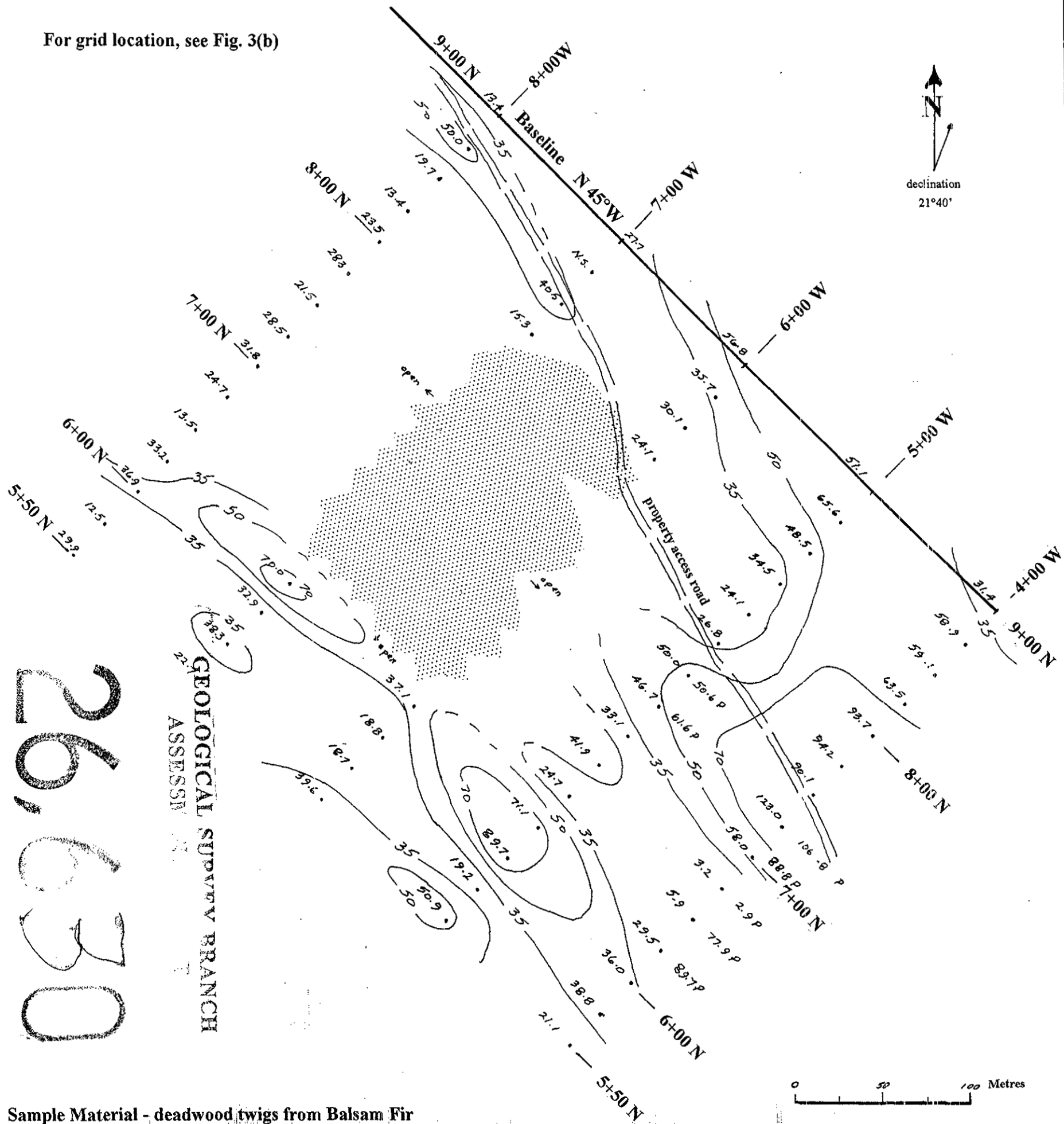
\* Due to small number of samples, values considered as significant are called *elevated*.



**SOUTHEAST GRID**

<b>Harold M. Jones &amp; Associates Inc.</b>	
Biogeochemical Survey <b>SILVER IN PPM</b> DNA CLAIMS Keefer Lake Area Vernon M.D., B.C. NTS 82-L-1W	
Drawn By: H.M. Jones Date: May 20, 2001	Figure No. 4

For grid location, see Fig. 3(b)



26,630

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT

Sample Material - deadwood twigs from Balsam Fir

35 - elevated values\* > 35 ppm Cd

50.6 P - 50.6 ppm Cd, check sample from same site using Lodgepole Pine

- elevated values > 40 ppm Cd (from 1999 survey using Lodgepole Pine)

\* Due to small number of samples, values considered as significant are called *elevated*.

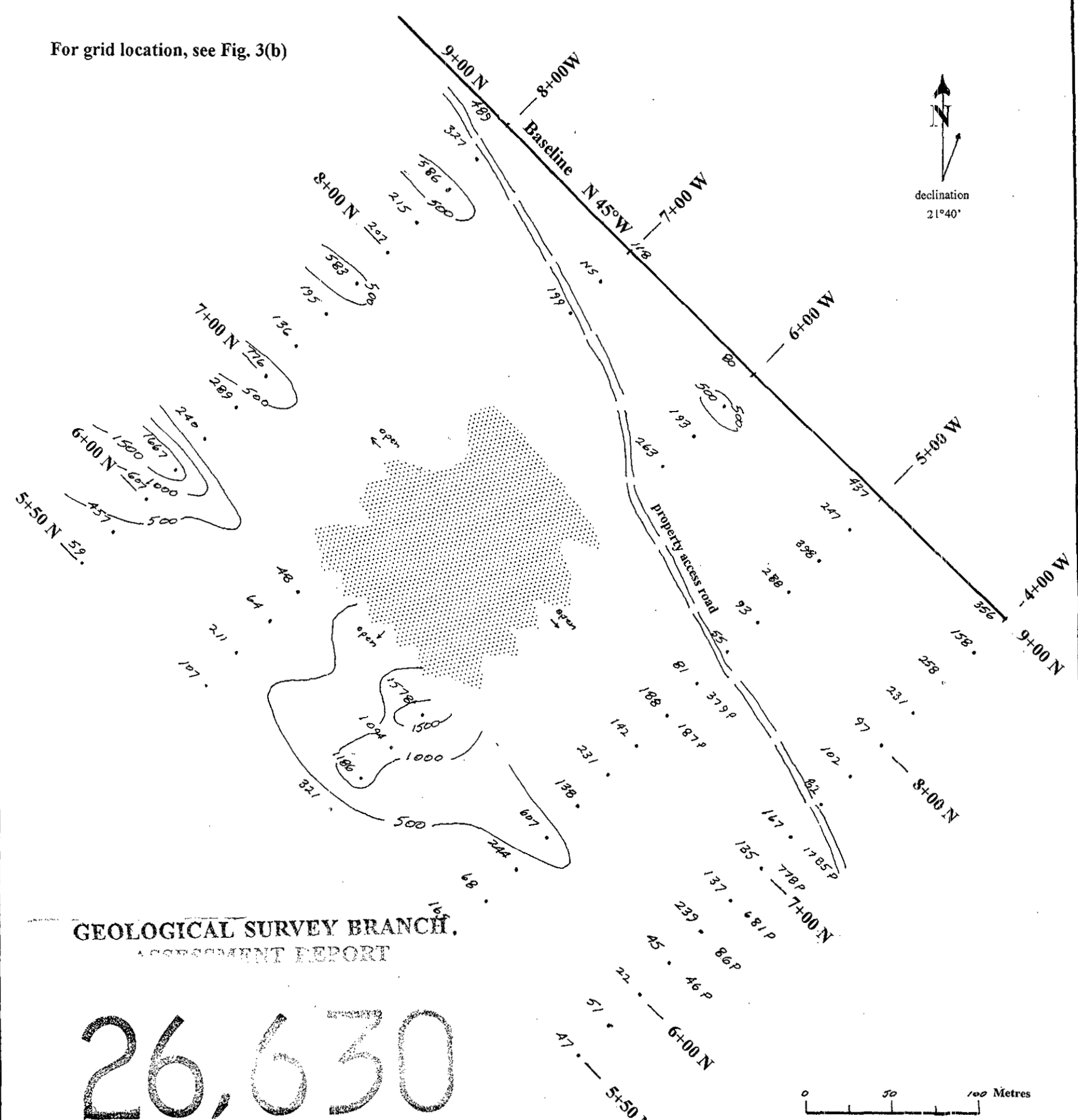


0 50 100 Metres

SOUTHEAST GRID

Harold M. Jones & Associates Inc.	
Biogeochemical Survey CADMIUM IN PPM DNA CLAIMS Kefer Lake Area Vernon M.D., B.C. NTS 82-L-1W	
Drawn By: H.M. Jones Date: May 20, 2001	Figure No. 5

For grid location, see Fig. 3(b)



GEOLOGICAL SURVEY BRANCH.  
ASSESSMENT REPORT

26,630

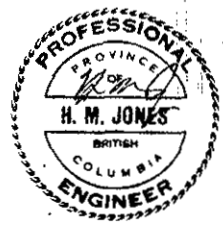
Sample Material - deadwood twigs from Balsam Fir

500 - elevated values\* >500 ppm As

379 P - 379 ppm As, check sample from same site using Lodgepole Pine

[Shaded area symbol] - elevated values > 500 ppm As ( from 1999 survey using Lodgepole Pine)

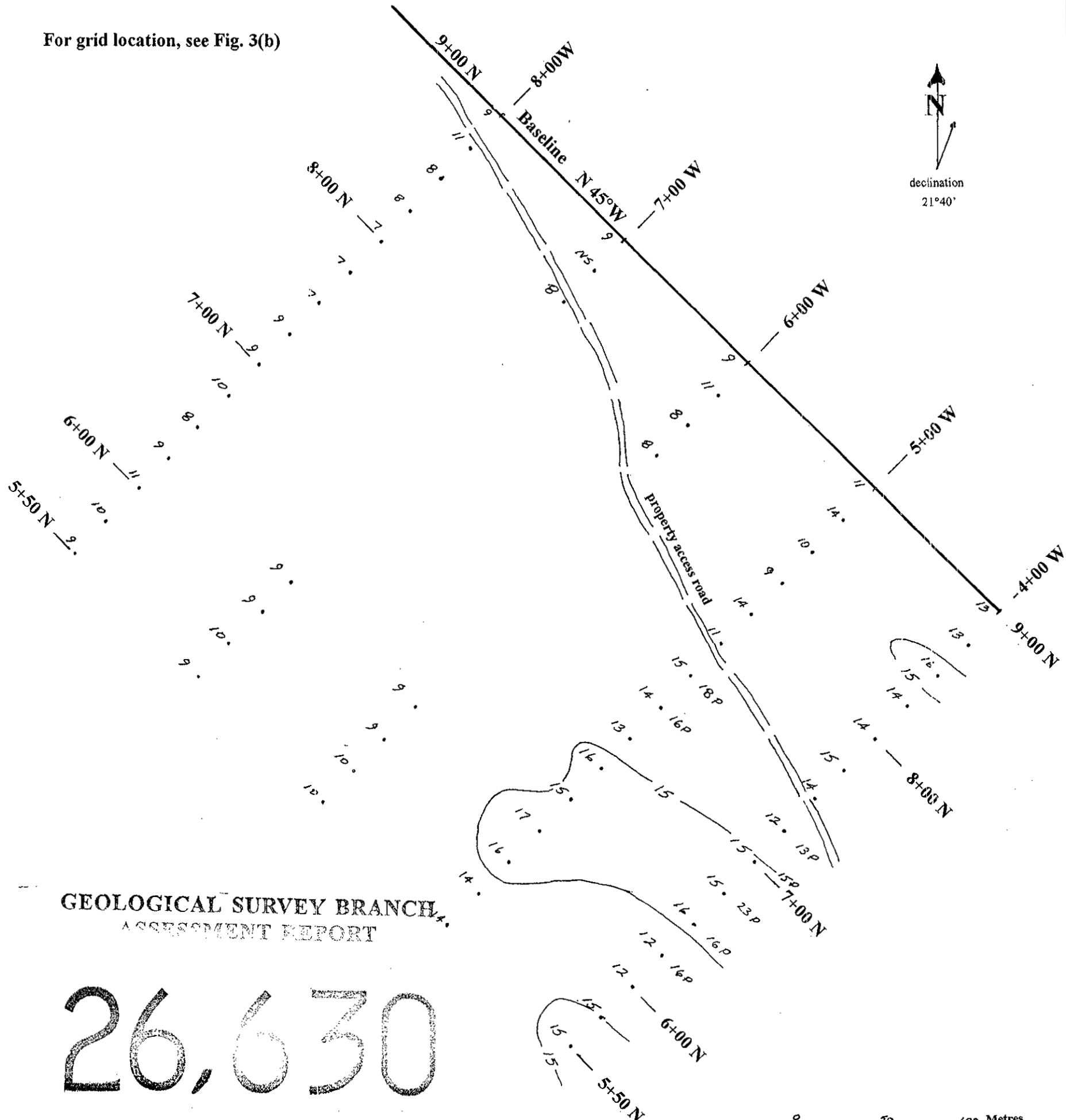
\* Due to small number of samples, values considered as significant are called *elevated*.



SOUTHEAST GRID

Harold M. Jones & Associates Inc.	
Biogeochemical Survey ARSENIC IN PPM DNA CLAIMS Kefer Lake Area Vernon M.D., B.C. NTS 82-L-1W	
Drawn By: H.M. Jones	Figure No. 6
Date: May 20, 2001	

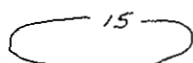
For grid location, see Fig. 3(b)



**GEOLOGICAL SURVEY BRANCH**  
ASSESSMENT REPORT

**26,630**

Sample Material - deadwood twigs from Balsam Fir

 - elevated values\* >15 ppm Sb

18 P - 18 ppm Sb, check sample from same site using Lodgepole Pine

No elevated values > 15 ppm Sb (from 1999 survey using Lodgepole Pine)

\* Due to small number of samples, values considered as significant are called *elevated*.

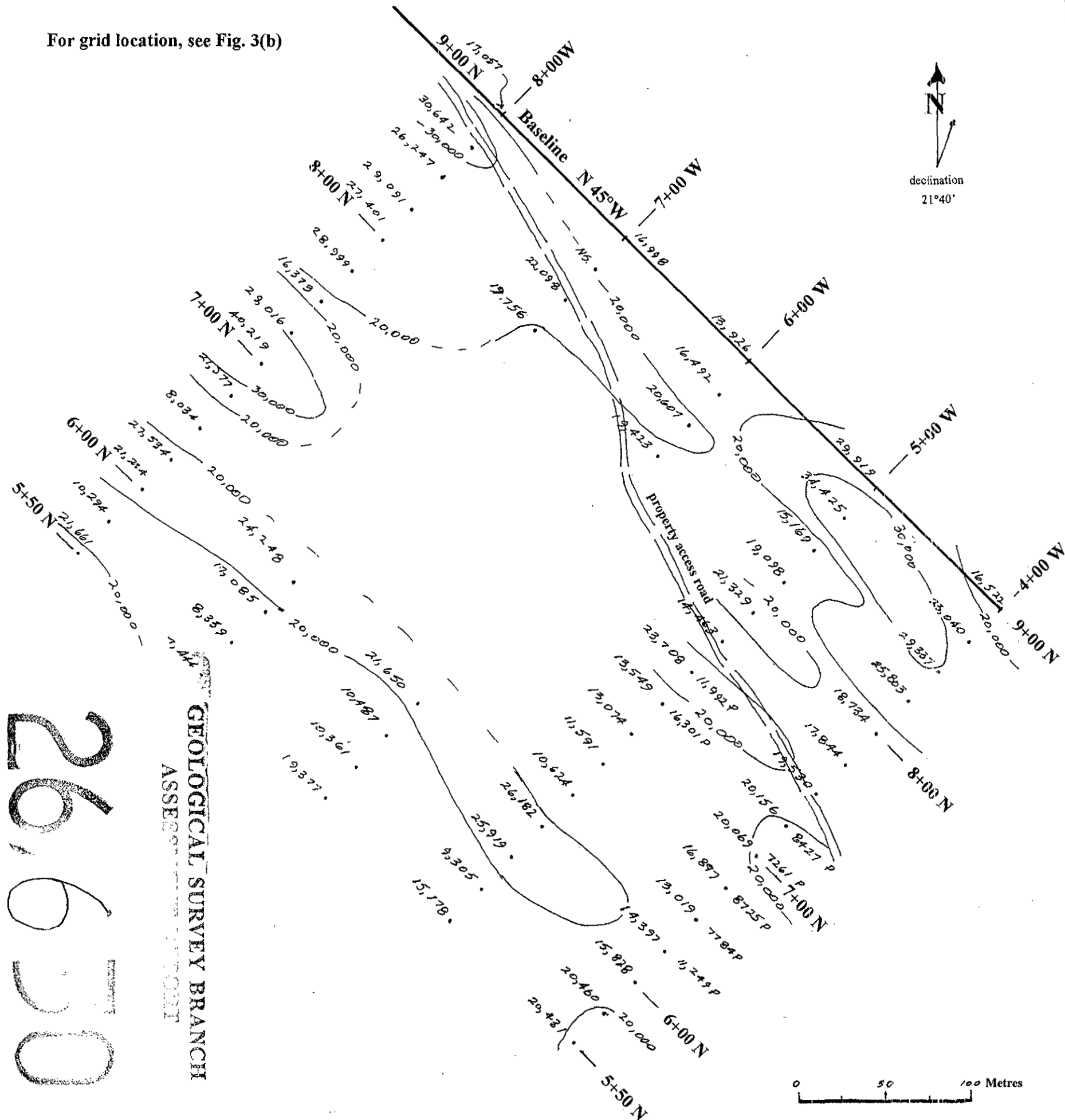


0 50 100 Metres

**SOUTHEAST GRID**

<b>Harold M. Jones &amp; Associates Inc.</b>	
Biogeochemical Survey ANTIMONY IN PPM DNA CLAIMS Kefer Lake Area Vernon M.D., B.C. NTS 82-L-1W	
Drawn By: H.M. Jones	Figure No.
Date: May 20, 2001	7

For grid location, see Fig. 3(b)



261670

GEOLOGICAL SURVEY BRANCH  
ASSETS SECTION

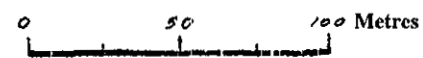
Sample Material - deadwood twigs from Balsam Fir

20,000 - elevated values\* >20,000 ppm Mn

11,992 P - 11,992 ppm Mn, check sample from same site using Lodgepole Pine

No elevated values > 20,000 ppm Mn ( from 1999 survey using Lodgepole Pine)

\* Due to small number of samples, values considered as significant are called *elevated*.



SOUTHEAST GRID



<b>Harold M. Jones &amp; Associates Inc.</b>	
Biogeochemical Survey <b>MANGANESE IN PPM</b> DNA CLAIMS Kefer Lake Area Vernon M.D., B.C. NTS 82-I-1W	
Drawn By: H.M. Jones	Figure No.
Date: May 20, 2001	8



## CONCLUSION

It was concluded that by sampling balsam fir over the known low grade gold zone and lodgepole pine over an area of unknown mineralization during the 1999 biogeochemical surveys it was not possible to compare the biogeochemical results from known to unknown mineralized zones. This was due to significantly different backgrounds for each tree type. It was decided to use balsam fir as the common sample medium in the current sampling program.

Sample results defined a linear zone coincident in arsenic, cadmium and manganese, and weakly coincident in silver. Arsenic is associated with the known mineralized intrusive explored in detail in the past. It is concluded that this coincident zone may reflect a mineralized intrusive. Additional wider spread sampling is required to further define this zone.

It is further concluded that biogeochemical sampling is a useful tool in exploring for mineralized areas but probably requires additional survey methods to further define the target area.

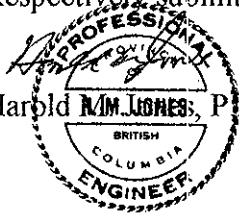
## RECOMMENDATIONS

It is recommended that detailed soil sampling be conducted on an expanded grid to including the area covered by the biogeochemical survey. Pending results from this work, limited backhoe trenching should be done on anomalies of interest.

Biogeochemical sampling should be considered for testing the northwest to west extension of the known mineralized zone. This is a well forested area with very limited outcrops.

Respectively submitted,

Harold M. M. JONES, P.Eng.



## REFERENCES


- Collins, D.A. (1988) - Report on the Dona and Irene Claims, Keefer Lake Area, Vernon M.D., for Keefer Lake Resources Inc.
- Jones, H.M. (1974) - Assessment Report on the Percussion Drilling and Physical Work on the Dona Group of Claims, for El Paso Mining and Milling Company.  
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 (1999) - Biogeochemical Assessment Report, Vent Claim Group, Osoyoos M.D.  
 (1987-1999) - Numerous other similar assessment reports filed by the author.
- Morrison, M.S. and Jones, H.M. (2000) - Biogeochemical Report on the DNA 1&3 Claims, Keefer Lake Area, B.C., Vernon Mining Division
- Nelles, D.M. (1985) - Trenching and Sampling Report on the Dona Group, Vernon M.D., for Keefer Lake Resources Inc.
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- Ryback-Hardy, V. (1973) - Geochemical and Geophysical Report on the Dona Group of Claims, for El Paso Mining and Milling Company.
- Smith, F.M. (1982) - Report on the Examination and Evaluation of the Dona Claims, for Granex Resources Corp.  
 (1984) - Report on the Dona and Irene Claims, Vernon M.D., for Keefer Lake Resources Inc.  
 (1986) - Report on the Dona Property (Dona and Irene Claims), Vernon M.D., for Keefer Lake Resources Inc.

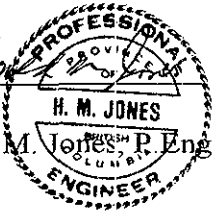
**CERTIFICATE**

I, Harold M. Jones, of the City of Richmond, British Columbia, do hereby certify that:

1. I am a Consulting Geological Engineer with an office at #86-5531 Cornwall Drive, Richmond, British Columbia.
2. I am a graduate from the University of British Columbia in Geological Engineering, in 1956.
3. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, Registration No. 4681.
5. I conducted and supervised the 1974 exploration program on the original Dona claims (now DNA claims) as an employee of the property owner, El Paso Mining and Milling Company and compiled all of their data on the property. I have also reviewed the results of all of the work conducted on the property since that of El Paso's.
6. I own a 90% interest in the DNA Claims.
7. I conducted the fieldwork described in this report.

Dated at Richmond, B.C. this 20th day of May, 2001.

  
\_\_\_\_\_  
Harold M. Jones P. Eng.



## APPENDIX A

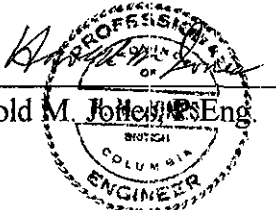
## Statement of Expenditures

The following are expenditures related to the biogeochemical survey conducted on the DNA Claim Group, located 45 kilometres southeast of Lumby, B.C. (NTS 82-L-1W) for the year 2000.

Biogeochemical Survey

H.M. Jones, P.Eng. – baseline and grid layout, collect 66 samples, 5 days @\$300/day		\$1500.00
travel, Vancouver-property return, 1 ½ days @ \$250/day		<u>375.00</u>
		\$1875.00
<u>Assays</u> – 66 biogeochemical samples – preparation	\$278.95	
- assaying	420.19	<u>\$699.14</u>
<u>Room and Board</u> – Spruce Grove camp	\$255.00	
meals while travelling	21.00	<u>\$276.00</u>
<u>Field Supplies</u> – flagging tape, hip chain thread, sample bags		<u>\$ 33.50</u>
<u>Vehicle Rental</u> -- car @ \$275/week	\$275.00	
gas	86.79	
highway tolls	20.00	<u>\$381.79</u>
<u>Report &amp; Map Preparation</u> – report, 1 day @ \$300/day	\$300.00	
plotting & drafting data	250.00	
secretarial	100.00	<u>\$650.00</u>
	sub total	<u>\$3915.43</u>
Transfer from PAC account of Harold M. Jones		<u>\$ 884.57</u>
Total Assessment Costs		\$4,800.00

I certify that the preceding Statement of Costs is a true statement of monies expended on conducting and reporting on the Biogeochemical Survey conducted on the DNA claims during the period September 6 to September 12, 2001


  
 Harold M. Jones, P.Eng.

**APPENDIX B**

**Assay Certificates**



GEOCHEMICAL ANALYSIS CERTIFICATE



Harold M. Jones & Associates Inc. File # A005078R Page 1

86 - 5531 Cornwall Drive, Richmond BC V7C 5N7 Submitted by: Harold M. Jones

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
L8W 9+00N	5	99	123	1704	<.3	28	6	17057	.58	489	<8	<2	2	982	13.4	9	<3	10	27.54	1.234	3	39	2.79	240	.02	286	.63	.08	4.58	<2
L8W 8+75N	1	99	72	2276	<.3	22	6	30642	.49	327	<8	<2	2	947	50.0	11	<3	7	26.73	1.836	4	34	3.24	369	.02	304	.57	.07	5.38	3
L8W 8+50N	1	97	67	1144	<.3	22	7	26247	.31	586	<8	<2	3	945	19.7	8	<3	6	30.99	.837	3	28	1.37	169	.01	175	.43	.05	2.51	<2
L8W 8+25N	<1	109	79	1370	<.3	26	7	29091	.38	215	<8	<2	<2	1024	13.4	8	<3	7	28.02	2.026	3	35	2.93	249	.01	302	.56	.08	7.94	<2
L8W 8+00N	<1	111	88	1533	<.3	20	10	27401	.49	207	<8	<2	2	1161	23.5	7	<3	9	27.46	1.497	3	30	2.61	289	.01	211	.66	.07	3.57	<2
L8W 7+75N	<1	97	86	1571	.8	26	8	28999	.43	583	<8	<2	<2	1099	28.3	7	<3	9	28.10	1.679	2	13	2.56	200	.01	241	.72	.07	4.84	<2
L8W 7+50N	<1	100	73	1862	.8	31	8	16373	.36	195	<8	<2	<2	1553	21.5	7	<3	6	30.01	1.180	2	31	2.67	287	.01	272	.89	.06	4.14	3
L8W 7+25N	<1	111	83	1806	<.3	31	7	29016	.41	136	<8	<2	2	1183	28.5	9	<3	8	27.85	1.826	3	29	3.72	317	.01	285	.67	.07	5.29	<2
L8W 7+00N	<1	99	119	1695	<.3	28	11	40219	.50	776	<8	<2	3	966	31.8	9	<3	9	26.97	1.947	4	36	3.21	191	.02	275	1.18	.09	5.56	9
L8W 6+75N	<1	113	102	1942	<.3	29	8	21577	.53	289	<8	<2	<2	1287	24.7	10	<3	8	27.49	1.932	3	35	3.46	322	.02	306	1.08	.08	4.63	9
L8W 6+50N	33	143	66	1597	2.6	37	8	8034	.27	240	<8	<2	2	1843	13.5	8	<3	7	30.53	.895	3	41	4.30	217	.01	388	1.05	.05	2.40	<2
L8W 6+25N	1	101	116	1311	<.3	33	9	27534	.46	1667	<8	<2	<2	1202	33.2	9	<3	7	28.16	1.866	3	32	3.17	182	.02	276	.91	.07	5.31	<2
L8W 6+00N	2	114	55	2133	<.3	13	6	21214	.22	607	<8	<2	<2	1161	36.9	11	<3	3	30.83	1.627	2	39	2.99	226	.01	323	.31	.05	6.07	<2
L8W 5+75N	10	115	57	1582	<.3	24	3	10294	.29	457	<8	<2	<2	1031	12.5	10	<3	6	29.74	2.137	1	21	3.65	243	.02	304	.35	.05	10.37	<2
L8W 5+50N	5	96	72	1777	.8	9	4	21661	.34	59	<8	<2	2	1050	29.9	9	<3	4	29.77	1.864	3	16	2.27	448	.01	322	.40	.06	6.94	<2
L7W 9+00N	2	113	86	1174	.6	26	7	16998	.50	118	<8	<2	<2	914	27.7	9	<3	8	28.40	1.260	2	47	2.09	239	.02	222	.58	.08	3.53	<2
L7W 8+50N	1	94	81	1726	<.3	17	7	22098	.38	199	<8	<2	2	807	40.5	8	<3	7	30.12	1.777	3	59	2.89	204	.01	253	.51	.08	5.71	<2
L7W 6+25N	1	107	68	1530	.7	19	7	24248	.33	48	<8	<2	<2	914	70.0	9	<3	5	29.56	1.497	2	29	2.86	278	.01	298	.43	.06	5.35	<2
L7W 6+00N	1	84	88	1391	<.3	16	6	17085	.49	64	<8	<2	<2	991	32.9	9	<3	8	28.54	1.013	2	17	2.69	306	.02	218	.59	.07	4.17	<2
L7W 5+75N	4	75	63	1325	.8	8	2	8359	.32	211	<8	<2	<2	1178	38.3	10	<3	5	32.46	1.016	1	14	2.36	285	.01	227	.30	.05	4.20	<2
L7W 5+50N	4	97	62	1443	.5	18	4	7444	.33	107	<8	<2	<2	1228	22.7	9	<3	6	31.78	1.129	1	14	2.82	175	.01	226	.70	.05	3.13	<2
RE L7W 5+50N	5	96	66	1427	.4	19	4	7300	.33	103	<8	<2	<2	1217	22.5	9	<3	5	31.36	1.116	1	14	2.79	180	.01	224	.70	.05	3.07	<2
L6W 9+00N	4	103	115	2162	1.2	27	8	13926	.53	80	<8	<2	<2	1007	56.8	9	<3	7	28.68	1.059	3	50	2.22	225	.02	236	.54	.09	3.34	<2
L6W 8+75N	3	154	136	1400	.6	35	11	16492	.62	500	<8	<2	2	866	35.7	11	<3	12	27.63	1.368	3	52	2.25	123	.02	230	.87	.11	3.34	<2
L6W 8+50N	2	89	81	1840	<.3	21	5	20607	.42	193	<8	<2	2	899	30.1	8	<3	8	29.18	1.234	2	43	2.87	187	.02	246	.60	.08	4.19	<2
L6W 8+25N	2	95	84	1810	<.3	23	5	19423	.45	263	<8	<2	<2	910	24.1	8	<3	6	28.41	1.213	2	60	2.82	204	.01	269	.72	.10	5.64	<2
L6W 6+25N	1	108	59	1420	.7	17	8	21650	.36	1578	<8	<2	2	964	37.1	9	<3	5	29.25	1.012	2	10	3.23	122	.02	263	.68	.05	3.42	<2
L6W 6+00N	2	105	72	1295	.3	20	9	10487	.46	1094	<8	<2	<2	938	18.8	9	<3	9	29.55	1.051	3	12	3.46	139	.01	223	.54	.06	3.84	<2
L6W 5+75N	3	107	102	1250	.5	11	6	10361	.52	1186	<8	<2	2	905	18.7	10	<3	9	29.57	1.539	3	13	2.41	129	.02	225	.55	.07	3.94	<2
L6W 5+50N	3	106	89	1942	.3	15	5	19377	.46	321	<8	<2	<2	912	39.6	10	<3	8	29.29	1.099	3	8	2.96	210	.02	268	.57	.07	3.76	<2
L5W 9+00N	2	116	113	2009	.5	39	13	29919	.38	437	<8	<2	2	899	51.1	11	<3	6	29.60	1.129	3	5	2.72	162	.02	252	.66	.06	3.33	<2
L5W 8+75N	<1	110	104	2045	<.3	35	14	34425	.54	247	<8	<2	3	868	65.6	14	<3	8	26.94	1.734	3	6	2.96	173	.02	263	.79	.08	5.30	4
L5W 8+50N	3	121	120	1719	.4	34	8	15169	.56	398	<8	<2	2	900	48.5	10	<3	11	27.80	1.791	2	7	3.11	161	.03	294	.86	.09	5.75	<2
L5W 8+25N	1	125	98	1540	<.3	28	7	19098	.59	288	<8	<2	2	841	34.5	9	<3	9	27.54	1.742	3	90	2.94	173	.02	215	.84	.13	4.03	<2
STANDARD C3	27	64	35	162	6.1	37	11	799	3.41	60	23	3	21	29	23.0	15	26	89	.56	.086	18	172	.60	149	.09	25	1.87	.04	.16	23
STANDARD G-2	2	4	3	42	.3	8	4	569	2.02	2	<8	<2	5	71	<.2	<3	<3	48	.67	.092	8	79	.62	225	.13	10	.97	.08	.54	2

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
- SAMPLE TYPE: TREE TWIGS Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 27 2001 DATE REPORT MAILED: May 1/01 SIGNED BY: C. L. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data FA



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
L5W 8+00N	1	109	81	1635	<.3	31	11	21329	.49	93	<8	<2	2	1156	24.1	14	<3	10	26.79	.949	3	102	2.32	173	.01	235	1.18	.10	2.34	8
L5W 7+75N	1	151	88	3643	2.4	34	5	14463	.43	55	<8	<2	<2	971	26.8	11	<3	8	28.58	1.384	3	144	2.66	190	.02	335	.59	.13	3.96	2
L5W 7+50N	1	120	95	1976	<.3	29	8	23708	.44	81	<8	<2	<2	878	50.0	15	<3	8	26.81	1.356	2	16	2.94	209	.01	245	.87	.06	4.34	2
L5W 7+50N(P)	3	212	135	2345	(25.4)	58	6	(11992)	.47	379	<8	<2	<2	878	(50.6)	(18)	<3	9	26.84	1.152	4	26	3.79	194	.01	667	2.29	.05	3.01	<2
L5W 7+25N	<1	115	56	1136	.5	23	6	17549	.30	188	<8	<2	<2	917	46.7	14	<3	5	29.43	1.983	2	19	3.23	218	.01	296	.73	.05	4.23	<2
L5W 7+25N(P)	<1	166	54	1706	1.3	30	6	(16301)	.27	187	<8	<2	2	823	(61.6)	(16)	<3	6	28.96	.972	2	19	3.91	480	.01	667	1.35	.03	3.04	8
L5W 7+00N	<1	108	46	2408	7.4	74	7	13074	.24	142	<8	<2	2	1488	33.1	13	<3	5	32.05	.842	2	29	1.83	554	.01	286	.77	.05	2.89	6
L5W 6+75N	2	181	89	3086	2.1	118	8	11591	.38	231	<8	<2	<2	1036	41.9	16	<3	8	27.93	1.578	3	100	3.94	162	.01	384	1.64	.06	4.39	4
L5W 6+50N	1	73	79	1270	.9	17	9	10624	.42	138	<8	<2	<2	1107	24.7	15	<3	8	29.54	.940	2	42	1.77	549	.02	252	.60	.07	4.08	<2
L5W 6+25N	<1	125	84	1987	<.3	20	7	26182	.50	607	<8	<2	<2	873	71.1	17	<3	10	26.63	1.179	3	52	2.86	127	.02	237	.73	.10	3.69	2
L5W 6+00N	1	119	66	1774	<.3	24	7	25919	.40	244	<8	<2	2	944	89.7	16	3	8	26.65	1.841	3	42	3.75	206	.02	268	1.08	.08	5.77	5
L5W 5+75N	1	73	54	1479	<.3	12	5	9305	.32	68	<8	<2	<2	797	19.2	14	<3	6	27.13	1.544	2	21	4.14	289	.01	278	.68	.07	6.26	<2
L5W 5+50N	1	122	91	1492	.8	20	10	15178	.46	165	<8	<2	<2	997	50.9	14	<3	9	27.63	1.543	3	50	3.09	200	.02	261	.78	.09	4.15	<2
L4W 9+00N	2	105	120	1487	<.3	31	8	16522	.60	356	<8	<2	<2	736	31.4	13	<3	12	26.09	1.728	3	7	2.68	130	.02	231	.71	.10	4.76	<2
L4W 8+75N	<1	109	97	1741	.6	20	7	23040	.54	158	<8	<2	<2	736	58.9	13	<3	11	26.20	1.496	3	7	2.66	192	.02	236	.72	.08	3.68	<2
L4W 8+50N	1	141	128	2166	4.0	28	7	29337	.64	258	<8	<2	<2	730	59.1	16	<3	13	25.62	1.355	4	8	2.73	139	.02	321	1.40	.10	3.76	6
L4W 8+25N	1	108	105	1985	.8	32	9	25803	.46	231	<8	<2	<2	835	63.5	14	<3	9	26.68	1.670	3	7	2.97	166	.02	256	.70	.07	4.60	2
L4W 8+00N	1	122	73	2172	.6	36	8	18734	.44	97	<8	<2	2	1082	93.7	14	<3	10	27.13	1.614	3	6	3.02	259	.02	293	.72	.07	6.54	2
L4W 7+75N	2	94	109	1787	1.6	33	8	17844	.47	102	<8	<2	<2	891	94.2	15	<3	10	27.62	1.019	3	6	3.18	219	.02	211	.67	.07	4.41	<2
L4W 7+50N	<1	80	67	1438	1.9	20	8	19530	.36	82	<8	<2	<2	982	90.1	14	<3	6	29.16	1.268	3	5	2.08	321	.02	200	.48	.06	3.54	<2
L4W 7+25N	<1	84	72	1947	.5	21	9	20156	.29	167	<8	<2	<2	1168	123.0	12	<3	4	27.29	1.680	3	4	3.30	400	.01	305	.81	.05	5.54	2
L4W 7+25N(P)	2	165	134	2098	28.5	50	6	8427	.81	1785	<8	<2	<2	908	(106.8)	13	<3	16	24.06	1.535	5	22	2.61	145	.02	394	3.32	.06	2.79	<2
L4W 7+00N	<1	124	44	2039	1.0	29	8	20069	.17	135	<8	<2	<2	811	58.0	15	3	2	27.18	2.179	2	4	4.03	240	.01	414	.80	.03	10.08	2
L4W 7+00N(P)	2	152	102	1937	42.8	42	6	7261	.51	778	<8	<2	<2	652	88.8	15	<3	10	27.51	1.021	3	22	1.95	517	.01	412	2.49	.05	2.17	<2
RE L4W 7+00N(P)	1	155	104	1960	43.3	44	6	7308	.51	785	<8	<2	<2	660	88.9	16	<3	10	27.69	1.027	3	22	1.96	529	.02	419	2.53	.04	2.18	<2
L4W 6+75N	1	99	48	1298	.5	31	8	16897	.33	137	<8	<2	2	1089	3.2	15	<3	6	29.18	1.242	3	5	2.75	507	.02	247	.81	.06	3.27	<2
L4W 6+75N(P)	7	185	75	2015	29.2	70	6	8725	.50	681	<8	<2	2	1000	2.9	23	<3	12	28.14	1.207	4	23	3.26	423	.02	498	1.38	.07	2.77	7
L4W 6+50N	2	100	51	1552	1.2	30	5	13019	.36	239	<8	<2	<2	902	5.9	16	<3	6	28.70	1.705	2	6	3.03	523	.01	260	.44	.08	5.92	<2
L4W 6+50N(P)	3	157	113	1702	19.5	80	6	7784	.56	86	<8	<2	<2	878	77.9	16	<3	12	26.60	1.056	3	22	3.26	598	.02	481	1.83	.07	2.57	6
L4W 6+25N	1	93	91	1474	1.1	22	6	14397	.54	45	<8	<2	<2	869	29.5	12	<3	9	26.64	1.018	3	7	2.55	327	.03	225	.80	.09	3.56	<2
L4W 6+25N(P)	3	123	142	2366	23.9	34	7	11249	1.02	46	<8	<2	3	685	89.7	16	<3	21	21.93	1.421	6	23	3.06	666	.04	368	2.49	.11	3.09	<2
L4W 6+00N	1	108	108	2532	4.9	18	5	15828	.60	22	<8	<2	<2	1043	36.0	12	<3	12	26.76	1.112	4	7	1.40	489	.02	251	.56	.09	4.37	7
L4W 5+75N	<1	106	78	1582	<.3	12	4	20460	.39	51	<8	<2	<2	844	38.8	15	<3	8	28.26	1.064	3	6	2.64	463	.02	266	.49	.07	5.00	<2
L4W 5+50N	1	93	81	1626	<.3	15	6	20431	.44	47	<8	<2	<2	951	21.1	15	<3	9	26.83	1.631	3	7	2.41	381	.03	264	.83	.08	6.21	<2
STANDARD C3	28	65	32	167	6.2	38	11	833	3.38	62	24	3	21	31	23.2	17	21	88	.61	.088	18	171	.60	148	.09	25	1.84	.04	.17	23
STANDARD G-2	1	4	4	43	<.3	8	4	569	2.05	<2	<8	<2	5	66	<.2	4	<3	48	.63	.093	8	82	.62	225	.13	9	.96	.07	.59	2

Sample type: TREE TWIGS. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.